AN ABSTRACT OF THE DISSERTATION OF

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This research investigates the role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the life experiences of University Student-Athletes. This qualitative study employs a naturalistic and grounded paradigm in an effort to capture the essence of these experiences. Participants are four student-athletes from Oregon State University who play intercollegiate athletics in the Pac-10 conference.

The participants share their life experiences during two in-depth phenomenological interviews. Interviews are tape recorded and transcribed. Interview questions follow a semi-structure outline developed by the researcher. Initial interviews yield emerging concepts and themes that guide subsequent interviews. Data is grouped according to extracted themes. Findings reveal the following themes: 1) Discovery of ADHD; 2) Understanding ADHD; and 3) Assimilating ADHD. This study has implications for adults with ADHD,

specifically university student-athletes, and further implications for collegiate coaches and counselor educators.

# Examining the Role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the Life Experiences of University Student-Athletes

by

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

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Shannon D. Smith, Author

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TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

Page

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF FIGURES

# Examining the Role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the Life Experiences of University Student-Athletes

## CHAPTER 1: INTRODUCTION

### Framing the Study

Attention-Deficit/Hyperactivity Disorder (ADHD) is one of the most commonly diagnosed childhood psychiatric disorders (Barkley, 1990, 1998), and is increasingly being recognized in adults (Biederman et al., 1993; Herrero, Hechtman & Weiss, 1994). It is characterized by a symptomatic triad of inattention, impulsivity, and hyperactivity (American Psychiatric Association [APA], 1994). Early conceptions of ADHD are accredited to George Still and Alfred Tredgold who, according to Barkley (1990), posited that "deficits in inhibitory volition, moral control, and sustained attention were causally related to each other and to the same underlying neurological deficiency" (p. 5).

Beginning early in the 1900s ADHD was initially associated with brain damage and mental retardation. Terms such as "organic driveness" (Kahn & Cohen, 1934, p. 749), "restless child" (Childers, 1935, p. 242), and the "syndrome of restlessness" (Levin, 1938, p. 770) were used to describe the syndrome. It became fashionable to consider most children who displayed such symptoms as having suffered some form of brain damage; thus, this behavioral pattern dictated a reliable indicator of an underlying central nervous system (CNS) etiology. By the early 1950s the concept changed to "minimal brain damage," "minimal brain dysfunction" and "hyperkinetic impulse disorder" with the reasoning that the

damage occurred in the thalamic area causing poor filtering of stimulation (Barkley, 1990, p. 9). In the 1960s critical reviews began questioning the notion of these children that suffered brain damage (Birch, 1964; Herbert, 1964; Rapin 1964), although it was recognized that some form of neurological dysfunction was present. However, this did not necessarily imply brain damage. The concept of "minimal brain dysfunction" eventually died off due to its vagueness, over inclusiveness, lack of prescriptive value and lack of neurological evidence (Kirk, 1963; Barkley, 1990).

The second edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM II; APA, 1968) introduced the diagnostic concept of "hyperkinesis" or the Hyperkinetic Reaction of Childhood disorder, thus reflecting the importance on the hyperactivity component of the syndrom. The publication of the DSM-III (APA, 1980) brought a new title of Attention-Deficit Disorder (ADD) with/without Hyperactivity for the categorical disorder. This change reflected the thinking that "deficits in sustained attention and impulse control were now formally recognized as of greater importance in the diagnosis than hyperactivity" (Barkley, 1990, p. 14). This proved to be a radical departure from the taxonomy set by the World Health Organization (1978) in the ICD-9, which continued to emphasis hyperactivity as the hallmark of this disorder.

However, the hyperactivity component was elevated once again when the DSM III-R (APA,1987) was published. The name was changed to Attention-Deficit/ Hyperactivity Disorder (ADHD). Finally, the most recent publication of

the DSM-IV continued the primary diagnostic category of Attention-Deficit /Hyperactivity Disorder (ADHD) with the subtypes of Combined Type, Predominantly Inattentive Type, and Predominantly Hyperactive-Impulsive Type (APA, 1994).

A few years ago the popular belief was that children outgrew ADHD by their teen years and certainly by adulthood (Eisenberg, 1967). Recent follow-up studies have shown that 30% to 80% percent of children with ADHD continue to demonstrate significant residual symptoms or a full spectrum of symptoms into adolescents and adulthood (Barkley, 1990, 1998; Barkley, Fischer, Edelbrock & Smallish, 1990; Biederman, Baldessarini, Wright, Knee & Harmatz, 1989; Gittelman, Mannuzza, Shenker & Bonagura, 1985; Weiss & Hechtman, 1986, 1993; Weiss, Hechtman, Milroy & Perlman, 1985a). Family studies reveal relatives of ADHD children to be at high risk for the disorder (Faraone & Biederman, 1994b). Half-sibling, twin, adoption, and segregation analysis studies suggest that genes play a role in this familial pattern (Faraone & Biederman, 1994a; Pauls, 1991). One study revealed as many as 64% of the children diagnosed with ADHD have at least one parent with a history of hyperactivity (Schachar & Wachsmuth, 1990). Another study revealed that of eighty-four parents with ADHD, forty-eight (57%) of the children met criteria for ADHD (Biederman, et al., 1995).

The clinical pattern of ADHD often follows a course leading to other psychiatric disorders. The most notable psychiatric pattern stemming from ADHD

appears to be the development of Oppositional Defiant Disorder (ODD) (Keller, et al., 1992), Conduct Disorder (CD) (Schachar & Tannock, 1997; Szatmari, Boyle & Offord, 1989), Substance Abuse Disorders (Baker, Knight & Simpson, 1995; Schubiner, et al., 1995; Thompson, Riggs, Mikulich & Crowley, 1996) such as smoking (Milberger, Biederman, Faraone, Chen, & Jones 1996; Pomerleau, Downey, Stelson & Pomerleau, 1995), alcohol (Wood, Wender & Reimherr, 1983), and cocaine use/abuse (Horner, Scheibe & Stine, 1996; McCance-Katz, Leal & Schottenfeld, 1995). Other comorbid disorders include Anxiety and Depressive Disorders (Biederman, Newcorn & Sprich, 1991b; Jensen, Shervette, Xenakis & Richters, 1993) including extreme mania (Biederman, Faraone, Keenan & Tsuang, 1991a; Faraone et al., 1997) and Bipolar Disorder (Carlson & Wintraub, 1993), and finally Personality Disorders such as Antisocial Personality Disorder (Cadoret & Stewart, 1991; Faraone, et al., 1995; Herrero, Hechtman & Weiss, 1994; Satterfield, Swanson, Schell & Lee, 1994). Other studies reveal a link of ADHD to criminal behavior (Mannuzza, Klein, Konig & Giampino, 1989).

To date, there is no research or literature which examines the role of ADHD and athletes. More important, no research or literature is available specifically regarding the experiences of college student athletes who have ADHD. There is a limited amount of literature regarding college and university students with ADHD (Dooling-Litfin & Rosen, 1997; Harris, 1995; Weyandt, Linterman & Rice, 1995), however, it reveals no link to athletes per se.

The Research Question

Strauss and Corbin (1990) state, "the research question in a grounded theory study is a statement that identifies the phenomenon to be studied" (p. 38). They believe that the research question "begins as an open and broad one; but not so open, of course, as to allow for the entire universe of possibilities. Yet not so narrow and focused that it excludes discovery" (p. 38). Therefore, the following question was posed, not too narrow and not too broad, to identify the phenomena under study: "What is the Role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the life experiences of University Student-Athletes?"

The purpose of this study was to examine the role of Attention-Deficit/ Hyperactivity Disorder (ADHD) in the life experiences of University Student-Athletes by describing the phenomenological experiences and meanings constructed by them. The intention of this study was to contribute further understanding and new knowledge of ADHD, as it specifically applies to university student athletes. Inherent in qualitative research is the development of theory (Strauss & Corbin, 1990). It was this author's hope to contribute data and findings to an emerging theory regarding the role ADHD plays in the life of a student athlete. Also, various themes and patterns were identified which can be pursued in future studies.

Some areas which were explored in this study included the following: the ADHD student-athletes' propensity toward athletics; the positive reinforcement (success/rewards) achieved through sports; the students' understanding/conceptualization of ADHD; the development of coping strategies, and the struggles/difficulties experienced having ADHD; the role physical exercise

plays in the management of ADHD symptoms; and the role athletics serves for management/treatment of primary symptoms of ADHD.

## The Researcher

Following the naturalistic and grounded theory research paradigm, it is important for the researcher to provide information of his or herself to add to the trustworthiness of the study (Patton, 1990). As Tesch (1987) points out, "phenomenological researchers study an experience because of its special significance for them. They have become deeply involved with the phenomenon. It is at the center of their personal and professional interests" (p. 236). I am a single, Caucasian male in the process of completing a doctorate in Counselor Education and Supervision at Oregon State University (OSU). Prior to entering the OSU Ph.D. program, I was a Licensed Professional Counselor (LPC), and employed as a Child and Family Therapist in a community mental health agency serving children, teens, and families in Ohio.

My professional interest in this topic developed while working in the community clinic due, in part, to the fact that I maintained a caseload of clients of which a significant portion were diagnosed with ADHD. Therefore, I began to take a unique interest in this population, and worked toward specializing in the treatment of ADHD. After some time, I became somewhat knowledgeable and proficient working with this population, and considered treating this particular disorder as part of my clinical "niche." Actually, I had experienced a great deal of personal satisfaction working with both my client and her or his family as they struggled with managing ADHD. This was one of the clinical disorders with which

I had fun working. I believe this was due, in part, to my ability to relate to the many experiences these children, teens, and families encountered. Up until that point in time I had not been formally diagnosed with ADHD. However, because of my extensive involvement working with these children and families and the suggestion from my clinical supervisor, I began to examine symptoms of ADHD within myself. I eventually completed a formal assessment and was diagnosed with ADHD. I was age twenty-eight at the time. I discuss this process in more detail in Chapter 5.

The notion of ADHD and the student-athlete was stimulated during my Ph.D. internship experience at the Oregon State University Intercollegiate Athletics Department. I began collaborating with a Learning Specialist regarding ADHD and its role with student athletes. We shared similar observations and experiences while working with student-athletes who have ADHD, and began to develop some basic ideas and theoretical notions about its role in this population. Through this collaboration an "emerging" theory of ADHD and its role in the university student athlete population was conceived.[1]

## An Emerging Theory of ADHD and Student-Athletes

Several theoretical constructs related to my presentation of an "emerging" theory of ADHD and its relationship to university student-athletes are as follows. I

[1] I would like to acknowledge that the beginnings of this "emerging" theory of the role of ADHD and the student-athlete were the shared ideas of Marci (last name withheld for reasons of confidentiality), a Learning Specialist at OSU and myself. However, the development of this emerging theory and subsequent views presented in this document reflect the manner and understanding of these shared ideas as held only by myself.

believe that students diagnosed with ADHD have a propensity toward athletics because of the nature of ADHD symptoms, primarily hyperactivity and impulsivity; athletics is a natural (and socially acceptable) avenue for these symptoms to manifest and be expressed. Therefore, the physical symptoms of hyperactivity and impulsivity lend themselves to the physical nature of athletics.

Athletics is an arena where people can experience significant positive rewards. Beginning in childhood and through adolescents, many people with ADHD find academics difficult, often resulting in repeated failures. Therefore, the arena of academics for many with ADHD is experienced and perceived in a negative manner. I believe that, through their developmental years, those who participate in athletics find sports as a significant source of success and positive reinforcement. Due to the successes and rewards achieved by playing sports, athletics then becomes an area in which they can excel through positive reinforcement. Also, the development of an athletic identity is a significant component of the identity development process for student-athletes with ADHD.

Being that ADHD is conceptualized as a neurobiological disorder, I believe that physical exercise plays a key role in the expression of ADHD symptoms, as well as the management of symptoms of ADHD via the neurochemicals in the brain. For example, since physical exercise increases amine metabolite levels in the brain (Ebert, Post & Goodwin, 1972; Post, Kotin, Goodwin & Gordin, 1973), perhaps exercise helps to modulate the level of norepinephrine, epinephrine, and dopamine (Pliszka, McCracken & Mass, 1996) resulting in increased ability to concentrate, pay attention, and maintain impulse control. What I am suggesting is that exercise may produce effects similar to medication used in the treatment of

ADHD symptoms primarily due to increased stimulation (production) and regulation of these neurochemicals in the brain.

These ideas are put forth to inform the reader of some of the basic assumptions and potential biases I hold as the researcher prior to conducting this study. In this respect, I put forth these ideas as a method of self-disclosure, and as method to guard against my biases. Also, it is a way to observe the potential impact of my biases upon the results, both for the reader and myself. Finally, it gives a clearer, more "rich" description of the potential role I assume as part of my participation in this study; that is, researcher as participant.

# CHAPTER 2: REVIEW OF THE LITERATURE

## A Conceptual Framework

The following review of the literature contributes in defining the theoretical framework of examining the university student-athlete with ADHD. It is important to note that in qualitative research the review of the literature is an evolutionary process as themes and patterns begin to emerge from the data while conducting a study (Glasser & Strauss, 1967; Patton, 1990; Strauss & Corbin, 1990). Therefore, the selection of this particular literature represents some of the biases that the researcher brings to the proposed study.

Perhaps more important, the review also represents this authors "theoretical sensitivity" to the research topic (Strauss & Corbin, 1990). Theoretical sensitivity is considered a personal quality of the researcher to recognize "subtleties of meaning of data" and make sense of such during theory development in a grounded format (Strauss & Corbin, 1990, p. 41). Strauss and Corbin (1990) define theoretical sensitivity as "the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't" (p. 42). It is with this literature review the author begins submitting his "theoretical sensitivity" toward this study.

The literature review is divided into several different areas. First, an overview of ADHD etiology is presented, including neuropsychological testing, the catecholamine hypothesis, and neurological tests. Second, the clinical diagnosis of ADHD is examined, including the DSM-IV criteria, the clinical interview, and questionnaires and scales available to assist the diagnostician in arriving at an

accurate diagnosis during assessment. A brief presentation of ADHD in children is outlined, examining the estimated prevalence in children and the amount of stimulant medication used annually to treat children. The review continues by looking at ADHD in the young adult population, and then focuses on ADHD in the adult population, including the prevalence of ADHD in adulthood, and other psychological disorders that can exist in conjunction with ADHD. The clinical term for this coexistence of separate mental disorders is known as comorbidity. The review then examines ADHD specifically in the college students. Provided is a brief overview of treatment options available to adults with ADHD, including individual counseling, group treatment, family/marriage counseling, vocational/career counseling, coaching, and the use of medications. The review examines college and university student-athletes, specifically developmental delays, socialization, and athletic identity. Finally, literature on the benefits of physical exercise is presented, as well as research of physical exercise as it applies to clinical populations.

## Etiology of ADHD

The etiology of ADHD is not yet clear, however, recent studies point to neurological and genetic factors as potentially the greatest contributors to this particular disorder (Barkley, 1998). Historically, brain damage, perhaps from a neurological disease, was believed to be the chief cause of ADHD (Childers, 1935; Kahn & Cohen, 1934; Levin, 1938). Some studies do show an association between brain damage and symptoms of ADHD (Cruickshank, Eliason & Merrifield, 1988; O'Dougherty, Neuchterlein & Drew, 1984). Lesions or injuries to the frontal lobes

and the prefrontal cortex can also mimic ADHD symptoms (Benton, 1991; Heilman, Voeller & Nadeau, 1991; Mattes, 1980).

Neuropsychological testing. Seidman, Biederman, Faraone, Weber and Ouellette (1997) administered several neuropsychological tests to a group of 118 male participants (ages 9-22) with ADHD and 99 male controls. Results showed significantly more impairment of neuropsychological functioning in the ADHD group than the control group (on the Wisconson Card Sorting Test–WCST, the Stroop test, and the Rey–Osterrieth Complex Figure). The ADHD group performed poorly on various tasks of attention and executive function. This impairment held true for both the younger and older boys, suggesting that neuropsychological impairments are not restricted to younger children with ADHD. These findings support the notion that such deficits are enduring into adulthood.

These same authors (Seidman et al., 1997) also found that the ADHD probands demonstrated more psychiatric comorbidity (64% vs. 15%), a greater proportion of family history of ADHD (41% vs. 15%), and mild increases in learning disorders (21% vs. 13%) than the control group. Also, participants with a family history of ADHD performed significantly worse than those without a family history of ADHD. The authors suggested that the observed pattern of impairment may be indicative of frontal (network) abnormalities and frontal-striatal dysfunction characteristic of ADHD.

Catecholamine hypothesis. Kornetsky (1970) hypothesized that people with ADHD had faulty functioning in the brain with a class of neurotransmitters known as catecholamines. Kornetsky's catecholamine hypothesis suggested that there was an insufficient amount of two chemicals in the brain, dopamine and norepinephrine. Kornetsky postulated that the use of stimulants in treating ADHD increased the

amount of dopamine (DA) and norepinephrine (NE) in the brain, and, therefore, the catecholamines played a significant role in treating ADHD. Kornetsky's catecholamine hypothesis remains tenable up to this day, however, it is still unclear whether any one, single neurotransmitter (DA or NE) is the sole regulator in the symptoms of ADHD (Hallowell & Ratey, 1994).

Pliszka, McCracken & Mass (1996) recently suggested that notion of "too much" or "too little" of a single neurotransmitter is no longer sufficient to explain the complexities of ADHD. These authors present a multistage hypothesis which emphasizes the interaction of norepinephrine, epinephrine, and dopamine in modulation of attention and impulse control. They suggest that the norepinephrine system is dysregulated, such that it does not effectively "prime" the cortical posterior attention system toward external stimuli. The anterior "executive" attention system produces effective mental processing of information which is possibly dependent on dopaminergic input. They suggested that the peripheral epinephrine system is a critical factor with stimulant medication for individuals with ADHD.

Neurological tests. Casey et al., (1997) examined the relation between frontostriatal structures, including the prefrontal cortex and basal ganglia, and inhibition deficits observed in 26 male children (mean age 9.69 years) with ADHD. They used magnetic resonance imaging (MRI) and tested on three response inhibition tasks with age-matched controls. Results revealed significant differences between ADHD children and controls on all three response inhibition tasks. Performance on these tasks correlated with those anatomical measures of frontostriatal circuitry, which is observed to be abnormal in ADHD children. Significant correlations between task performance and anatomical measures of the

prefrontal cortex and caudate nuclei were found predominantly in the right hemisphere.

Hynd et al., (1991) examined the corpus callosum of ADHD children versus controls. Those with ADHD had smaller corpus callosums, specifically in the area of the genu and the splenium and the region anterior to the splenium.

In a follow-up study, Semrud-Clikeman et al., (1994) examined differences in corpus callosal area and shape between ADHD children and controls. Using magnetic resonance imaging (MRI), they found that the ADHD subjects had significantly smaller posterior corpus callosum regions than the controls. The splenium accounted for the majority of variance between the groups. The authors posit that the splenial area of the corpus callosum is indeed smaller in ADHD children, and may relate to ADHD symptomology such as self-regulation. However, the presence of genu differences could be not substantiated.

## Diagnosing ADHD

Diagnosing ADHD is often a complicated task for the professional. Since there is no one instrument to test for ADHD, making an accurate diagnosis can involve using several instruments, obtaining a significant amount of information from several parties (e.g., teachers, parents, relatives), and attempting to put it all together into an accurate diagnostic assessment (Barkley, 1998). The validity of a diagnosis requires documentation of its characteristic signs and symptoms (descriptive validity); evidence of a specific course, outcome, and response to treatment (predictive validity); and finally evidence related to etiology and

pathophysiology (concurrent validity) (Spitzer & Williams, 1985). The criteria used to establish such validity is outlined in the DSM-IV (APA, 1994).

DSM-IV criteria. Attention-Deficit/Hyperactivity Disorder (ADHD) is considered primarily a neurobiological disorder which is characterized as a symptomatic triad of inattention, hyperactivity and impulsivity (APA, 1994; Barkley, 1990, 1998). The current diagnostic criteria used to defined ADHD can be applied to children, adolescents, and adults. However, for both a childhood and adulthood diagnosis, symptoms must still be present before age seven. Evidence of significant impairment must be evidenced in several areas and settings, including social, academic, or occupational functioning and two or more settings such as school, home, or work according to the DSM-IV. A person must experience six of the nine specified criteria of *inattention* to qualify for a diagnosis of *predominantly inattentive type*, or must experience six of the nine criteria of either *hyperactivity* and *impulsivity* to qualify for a diagnosis of *predominantly hyperactive-impulsive type*. If the person were to experience six of the criteria from each set of the criteria, she or he would be diagnosed with *combined type*. The criterion for each of these categories is included Appendix A. Finally, the symptoms must not occur during the course of a psychotic disorder or be accounted for by another mental disorder (e.g., mood, anxiety, dissociative, or personality disorder) (APA, 1994).

Clinical interview. The most effective method of diagnosing adult ADHD is through conducting a thorough clinical interview (Jackson & Farguia, 1997). However, this method can be problematic. Shaffer (1994) suggests that it is not always easy for "clinicians to elicit an accurate childhood history with any degree of confidence" (p. 634). He points out such reasons as "inaccurate recollections of distant events, mood shifts, and behaviors . . . Some patients who were previously

hyperactive may forget, and others may exaggerate . . . In some instances, this may be done to justify obtaining a specific desired treatment" (p. 634). Therefore, it is important for clinicians to gain information from multiple sources, such as family members including parents, spouses, siblings, relatives, and close friends (Barkley, 1990, 1998; Biggs, 1995; Fisher, Barkley & Edelbrock, 1990; Wilens, Spencer & Biederman, 1998).

Questionnaires/scales. In addition to the clinical interview, screening questionnaires can be a useful adjunct for obtaining an accurate diagnosis of adult ADHD. Several questionnaires are available to the clinician, and are as follows: The Wender Utah Rating Scale (Wender, 1987; Ward, Wender & Reimherr, 1993), The University of Massachusetts Medical Center (UMMC) Protocol and the UMMC Ambulatory Psychiatry Symptom Rating Scale (Barkley, 1990), the Symptom Checklist 90-Revised (Derogatis, 1986), The Adult ADHD Questionnaire (Nadeau, 1991), the Copeland Symptom Checklist for ADHD (Copeland, 1989), the Brown Attention-Activation Disorder Scale (Brown & Gammon, 1991) and the Brown-ADD (Brown, 1995).

## ADHD in Children

Estimates of children diagnosed with ADHD range from 3% to 10% of the American population (Denckla, 1993). The most commonly accepted estimate is that 5% of school age children suffer from ADHD (Barkley, 1990). This amounts to more than three and a half million children in the United States (Wallis, 1994). Levinson (1992) estimates the prevalence of ADHD in children and youth is three times Barkley's estimate, suggesting it is up to 20% of the total population. Safer,

Zito & Fine (1996) estimate that 1.5 million children annually (2.8% of the school-age population) use stimulant medication for management of ADHD symptoms.

## ADHD in Young Adults

Recent studies have examined the progression of ADHD from adolescents into young adulthood. Barkley, Murphy and Kwasnik (1996) compared a group of 25 young adults with ADHD to 23 young adults drawn from a community (mean age = 25 yrs). Using several measures, they were unable to confirm results of previous studies such as greater prevalence of comorbid mood and anxiety disorders, substance use and abuse, and criminal activities in the ADHD group versus the control group. Nor were there statistical differences between these groups in terms of a history of educational problems. This may have been primarily due to the low statistical power of the study design.

However, these authors (Barkley, Murphy & Kwasnik, 1996) found several results which confirmed previous literature. One of the main findings was that the young adults in the ADHD group had committed significantly more antisocial acts than the control group. For example, they had stolen property and money more often, engaged in disorderly conduct which required police intervention, possessed illegal drugs, and ran away from home as adolescents more often than the control group. And, in the college setting, this group reported significantly more difficulty with oppositional defiant behaviors as well as ADHD symptoms. Further, they reported similar difficulties of oppositional defiant behaviors and ADHD symptoms in the work place setting, and held their job positions for a significantly shorter duration than the controls.

This same group of young ADHD adults reported significantly more psychological distress on the SCL-90-R than the control group. Further, this group displayed significantly more impulsive and inattentive symptoms on a computerized continuous performance test, and demonstrated more variable reaction times on this same test than the controls. Significantly poorer performance in verbal working memory was also noted on the Digit Span subtest of the WAIS-R. The authors conclude that such evidence is supportive of adult ADHD as a valid diagnosis.

## ADHD in Adults

Although popular opinion up until the mid 1980s held that ADHD was primarily a childhood disorder outgrown by the teen years (Barkley, 1990; Nadeau, 1995), the notion of adult ADHD can actually be traced back to the late 1960s (Mendelson, Johnson & Stewart, 1971; Menkes, Rowe & Menkes, 1967; Quitkin & Klein, 1969). Menkes, Rowe & Menkes (1967) posited that symptoms of hyperactivity could indeed continue beyond childhood and into adulthood. Other retrospective studies (Borland & Heckman, 1976; Feldman, Denhoff & Denhoff, 1979) determined that approximately 3% percent of ADHD subjects were symptomatic in adulthood.

The first empirical study (Wood, Reimherr, Wender & Johnson, 1976) testing the use of stimulant and antidepressant medication in adults with MBD (ADHD) took place in the mid 1970s. The following decade witnessed the gradual emergence of using stimulant and antidepressant medication in the management of symptoms of hyperkinesis or MBD (ADHD) in adults (Gomez, Janowsky, Zetin,

Huey & Clopton, 1981; Mann & Greenspan, 1976; Packer, 1978; Rybak, 1977). The first longitudinal studies began emerging in the 1980s (Gittelman, Mannuzza, Shenker & Bonagura, 1985; Weiss, Hechtman, Milray & Perlman, 1985b). Yet it was not until the 1990s that widespread acceptance of adult ADHD in clinical practice existed and professionals began to recognize and treat cases with stimulant or antidepressant medications (Barkley, 1998; Goldstein, 1997; Nadeau, 1995; Spencer et al., 1995; Wender, 1995). It is important to note that this acceptance has not gone without challenge from its skeptics (Shaffer, 1994). However, many have accepted the notion of adult ADHD as a valid disorder (Barkley, 1998; Nadeau, 1995; Spencer, Biederman, Wilens & Faraone, 1994; Wender, 1995).

ADHD Prevalence in Adulthood. It is thought by many the persistence of ADHD into adolescence continues in up to 80% of cases from childhood and up to as many as 66% of cases into adulthood (Barkley, Fischer, Edelbrock & Smallish, 1990; Biederman & Steingard, 1989; Fischer, 1997; Gittelman, Mannuzza, Shenker & Bongura, 1985; Hechtman, Weiss, Perlman, Hopkins & Wener, 1979; Mannuzza, Klein, Bessler, Malloy & LaPadula, 1993; Weiss & Hechtman, 1993). Some estimates of continuing symptomatology have reported rates as high as 79% (Weinstein, 1994) and as low as 10% (Schaffer, 1994) depending on the type of study and how the disorder was defined. Also, estimates of the prevalence of adult ADHD range from 5% to 10% of the total adult population, although reports have varied from 1% to 20% again depending on the criteria and definition used to define the disorder (Barkley, 1990, 1998). Average estimates appear to range between one-third and two-thirds of children and adolescents continuing symptomology into adulthood (Biederman, 1991; Shekim, Asarnow, Hess, Zaucha

& Wheeler, 1990) which would account for eight to 15 million adults with ADHD (Miller, 1993).

## Comorbid Conditions

As mentioned previously, ADHD is sometimes found in conjunction with other psychiatric disorders. Of course, concerns have been raised concerning the nosological system (taxonomy) which may account for such high rates of comorbidity (Achenbach, 1991; Caron & Rutter, 1991; Nottelman & Jensen, 1995), specifically with symptoms of ADHD (August & Garfinkel, 1993; Biederman et al., 1991b). Questions have been raised regarding the diagnostic precision of an independent clinical entity and features of ADHD in relation to other psychiatric disorders. For example, Baumgaertel, Wolraich and Dietrich (1995) found a significant increase in the prevalence rate of ADHD comparing DSM-III and DSM-IV criteria from 9.6% to 17.8%. This was due primarily to the addition of *inattentive type* in the DSM-IV. This suggests taking caution when examining the comorbid conditions with ADHD.

Murphy and Barkley (1996) compared 172 adults diagnosed with ADHD to a control group referred to the same clinic who was not given the ADHD diagnosis. They found the ADHD adults, including their parents and spouses, rated their symptoms of ADHD significantly higher than those in the control group. Significantly more of the ADHD adults had experienced alcohol or other drug abuse and dependence disorders (particularly marijuana, cocaine, and psychedelics), conduct disorders, and oppositional defiant disorder. There also was a trend for the ADHD adults of reporting more symptoms of antisocial personality

disorder. However, groups did not differ significantly in percentages related to affective or anxiety disorders. This particular finding is in opposition to the related literature (Biederman et al., 1993; Shekim, Asarnow, Hess, Zaucha & Wheeler, 1990).

Murphy and Barkley (1996) further report that the ADHD adults endorsed more symptoms of psychological and interpersonal distress on the subscales of the Symptom Checklist 90 Revised (SCL-90-R) (Derogatis, 1986). Specifically, they scored higher on scales measuring somatic complaints, interpersonal difficulties, hostility, depression, anxiety, and phobic complaints. A further trend conveyed elevated risk for impairment in adaptive functioning and family life, and significantly more ADHD adults reported having a family member diagnosed with ADHD which supports recent findings in the literature (Biederman et al., 1993). Additionally, authors found that ADHD adults changed their jobs significantly more than controls, twice as many had been dismissed from their employment, a higher number dropped out of college, more achieved a lower grade point average, had increased number of school suspensions, and engaged in physical fighting. Finally, the ADHD adults had significantly more driving suspensions (e.g., speeding violations) than controls.

## ADHD in College Students

Surprisingly there is little research that examines ADHD in college and university students. This paucity of information has recently stimulated a small body of research on this population. Heiligenstein and Keeling (1995) conducted a systematic chart review of forty-two students diagnosed with ADHD. Twenty-nine

men and thirteen women were identified, mean age was 27.0 years (range = 18-46). The presenting problems were symptoms of ADHD (55%), mood symptoms (21%), nonspecified learning disabilities (10%), and academic underachievement (14%). Associated difficulties included depressive disorders (26%), anxiety disorders (5%), drug and alcohol dependence/abuse (26%), legal problems (12%), learning disabilities (2%), and eating disorders (2%). Sixty-four percent evidence a history of childhood academic underachievement, and 7% had a history of learning disabilities. Forty-five percent indicated no comorbid condition. A significantly high number, 31%, presented for their first evaluation. Many described themselves as unable to "get their act together" (p. 227).

Weyandt, Linterman and Rice (1995) examined the prevalence of ADHD in 770 college students. Results revealed that 7% and 8% of the students reported significant symptoms of ADHD in adulthood using the Adult Rating Scale (ARS) and the Wender Utah Rating Scale (WURS) (1.5 SD above the mean). Similar results were reported during their childhood, 8.7% reported significant symptoms of ADHD during childhood. However, fewer students (2.5%) reported symptoms during both childhood and adulthood, as assessed by the ARS and WURS.

Dooling-Litfin and Rosen (1997) examined self-esteem in college students with a history of ADHD. Results revealed that people with ADHD who were successful enough to continue on their education into college have lower self-esteem than those identified as not having ADHD. The differences remained even after conducting analysis of covariance, covarying out the effects of economic status, aptitude test scores, and gender. Also, when multiple regression was performed results showed that social skills and current ADHD symptomology were significant predictors of self-esteem, and accounted for 22% of the variance. The

direction of the effects showed that those with greater social skills and lower symptoms of ADHD had higher self-esteem. These findings underscore the importance of further examining college and university students.

## Treatment for Adult ADHD

Treating adult symptoms of ADHD is often multidemensional. Most often a number of treatment modalities and multimodal interventions are recommended and employed to assist in the reduction of ADHD symptomology (Barkley 1998). The most effective form of treatment is through the use of prescription medication (pharmacology). Barkley (1998) suggests that the most common form of psychosocial treatments for ADHD adults are individual, family/marriage, and group therapy, career/vocational counseling, and coaching. Other treatment forms can also include cognitive control, behavioral interventions, and educational interventions (Jackson & Farrugia, 1997).

Individual counseling. Adults with ADHD can benefit from individual counseling. Such therapy can help the individual to understand the disorder, outline treatment goals, and develop strategies to accomplish daily tasks that otherwise can be quite difficult and frustrating. Issues such as low self-esteem, interpersonal problems, and disorganization can be addressed as well. Behavioral therapy and cognitive therapy have been suggested as particularly helpful with adults, as well as with children and teens who have ADHD. Specifically, "time management, organizational skills, communication skills, anger control, decision making, self-monitoring and reward, chunking larger tasks into a series of smaller steps, and changing faulty cognitions are thought to be potentially helpful" toward

meeting demands of daily life and work (Barkley, 1998, p. 588). There is some evidence which indicates that traditional insight-oriented psychotherapies are limited in success with ADHD adults (Ratey, Greenberg, Bemporad & Lindem, 1992).

Group counseling. Although there has been no scientific research to support the efficacy of group counseling for ADHD adults, it is recommended by some as another viable form of treatment (Barkley 1998). Such group treatment includes a time-limited and semistructured format with established goals and themes, preferably 10 people per group. Topics can include "mediation issues, organizational skills, listening/interpersonal skills, anger control, decision making, stress reduction, vocational/workplace issues, and personal coping skills" (Barkley, 1998, p. 589).

Family/marriage counseling. Marriage and family counseling can be a useful way to resolve issues that affect relationships with family members. Spouses of ADHD adults often report marital dissatisfaction, feelings of frustration, anger, and confusion due to the primary symptoms of the disorder. "They may complain that their spouse is a poor listener, is unreliable, is forgetful, is self-centered or insensitive, often seems distant or preoccupied, is messy, does not finish household projects, or behaves irresponsibly" (Barkley, 1998, p. 589). This type of therapy then becomes an avenue to reduce conflict, stop blaming, and establish a working alliance to reduce conflict.

Vocational/career counseling. Adults with ADHD perhaps find no greater challenge to their abilities than in the workplace environment. The cardinal symptoms of ADHD, including inattention, impulsivity, and hyperactivity, can severely interfere in work performance for many adults with the disorder. Of

critical importance to ADHD adults is to find an occupation that "fits" their strengths and reduces limitations related to ADHD symptomology. As Barkley (1998) points out, "most who experience workplace problems do so not because of incompetence but because their jobs are ill-suited to their strengths. They frequently leave jobs because of boredom or inability to tolerate what they perceive as boring and tedious daily routine" (p. 589-590). Vocational counseling can serve as method to identify appropriate job opportunities which match the strengths of ADHD adults.

Coaching. Coaching is a relatively new approach to managing ADHD, and unfortunately has no empirical data to support its efficacy. "Coaching is a supportive, pragmatic, and collaborative process in which the coach and adult with ADHD work together usually via daily 10- to 15-minute telephone conversations to identify goals and strategies to meet these goals" (Barkley, 1998, p. 590). Although there is not standard methodology to coaching, the coach basically helps the ADHD adult "stay on task by offering encouragement, support, structure, accountability, and, at times, gentle confrontation" (p. 590). There is an association called The Personal and Professional Coaches Association which ADHD adults can access for assistance.

Medications (pharmacology). Perhaps the most common approach to treating ADHD is through the use of prescription medication. Medications correct the neurochemical anomalies in the brain, and are therefore the most significant modality of treatment for individuals with ADHD across all age groups (Bhandary, Fernandez, Gregory, Tucker & Masand, 1997). The mainstays for treating children, adolescents, and adults are the stimulant medications (Wilens, Spencer & Biederman, 1998). Dextrophetamines, methamphetamines, methylphenidate

(MPD), and magnesium pemoling (MAP) appear to be the cardinal stimulants used when treating adults with ADHD (Wender, 1995; Wilens, Spencer & Biederman, 1994).

Next to the stimulants, antidepressants are the foremost used medication in treatment of adult ADHD. Antidepressant medication includes use of the tricyclic antidepressants (TCAs) such as desipramine, imipramine, nortriptyline, and protriptyline (Bhandary, Fernandez, Gregory, Tucker & Masand, 1997). Other medications include the atypical antidepressants such as bupropion and vanlafaxine, the monoamine oxidase inhibitors (MAOI) such as clorgyline, meclobamide, selegiline, and tranylcypromine, and the selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine, fluvoxamine, paroxetine, and sertraline (Bhandary, Fernandez, Gregory, Tucker & Masand, 1997). Other medications, although not as common, include the antihypertensives (clonidine, guanfacine, and beta blockers such as nadolol and propranolol), anxilytics (buspirone), and mood stabilizers (lithium carbonate, carbamazepine, divalproex sodium) (Bhandary, Fernandez, Gregory, Tucker & Masand, 1997).

## College/University Student-Athletes

Student athletes are a distinct group of individuals, and have been noted to display unique and albeit somewhat different characteristics than that of non-athletic college and university students. Review of the sports psychology literature over the past two decades reveals that concern has been presented over the personal, academic, and career development of student athletes (Blann, 1985;

Chartrand & Lent, 1987; Goldberg & Chandler, 1989; Jordan & Denson, 1990; Kennedy & Dimick, 1987; Martin, Eklund & Mushett, 1994).

Developmental delays. There is evidence that college and university student athletes may be prone to developmental delays. Some authors have suggested that participation in intercollegiate athletics can skew normal developmental processes of student athletes (Blann, 1985; Lanning, 1982; Ogilvie & Howe, 1986; Sowa & Gressard, 1983). Heavy demands of the athletic role have been noted to conflict with other important roles and activities, and cause problems for the student-athlete such as limited peer relationships, lack of direction in career and social opportunities, restricted self-concept and low sense of self-worth (Lanning, 1982; Remer, Tongate & Watson, 1978). Difficulties are also manifest in coping with developmental transitions, academic proficiency, drug use, and psychosocial development (Damm, 1991; Ferrante & Etzel, 1991; Hinkle, 1993). College and university student-athletes often have additional roles and responsibilities not encountered by other students. Often they maintain a strict workout schedule which can account for more than twenty hours per week throughout the academic year.

College and university student-athletes often lack basic social skills, academic skills, self-confidence in areas outside of sports, and sensitivity to the needs of others (Remer, Tongate & Watson, 1978). Involvement in sports has limited the development of a sense of self-confidence, identity outside the arena of sports, educational plans/future, autonomy, and mature interpersonal relationships (Blann, 1985; Lawrence, 1986; Sowa & Gressard, 1983). Goldberg and Chandler (1995) believe it is important for counselors to understand the life experiences of college and university student-athletes as they attempt to satisfy four basic stage-

relevant developmental tasks: a) identity formation, b) becoming personally competent, c) developing interpersonal relationships, and d) planning for the future.

Socialization and Sports. Socialization of athletes begins at an early age and continues throughout the athlete's developmental years into adulthood. Identification with sports is a significant part of the socialization process (McPherson, 1980; Ogilvie & Howe, 1986). Lanning (1982) suggests that for many athletes the aspiration to play professional sports is a primary motivation toward developing athletic skills. However, less than 2% of collegiate athletes become professional players (Lee, 1983), and fewer than 4% of high school football and basketball players ever enter the collegiate level; fewer than 2% of that 4% continue into the professional ranks (Leonard & Reyman, 1988). Goldberg & Chandler (1989) pointed out that the "psychological centrality of athletics within the adolescents social system and the community's value system may be at odds with such purposes of the school as the pursuit of academic excellence, the transmission of knowledge, and the psychosocial development of the adolescent" (p. 39).

In the social setting of the university, the student-athlete culture has also been the object of prejudice and discrimination. Engstrom and Sedlacek (1991) discovered that students do possess negative attitudes toward athletes, especially in the area of academic performance. According to these authors, students "felt more suspicious, worried, and displeased when a student-athlete rather than a 'student' received an A in class" (p. 190). Further, they expressed stronger feelings of disappointment, concern, worry, and annoyance when a student-athlete was assigned to be a lab partner. Students also indicated displeasure, lack of acceptance, and indignance when tutorial and advising services were expanded for

student-athletes. When student-athletes left school, other students seemed less concerned, embarrassed, disapproving and sad. This evidence supports the fact that student-athletes have increased pressure when coping with social situations. Lacking the development of appropriate social skills (Remer, Tongate & Watson, 1978), athletes are at risk to demonstrate adequate social performance in the university culture, thus increasing the potential for failure in their academic career. According to some professionals, evidence points out that this risk is substantially increased for Black students (Sellers, 1992; Sowa, Thomson & Bennett, 1989; Young & Sowa, 1992)

Athletic identity. Recent research with college and university student-athletes have spawned much attention in the area of the development of athletic identity. Brewer, Van Raalte and Linder (1993) introduced the construct of "athletic identity" (p. 237), which is basically the degree to which one identifies with the athletic role. The authors proposed this framework as a useful way to discuss the multidimensional aspects related to self-concept. Their basic conceptualization of athletic identity holds that "the individual with strong athletic identity ascribes great importance to involvement in sport/exercise and is especially attuned to self-perceptions in the athletic domain" (p. 239). In its narrowest sense, it is seen as cognitive structure (self-schema) which guides and organizes processing of information related to self. In its broadest sense it is viewed as a social role or occupational self-image. The authors initially discussed positive and negative aspects related to a strong athletic identity, and developed the Athletic Identity Measurement Scale (AIMS) as method to measure this construct.

Positive aspects of athletic identity proposed by Brewer, Van Raalte and Linder (1993) include the "development of a salient self-identity, or sense of self . .

. [and] athletic skills, engage in social interaction, measure their abilities, and build confidence" (p. 238), as well as help to achieve optimal athletic performance. Those who have strong sense of athletic identity are more apt to engage in physical exercise than those who place less value on the athletic component of their self-identity.

Risks, or negative aspects of a strong athletic identity include difficulties during sports career transitions, such as being cut from a team, experiencing an injury, or termination of a sports career (Brewer, Van Raalte & Linder, 1993). Also, when athletes lack other sources of self-worth and self-identification aside from athletic identity, the authors hypothesized "that there is an increased risk for emotional disturbance" (Brewer, Van Raalte & Linder, 1993, p. 240). Strong athletic identity may also limit exploration of career, education, and other lifestyle options due to intensive involvement in sports, and in some cases, may prompt individuals to jeopardize their health due to excessive training or participating in sports activities while injured (Brewer, Van Raalte & Linder, 1993).

The AIMS substantiated athletic identity as a unidimensional factor toward understanding athletic identity (Brewer, Van Raalte & Linder, 1993). Subsequent studies revealed multidimensional factors which could also be assessed by the AIMS. Brewer, Boin and Petitpas (1993) discovered three additional components to athletic identity, including "social identity" (the strength with which athletes identify with the athletic role), "exclusivity" (the degree to which athletes rely on athletic identity and weakly identify with other roles, such as student or friend), and "negative affect" (negative emotional responses resulting from the inability to participate in sports, such as from injury or retirement). These were subsequently confirmed in a study of adolescent swimmers with disabilities by Martin, Eklund

and Mushett (1994). Further, a fourth factor was discovered which the authors labeled "self-identity" (self-referenced cognitions which reflect athletes' perceptions of others' views of them). Thus, a 4-factor model of AIMS is used to describe athletic identity. This 4-factor structure was later confirmed by Martin, Eklund and Mushett (1997) in a study of international swimmers with disabilities.

## The Role of Physical Exercise in Physical and Psychological Well-Being

Physical exercise is one method to improve health across the life-span (Rejeski, Brawley & Shumaker, 1996). There is ample evidence in the research regarding the positive benefits of exercise on both physical and psychological well-being including children (Biddle, 1993), middle aged adults (McAuley, 1992; McAuley, Courneya & Lettunich, 1991), and the elderly (McNeil, LeBlanc & Joyner, 1991). Exercise is associated with physiological health benefits such as decreased heart disease, diabetes, obesity (Anderson & Hippe, 1996), and enhancement of the cardiovascular and respiratory systems (Astrand & Rodahl, 1977).

Psychological benefits of physical exercise include reduced anxiety (Landers & Petruzello, 1994) and reduced psychosocial stress response (Crews & Landers, 1987). Even single bouts of exercise have demonstrated a broad range of psychological outcomes including positive affect (McAuley, 1994), and negative affect (North, McCullagh & Tran, 1990; Petruzzello, Landers, Hatfield, Kubitz & Salazar, 1991). Physical exercise also proves to be useful strategy for coping with stress (Rostad & Long, 1996). Evidence indicates that participation in an exercise program may increase coping skills because it enhances personal resources such as

self-esteem and self-efficacy, as well as improves levels of cardiovascular health (Doan & Sherman, 1987; Petruzzello, et al., 1991). A positive relationship has been found between level of physical activity and overall mental health (Stephens, 1988).

Physical exercise in clinical populations. Three main areas of psychopathology linked to athletics have been a major focus of the sports psychology literature. Specifically, these areas include eating disorders (Black, 1991; Borgen & Corbin, 1987; Burckes-Miller & Black, 1988; Seime & Damer, 1991; Thompson, 1987; Yates, 1991), substance use and abuse disorders (Bell & Doege, 1987; Damm, 1991; Spence & Gauvin, 1996), and adjustment reactions in response to athletic injury (Rotella & Heyman, 1993; Smith, Scott & Wiese, 1990). Beyond these areas, a lack of research exists in the sports psychology literature on other clinical disorders. However, investigations on the impact of physical exercise within clinical populations reveal some interesting findings.

One area of psychopathology that has received the most attention in relation to the effects of exercise is clinical depression. Craft and Landers (1998) recently conducted a meta-analysis to investigate the effect of exercise on clinical depression. Using analysis of variance (ANOVA), results of over 30 studies indicated that individuals who exercised were -.72 of a standard deviation less depressed than individuals who did not exercise. Authors concluded that both aerobic and non-aerobic exercises were beneficial; however, running produced the largest effect. Those people who were more severely depressed benefitted from an exercise regime significantly more than those who were less depressed. Yet the duration of time to achieve less depression was somewhat longer for the more severely depressed. Finally, exercise as a form of treatment was found to be as

beneficial as compared to group and individual psychotherapy and behavioral interventions.

A recent investigation examined the effects of exercise in relation to schizophrenia. Faulkner & Parkes (1999) investigated the use of an adjunct exercise program in the treatment of schizophrenia. Participants were three individuals with chronic schizophrenia living in a hostel. Results indicate a reduction in auditory hallucinations. The benefit of the "voices" subsiding lasting approximately 2 to 3 hours after each exercise session. Sleep patterns were reported to improve during the exercise program, and consistently aided one participant to stay awake during the day. All three participants made noted changes in behavior, including increased hygiene, social interactions, self-esteem, and involvement in activities, and decreased boredom, anxiety, and stress. Cited as a significant benefit from the exercise program for this population was that exercise distracted participants from concentrating on the "voices." Participation in the program provided opportunity to focus on something other than auditory hallucinations.

This author was unable to find any studies specifically examining the effects of exercise in the adult population of ADHD. This area is simply lacking in the research literature.

## Summary

ADHD is a chronic, widespread neuropsychiatric syndrome that persists into adulthood, affecting millions of people. Unfortunately, due to prevailing controversies, it is often overlooked. With proper treatment, both medical and

psychosocial, adults such as university-student athletes suffering with this disorder can overcome its defeating symptomology. It is imperative that further investigation continue examining this debilitating disorder in effort to assist millions who suffer from the cardinal symptoms of inattention, hyperactivity, and impulsivity.

# CHAPTER 3: METHODOLOGY

## Research Paradigm and Design

The purpose of this study was to examine the life experiences of university student-athletes by describing the phenomenological experiences and meanings constructed by them as they pertained to Attention Deficit Hyperactivity Disorder (ADHD). In order to accomplish this goal, in-depth, semi-structured interviews were employed. This phenomenological, qualitative method of analysis allowed for the subjective experiences of participants to be fully described and explored. As suggested possible by Vaughn (1992) through this examination an emerging theory of the role of ADHD and the university student-athlete was further developed, expanded, and refined by the researcher.

Justification for a qualitative design and approach toward examining the question and phenomena of this investigation provided the opportunity for data to emerge which may have been overlooked or simply not considered in the more traditional quantitative methodology. Also, preselected responses or researcher-defined variables which could have otherwise "contaminated" data supplied from participants were not imposed upon participants (Stiles, 1993). To date, the knowledge base regarding ADHD has been derived from a quantitative orientation, and most subjects have been drawn from a clinical setting. Little understanding of ADHD has emerged from a phenomenological approach, nor from a population that represents someone other than those people found in a clinical setting. Therefore, this study was appropriate to meet this need lacking in the ADHD literature.

Subjects

Recruitment. The sampling procedure consisted of *purposeful sampling* in an effort to facilitate the expansion of the developing theory (Bogdan & Biklin, 1998), and utilized the notion of "information rich cases" so that a greater degree of depth could be obtained regarding the participant experiences and the focus of inquiry (Lincoln & Guba, 1985; Patton, 1990). Sample size is related to the purpose of inquiry, establishing a level of credibility, and more practically what data can be gathered within a limited time and available resources (Patton, 1990). The number of subjects for this research amounted to four in totality. This number established a reasonable participant pool which allowed for information rich cases and themes to emerge, subsequently leading to the development of theory.

Study participants were recruited through the Oregon State University (OSU) athletic department via referral from a contact person. The contact person was a Certified Learning Specialist who had the opportunity to work with students with disabilities, including ADHD, and who was able to identify university student-athletes who had a previous diagnosis of ADHD or were recently diagnosed with ADHD. This contact person identified student-athletes who were diagnosed with ADHD, informed them of the nature of this study (see Appendix E), and referred interested people to this author as potential participants for the purpose of this research (see Appendix D). Profiles of the participants are presented in the Results Chapter (Chapter 4).

Inclusion criteria. Criteria for inclusion in this research study included the following: 1) an accurate[2] diagnosis of ADHD; 2) current enrollment as a

[2]An "accurate" diagnosis of ADHD was determined by evidence of a clinical evaluation conducted by psychologist, medical doctor, licensed counselor, or other

university student; 3) involvement in playing a collegiate sport; and 4) a willingness to participate in this study.

Exclusion criteria. Due to the numerous disorders that can exist with ADHD (e.g., drug and alcohol, personality, depressive), it became necessary, yet difficult, to establish exclusion criteria for this study. By establishing exclusion criteria, this may have excluded or prevented the obtaining of valuable information or information rich data that may contribute to the in-depth development of theory. However, recognizing that some comorbid disorders may also distort or prevent submission of accurate data, or put the interviewer or third-parties at risk (e.g., knowledge of illegal activity, current suicidal ideation), the following exclusion criteria were established: 1) no current legal condition or pending charges (which may subject the researcher to have to act as a witness or give testimony in a court of law); 2) no major mental illness such as a psychotic condition or disorder (e.g., Schizophrenia), thought disorder (e.g., Delusional Disorder), depressive disorder (e.g., Bipolar Disorder); and 3) no current suicidal or homicidal ideation. The establishment of these criteria also solidified the integrity and trustworthiness of the study's design and further increased its internal and external validity (Bogdan & Biklin, 1998; Lincoln & Guba, 1985; Patton, 1990).

It was my responsibility to have acted according to the standards and ethics set by the American Counseling Association (ACA, 1997) and to have acted in the best interest of all parties involved. I believe that this task was accomplished as demonstrated by the following procedures. In the event that I obtained knowledge of any of the above exclusion criteria during or after the interview, the right to

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person with appropriate professional credentials necessary for establishing a clinical diagnosis of ADHD.

cease the interview process and exclude any of the obtained data from the final analysis would be maintained. Explanation to the interviewee for reason(s) of acting in this manner would have been provided. Subsequently, the interviewee would have been referred to the appropriate professional services (e.g., mental health, legal) and legal/ethical parameters would have been followed by informing such service agencies of necessary or required (mandatory) information; however, none of these procedures proved to be necessary.

Informed consent. Student-athletes were informed as to the nature of this study which, stated briefly, was to understand their life experiences with ADHD (see Appendix D). It was noted that the study was part of this author's doctoral dissertation in the Counselor Education and Supervision program at OSU. The respondents' participation was voluntary and they were free to exit the procedure(s) at any time. My name and the name of my doctoral committee chair, address and telephone number were provided to participants as a means to ask any questions, express any concerns, and request further information. No participants did so. Confidentiality and anonymity were assured to participants. Participants were informed of the limits of confidentiality which are the reporting of danger to self or others as mandated by ACA.

Informational/screening meeting. The above information was reviewed with each participant individually at separate informational/screening meetings prior to conducting the interview. During this informational contact, participants were asked to read and sign the Informed Consent Document (see Appendix D), and were given a photocopy for their records. Participants qualifying for any of the above exclusion criteria would have subsequently been excluded from the study at

that time; however, this was proved not necessary. Participants then proceeded with two semi-structured, individual face-to-face interviews.

Post-interview process time. Participants were given time at the end of each interview to process any thoughts or feelings experienced as a result of the interview. Each participant declined the need to do so. In addition, I was also prepared to supply each participant with an appropriate counseling referral to pursue these feelings and/or thoughts at greater length if participants requested such, or if I presented concern for the participant's well-being. This proved not to be necessary. I also provided a phone number to all participants and encouraged them to contact me if they were uncomfortable or disturbed in any way by the content of their responses during the interviews or simply if they had further questions or additional information to add. No participants did so.

## Trustworthiness of the Study

The notion of "trustworthiness" is an important concept in qualitative research. It has been asserted that rigor is not the hallmark of naturalistic/qualitative design, and that the criteria historically used to ensure rigor, internal validity, external validity, reliability, and objectivity does not exist in this research paradigm. And, indeed it is my belief that such criteria used in the positivist's paradigm representing a quantitative research approach is not appropriate to inflict upon qualitative research. However, it is important to have criteria to aid in the process of assuring that using a qualitative paradigm is "robust" and can be adequately substantiated. Therefore, the construct of

trustworthiness was examined in the literature relative to qualitative research and applied to this study.

Lincoln and Guba (1985) introduced the notion of "trustworthiness" to serve within the naturalistic paradigm. They believe trustworthiness meets four basic criteria of research; 1) truth value, 2) applicability, 3) consistency, and 4) neutrality. By establishing the trustworthiness of a research design, the parallel constructs of internal validity, external validity, reliability, and objectivity found in the more traditional positivist paradigm can be met. The naturalist's alternative, trustworthiness, establishes an appropriate set of criteria for conducting qualitative inquiry, as well as assesses its ultimate value. Lincoln and Guba (1985) posit that trustworthiness is composed of four basic elements; 1) credibility, 2) transferability, 3) dependability, and 4) confirmability. These four elements are composed of several research methods and techniques which solidify the prospect of trustworthiness.

Credibility. Credibility is a construct parallel to internal validity found in the positivist paradigm. It serves as the "truth value" of qualitative inquiry, meaning that reconstructions of interpretive research adequately represent constructs of the original multiple realities (Lincoln & Guba, 1985, p. 294). Five major techniques have been suggested by Lincoln and Guba (1985) in an effort to establish credibility: 1) activities that increase the likelihood of credible findings and interpretations being produced (e.g., prolonged engagement, persistent observation, and triangulation); 2) an activity which provides an external check on the process of inquiry (e.g., peer debriefing); 3) an activity designed to refine the working hypothesis with increased information (e.g., negative case analysis); 4) an activity that checks preliminary findings and interpretations against the data (e.g.,

referential adequacy); and 5) an activity which checks findings and interpretations from the original source(s) (e.g., member checking).

Transferability. Transferability can be equated to the positivist notion of external validity (Lincoln & Guba, 1985). However, it is different in this respect: the working hypotheses are limited to the description of the time and context in which they were found, whether they can be found in a similar context at another time becomes an empirical matter. Thus, the naturalist attempts to provide a "thick description" (Lincoln & Guba, 1985, p. 316) of the phenomena to enable others to transfer the findings and conclusions to other situations or contexts. This is accomplished by establishing a data base for transferability, including both the minimum and maximum elements needed to clearly describe the phenomena under investigation. One suggested method of accomplishing this task is to engage in purposeful sampling (Lincoln & Guba, 1985).

Dependability. The construct of dependability is equated to the empirical notion of reliability which is most commonly achieved through replication. Dependability employs an inquiry audit, much like a fiscal audit. Essentially the "accounts" are reviewed for their accuracy and subsequently justified or attested. The parallel process occurs in qualitative inquiry. The researcher follows a process of inquiry or "auditing" the data, and then determines its acceptability or provides an "attestation" (Lincoln & Guba, 1985, p. 317).

Confirmability. Lincoln and Guba (1985) suggest that confirmability parallels the positivist construct of objectivity. This involves the use of multiple records or data, and the establishment of a trail of the collection process from which the data can be reviewed or "audited." Confirmability is achieved through the use of the following methods; 1) establishing an audit trail, and 2) auditing the

process (Lincoln & Guba, 1985). Establishing an audit trail entails using: a) raw data (e.g., video/audio tape recordings, field notes, documents, records, and survey results); b) data reduction and analysis products (e.g., write-ups of field notes, summaries, unitized information, quantitative summaries, and theoretical notes including hunches, theories, and concepts); c) data reconstruction and synthesis products (e.g., category structures such as themes, definitions, and relationships, findings and conclusions including interpretations and inferences, and final reports); d) process notes (e.g., methodological notes including procedures, designs, strategies and rationale, trustworthiness notes relating to credibility, dependability, and confirmability, and audit trail notes); e) materials relating to intentions and dispositions (e.g., inquiry proposal, personal notes including reflexive notes and motivations, and expectations such as predictions and intentions); and f) instrument development information (e.g., pilot forms, preliminary schedules, observation formats, and surveys) (Lincoln & Guba, 1985).

In an effort to establish the trustworthiness of this study, a number of methods and techniques suggested to promote credibility, transferability, dependability, and confirmability were incorporated into the overall fabric of the research methodology. The reader is referred to the full description of these methods in the sections "Data Collection" and "Data Analysis and Interpretation."

## Methodology: The Constant Comparative Method of Analysis

Berg (1998) outlines the basic procedures of a qualitative type of inquiry. He proposes a model which includes both the "research-before-theory" and the "theory-before-research" models. His basic contention is that this approach is one

that "spirals" rather than follows a linear progression. In this particular approach, "you begin with an idea, gather theoretical information, reconsider and refine your idea, begin to examine possible designs, reexamine theoretical assumptions, and refine those theoretical assumptions and perhaps even your original or refined ideas" (p. 17-18). Berg's model is as follows:

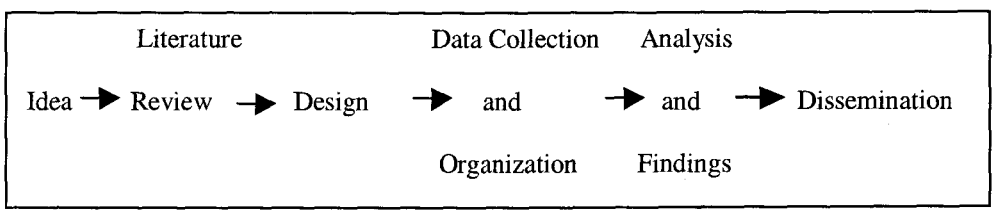


Figure 1: Berg's Model of Qualitative Inquiry

Following this basic model, the design of this study incorporated the grounded theory format, or what is commonly known as the "constant comparative method of analysis" (Glaser & Strauss, 1967, p. 101-116; Strauss & Corbin, 1990). Bogdan and Biklin (1998) describe this method of data collection and analysis as occurring in a "pulsating fashion–first the interview, then the analysis and theory development, another interview, and then more analysis, and so on" (p. 66). Bogdan and Biklin (1998) recount the basic steps proposed by Glaser (1978) of the constant comparative method of analysis of developing theory. They are as follows:

1. Begin collecting data.
2. Look for key issues, recurrent events, or activities in the data that become categories of foci.
3. Collect data that provide many incidents of the categories of focus, with an eye to seeing the diversity of the dimensions under the categories.

> 4. Write about the categories you are exploring, attempting to describe and account for all the incidents you have in your data while continually searching for new incidents.
> 5. Work with the data and emerging model to discover basic social processes and relationships.
> 6. Engage in sampling, coding, and writing as the analysis focuses on the core categories. (p. 67)

As Bogdan and Biklin (1998) note, these stages are not linear, rather, they occur simultaneously, and the analysis keeps moving forward and back to more data collection and coding. Bogdan and Biklin's (1998) six basic steps of research were followed in this study and are delineated below, beginning with collecting the data; the remaining procedures, number two through six are examined under the following section, Data Analysis and Interpretation.

## Data Collection

A variety of methods were utilized in the data collection process. Using several different methods of data collection is imperative when attempting to gain a clear understanding of the phenomenon under investigation in qualitative research. Multiple methods of assessment also serve as a strategy of triangulation in qualitative analysis (Bogdan & Biklin, 1998; Lincoln & Guba, 1985; Patton, 1990; Yin, 1994), which adds to the credibility and trustworthiness of a study, and helps to ensure construct validity. Data of qualitative inquiry are often extracted from the words and behaviors of the participants involved in the data collection. This effort is to obtain an accurate and "thick" description of the phenomenological experiences of the participants in the context of their particular environment (Lincoln & Guba, 1985).

Yin (1994) proposed three principles to follow during data collection in effort to maximize the benefits gained from multiple methods of assessment. The principles are as follows: 1) the use of multiple sources of evidence, 2) the creation of a case study database, and 3) the maintenance of a chain of evidence. Yin suggests that by following these principles, construct validity and reliability is strengthened. Therefore, these principles were employed in an effort to guide this study. Methods of data collection attempted to capture the exact words and language used by the participants and were evidenced in the following methods of data collection: 1) a semi-structured interview; 2) audio taping; 3) audio transcription (including a hard copy and Word Perfect copy); 4) field notes; 5) a researcher reflexive journal; and 6) participant generated documents including psychological evaluations completed by a licensed psychologist indicating the diagnosis of ADHD.

Semi-structured interview guide. Due to the nature of this design, a specific questionnaire or rating scale was not used for data collection. Rather, a semi-structured interview guide was employed for obtaining data (see Appendix B). The initial interview questions were intended to be somewhat broad and were seen as flexible toward gaining in-depth information regarding the experience of university student-athletes with ADHD.

In an effort to determine if the interview questions would elicit focused responses, a pilot interview with a volunteer university student-athlete with ADHD was conducted. After debriefing this interview with my major advisor, questions were then revised for clarity and to elicit more focused responses. The data from this pilot was not used in the results of this study. In addition, my doctoral committee made recommendations to the semi-structured interview guide which

were incorporated into the interview questions. Once satisfied that the questions would yield information related to understanding the role of ADHD in the life experiences of university student-athletes, the face-to-face interviews proceeded.

The analysis of data from the first round of interviews resulted in more specific questions regarding the role of ADHD in the life of a student-athlete. Fourteen broad themes (see Figure 2) emerged from the patterns and properties within the data (Bogdan & Biklin, 1998; Lincoln & Guba, 1985; Patton, 1990). These questions and themes guided the development of the second round interview guide (see Appendix B-2).

Audio taping. Interviews were audio-taped to allow for transcription and playback. Audio tapes were used for transcription and playback to recall a description of the events and the manner in which they were described (e.g., voice tone, inflection, expression of emotion or affect).

Audio transcription. Within a three-day period of time after each face-to-face interview, the audio taped interviews were completely transcribed into a hard paper-copy format for the purpose of review and citation. Half of the audio taped interviews were transcribed by a professional transcriber where confidentiality was maintained. The remainder I transcribed. I thoroughly read each interview transcript to gain a general, overall impression. Next, I carefully listened to each interview while reading the transcript, correcting any mistakes and inserting my observations recorded during the interview (e.g., nonverbal messages, body movements). Final transcripts were then reviewed one last time in a similar manner by the professional transcriber as a method to further ensure accuracy of the data. This process provided confidence that the transcripts were verbatim, the words and language of the participants.

There are mixed reactions regarding the use of medication - both positive and negative aspects of taking Ritalin

There is some attraction to the symptoms of ADHD

There is a need to not want ADHD to be seen as a crutch/excuse/handicap

There is a sense of secrecy and silence about having ADHD

There is shame and embarrassment about having ADHD

You are treated differently than others due to having ADHD

A "hands-on" learning style is preferred

Knowledge of ADHD - Self

Knowledge of ADHD - Others

Impact of ADHD upon academic performance is negative

There is little to no impact of ADHD on athletic performance

Involvement in sports/athletics since childhood

No awareness of ADHD until attending University

Current ADHD symptoms of include - hyperactivity, impulsivity, inattention

There are certain skills used to compensate for having ADHD: time management; organization; scheduling; having a routine; changing activities regularly; taking small breaks; "fighting through" the ADHD symptoms; using alcohol and drugs; avoidance; denial; and sleeping

Figure 2: First Round Interview Themes

Upon completion of each of the transcriptions, the transcriptions were offered to each of the participants to read and edit for meaning and clarity. However, all participants but one declined to review the transcripts. Three participants indicated that there wasn't anything that they had said during the

interview that needed to be changed. Only one person reviewed the transcripts and suggested that some content be deleted from the first interview transcript. This individual believed that the omission would be a positive alteration. Transcripts from the first round of interviews ranged from twenty-seven pages to forty-two pages of double-spaced text. The second round of interview transcripts were each approximately twenty pages of double-spaced text. Both the first and the second round interview transcripts generally followed the order of the semi-structured interview guide included in this study (see Appendix B, and Appendix B-1).

Word-perfect document transcription. Copies of the interviews were saved in a Word-Perfect Document format. This allowed for cutting and pasting sections of the transcripts when analyzing for themes and ensured accurate quotations.

Field notes. I completed field notes during and following the interview process. This allowed for the ability to record my thoughts and insights throughout this process (Bogdan & Biklin, 1998; Lincoln & Guba, 1985; Patton, 1990). Thus, the field notes served as an added source of data which increased the trustworthiness of the study, as well as strengthened the validity and reliability of the data collection process. Particular attention was given to participants' nonverbal gestures (e.g., body language).

Researcher reflexive journal. To assist in the trustworthiness and integrity of this study, a reflexive journal was maintained throughout (Lincoln & Guba, 1985). As an integral part of the qualitative research process, a personal record of thoughts, reflections, insights, reactions, and additional hypothesis is necessary to aid in the advancement of theory development and to assist in identifying potential personal biases (Bogdan & Biklin, 1998; Lincoln & Guba, 1985; Patton, 1990). Patton (1990) suggests that a journal aids in not only becoming aware of biases, but

also in removing viewpoints, prejudices and assumptions in relation to the phenomenon under investigation. Following Lincoln and Guba's (1985) guidelines, the following components were incorporated into the reflexive journal: 1) a daily schedule and logistics of the study; 2) a personal diary; and 3) a methodological log. The reflexive journal proved to be a useful aid in this study.

I believe the reflexive journal was very helpful during this research project. For example, I found myself reflecting on events and behaviors that may have influenced my interactions with the participants in a negative manner. As a result, I was able to step back and remove myself from the situation and feelings enough to remain relatively objective. In particular, three of the participants forgot our scheduled interview appointment on several different occasions, even when I had contacted them only a few hours before the scheduled time as a reminder. Subsequently, I became mildly frustrated and anxious about maintaining the interview schedule. However, as I wrote about this type of reaction in my journal, I was able to look more objectively at this situation and realized that the forgetful behavior was described in the literature as fairly typical for persons with ADHD (Barkley 1990, 1998). This paradigm shift allowed me not personalize and to avoid feeling strongly about the missed appointments. Also, it helped me to imagine how other people may have responded to the participants when they missed appointments in the past. And in fact, during the interviews the participants did describe others' reactions as negative toward them when they had missed appointments.

Participant generated documents. Participant documents were used as a source of data in this research study. Bogdan and Biklen (1998) describe three types of documents for data collection; 1) personal documents, 2) official

documents, and 3) popular culture documents. Personal documents can include, but are not necessarily limited to intimate diaries, personal letters, and autobiographies. Official documents can include internal and external communications of an organization, student records, and personnel files (Bogdan & Biklen, 1998). Participants were asked for copies of any personal and/or official documents that would be useful as a source of data. Official documents were the only sources of participant generated documents which were collected. These documents included the following: 1) psychological reports/assessments; 2) clinical/diagnostic assessments for the purpose of identifying and diagnosing ADHD; 3) records of educational testing 4) and school records. All material was collected on a voluntary basis from each participant; no participant was forced to submit any documents.

Interview setting. All of the face-to-face interviews were conducted on the campus of Oregon State University. Three of the participant interviews were conducted in an air-conditioned office located in Education Hall, and the fourth participant interview was performed in the air-conditioned Valley Football Center. Each location was deemed "private" as to ensure confidentiality and anonymity. Further, the locations were considered free of potential distractions (e.g., phone, acquaintances, interruptions) and provided convenient locations for participants to meet.

Participant interviews and timeline for gathering data. Two sets of face-to-face interviews were conducted with each participant; thus, each student-athlete was interviewed twice, resulting in a total of eight face-to-face interviews. The first round of interviews began in June and were completed approximately one month

later in July. The second round interviews began and were completed during the month of August.

The process for each of the initial interviews followed this procedure: 1) a brief explanation as to the purpose for conducting the study was stated, which was to gain an understanding of the life experiences of university student-athletes who have ADHD; 2) a brief personal disclosure of the interviewer was presented in an effort to develop a sense of trust with each interviewee. The disclosure indicated that this study was part of a doctoral dissertation in the Counselor Education Program located in the OSU School of Education; and 3) the questions outlined in the semi-structured interview guide (see Appendix B) were asked to the participants. The first section of the initial interview was intended to gather background information regarding each participant in an effort to develop a profile of each individual. The remainder of the interview was intended to focus more specifically on ADHD and its impact in the student-athletes' life experiences. The initial interview was approximately ninety minutes in length. After the interview, I disclosed to the participants that I was also diagnosed with ADHD. I believe my self-disclosure established a deeper sense of trust with the participants. Each participant seemed mildly surprised by this fact in the beginning; however, they also displayed something like a sense of relief, as if they knew I could understand their experiences. As a result, I believe that they were more open to me during the second round of follow-up interviews.

Second round follow-up interviews were approximately one hour in length. These follow-up interviews were dictated by the emerging themes from the data and the outcome of the analysis from the first interview (see Appendix B-1). The process for each of the follow-up interviews was as follows: 1) participants were

given a brief description of the results from the initial data analysis, which indicated that fourteen broad themes had emerged from the data analysis and would be reviewed in detail momentarily; 2) the general question "What thoughts or feelings have you had in response to our last interview?" was posed to the participants; and 3) the fourteen themes were reviewed, participants were asked to respond to each theme as it aligned with their experience. A hard copy of the themes was given to the participants to read (see Appendix B-1). In general, participants responded to the second round themes according to how they believed each theme "fit" their experiences.

Upon completion of the interviews, the student-athletes were thanked for their participation. After the study was over, twenty dollars worth of Cinemax movie passes was offered to each participant as a token of appreciation for their efforts; three accepted this gift and one declined. The offering of this gift did not follow the proposed design or disclosure. Regardless, I decided to do this without consultation; a somewhat impulsive decision on my part in response to my excitement in completing the data collection.

## Data Analysis and Interpretation

This section incorporates steps two through six of Bogdan and Biklin's (1998) conceptualization of the constant comparative method of data analysis. Data analysis and interpretation occurred after each (first and second) round of interviews.

The first round of interviews. Analysis of the first round of face-to-face interviews followed these procedures: 1) the reading and rereading of the final,

corrected copies of the transcriptions, first to gain an overall impression and second, to refresh my memory of the information; 2) the rereading of transcripts for initial identification of categories and themes, including ideas, events, or feelings that the participants described, noting the themes in the margin of the text; 3) the compiling of a master list of themes from the first round of interviews; 4) the narrowing down of the master list from the first round of interviews to fourteen (14) overall themes (see Figure 2); and 4) finally, in order to verify these themes from the narrative data, the reviewing of my results with Major Professor, Dr. Liz Gray to ensure accuracy. This process resulted in further clarification of themes when unilateral agreement between Dr. Gray and me was reached. A list of potential questions was generated that would elicit further information related to each theme. The second round interview guide was then created.

The second round of interviews. The second round of interviews was conducted approximately one month after the first round interviews. Analysis followed these procedures: 1) the reading and rereading of the final, corrected copies of the transcriptions; 2) the rereading of transcripts for identification of any new categories or themes; 3) applying the transcribed text to the categories of the established fourteen (14) themes; 4); the reviewing of the transcripts with Dr. Gray. This process helped to solidify the final themes and the 14 overall themes were reduced to five major categories (see Figure 3). The intent of the second round interviews served as a "member check," and provided additional information regarding each of the original 14 themes. This information also supported a "thick description" of the emergent themes. It was apparent that saturation had been reached after the second interview as no new themes emerged.

The five major categories: 1) knowledge; 2) symptoms; 3) treatment; 4) coping skills; and 5) identity development are discussed in the next chapter in the larger context of a model which has emerged as a result of this study. The progression that this model follows is illustrated in Figure 4.

| |
|---|
| Knowledge |
| Symptoms |
| Treatment |
| Coping skills |
| Identity Development |

Figure 3: Second Round Interview Coding Categories of Themes

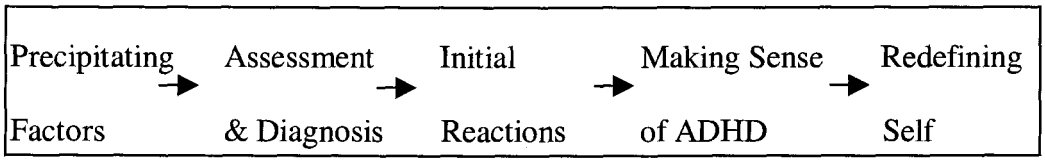


Figure 4: Emerging Model of Identity Development/Assimilation

This first model reflects the process that I believed at one point in time during my study that the student-athletes followed upon discovering that they had ADHD. A refined model, relabeled Model of Identity Assimilation Process, is presented in detail in the Results section (Chapter 4).

Researcher Bias

As a phemomenologist and a qualitative researcher, I acknowledge that I am biased. Specifically, I was unable to remain completely objective throughout the research process, and my biases impacted my research. Historically, one's personal and professional experiences and life history influence the manner in which one filters life events, and subsequently derives meaning. As it relates to research, more specifically qualitative research, one's personal experiences influence the manner in which data is collected - the decision regarding which data then becomes of central focus and which data does not, how it is categorized, and how it is presented as meaningful results. Therefore, the results presented in Chapter Four and, for that matter, this entire study, are presented through my eyes, and reflect in part my biases as they are enmeshed with the data collected.

One of my biases includes operating from a poststructural frame of reference. "Truth" is somewhat relative in that it is bound in time and space and reflects meaning as experienced by those individuals within that time and space. Therefore, the "truth" as I present it here is truth as removed from several contexts - after the student-athletes lived their experiences, and after the interviews were conducted, and after the many hours which went into analyzing and writing the results of my investigation.

I make no apology for the presentation of my results; however, to the participants of this study, I wish to acknowledge that every attempt was made to be sensitive throughout the research process to maintaining the participants' identity through the use of their words and descriptions of their life experiences from the context in which they arose. Therefore, as much as possible, I attempted to avoid projecting my interpretation of their words and description of their life experiences

throughout the analysis; however, my analysis is, and can only be, a reflection of my interpretive projections.

## Ethical and Confidential Considerations

All information/data obtained from the participants was for the sole purpose and intentions of this study. Given names were not presented in the analysis to ensure anonymity and confidentiality of each participant. Participants have been identified according to pseudonyms. Approval was obtained from the OSU Committee for the Protection of Human Subjects and the U.S. Department of Health and Human Services for this project (see Appendix C). All information, data, tapes, transcripts, and other materials gathered were kept in the safety of the researcher under lock and key. The researcher operated according to the ethical standards set by the American Counseling Association (ACA) (1997) while conducting this study.

## Limitations and Potential Benefits

This study was not intended to be a comprehensive account of the life experiences of university student-athletes with ADHD. It was however, intended to serve as a link in the research gap regarding literature on ADHD. This study of the life experiences of university student-athletes with ADHD, as case study, also intended to serve as a vehicle for discovery of an emerging theory. It was not intended to completely explain this disorder nor the entire population the participants represent, nor the individuals themselves in entirety.

It was my personal intention that this research would serve as a vehicle of discovery for the participants involved as well for myself as the researcher. By having engaged the participants in the process of this study and having shared the results with each of them, I sincerely hoped to further their sense of self-understanding and empowerment. As well, I hoped to gain a deeper understanding of myself as a young, developing researcher especially in the process of further understanding people and the meanings which they construct out of their life experiences, specifically those who experience ADHD.

This study was not designed to make broad generalizations of its findings. Rather, findings are limited only to the participants involved. This type of research is considered "first step" research, specifically when developing theory. Yin (1994) distinguishes between "analytic generalization" and "statistical generalization" (p. 30). Statistical generalizations make inferences about a population on the basis of empirical data. Whereas analytic generalization is deduced from a case study or multiple case studies and then used in theory development, which generally applies only to the particular case study under investigation. Therefore, generalizations are not necessarily inferred toward a larger population. As Yin (1994) points out, "a fatal flaw in doing case studies is to conceive of statistical generalization as the method of generalizing the results of the case" (p. 31). Therefore, one acknowledged limitation of this study is the degree to which results can be generalized; results are applicable only to the participants involved in this study.

However, given the above limitations, it was anticipated that emerging themes, patterns, and categories might highlight issues that may be common to university student-athletes who have ADHD. It was anticipated that the prospect of

an emerging theory of ADHD as it applies to the university student-athlete might be initiated. And finally, the design provided information which subsequently allowed for informed hypotheses in the future. Such hypotheses are found in the Results section (Chapter 4).

## Summary

In conclusion, Chapter 3 described how this exploratory study examined the life experiences of university student-athletes with ADHD. The narrative data utilized for this study came from two rounds of face-to-face interviews with four student-athletes from Oregon State University. The resulting data was analyzed by the constant comparative method of analysis.

This section provided a description of the research paradigm and overall design. It reviewed information regarding the participants such as methods of recruitment, inclusion and exclusion criteria, post-interview process time, informed consent, and an informational meeting. It also summarized instrumentation and data collection which included the semi-structured interview, audio-taping, audio transcription, Word-Perfect document transcription, field notes, reflexive journal, participant generated documents, and the interview setting. Information regarding data analysis and interpretation was also presented, including member checks, coding and thematic development. Finally, ethical and confidential considerations were discussed, as well as limitations and potential benefits.

# CHAPTER 4: RESULTS

## Embarking on a Journey

The presentation of qualitative data is a complex and often painstaking undertaking. I amassed a rather large amount of data during the two sets of interviews and struggled to select the best presentation of the data to support my description and interpretation of the phenomena under investigation. By "best presentation" I mean providing enough information to show the reader how I arrived at the themes and conclusions. The difficulty this presented was in finding the balance using a limited number of quotations, and yet maintaining the meaning in the context from which it was derived. Therefore, I chose the more elucidating process of providing more textual material of student-athletes' direct quotations and less analysis, allowing these student-athletes to speak for themselves (Wolcott, 1990). The quotations may seem to be quite long; however, I believe this was necessary in an effort to maintain the voice of these student-athletes. My main concern is to present the authentic "voice" of the participants and not merely my interpretation of such. Therefore, my use of numerous quotations from the transcripts enables the reader to hear the voice of these student-athletes as much as possible from the same context in which I heard it, and the reader is able to draw her or his own conclusions (Opie, 1992).

During my final analysis of the data, three major themes emerged. The manner in which I discuss the themes follows a chronology. The process of being diagnosed with ADHD presents these student-athletes with a new paradigm from which to view their lives. I am choosing to identify this phenomenon under the first theme called *Discovery of ADHD.* This process encompasses precipitating

factors leading to the assessment and diagnosis of ADHD, as well as the mixture of initial reactions by the four student-athletes. Upon gaining the knowledge that they have ADHD, these student-athletes begin a learning process regarding ADHD, an attempt to understand their situation. Specifically, they begin to understand what ADHD is, and how it manifests in their lives. Issues related to the management of ADHD symptoms follows next in the process. Closely related to issues of treatment is the manner in which these student-athletes cope with symptoms of ADHD. These aspects lead to the second theme called *Understanding ADHD.* Finally, the manner in which I assimilated the data and best understood it was through a process of identity development. I chose to call this final theme *Assimilating ADHD*, and visualize it as a continuous cycle of redefining self.

I use the word "assimilation" in the strictest sense as "to take in and incorporate as one's own" (Flexner, 1980, pg. 151). I recognize that assimilation has many different meanings related to culture and the process of cultural assimilation (McLemore, 1994); some of these meanings are not necessary viewed as positive. However, assimilation as used in this study simply refers to incorporating the paradigm of ADHD into one's identity. Whether this incorporation is positive or negative or both depends on the context and the individual.

## Student-Athlete Profiles

This section provides a profile of each student-athlete. The four student-athletes have been given pseudonyms in order to protect privacy and ensure anonymity. The four student-athletes played in the following sports: gymnastics,

football, golf, and basketball. I will refer the gymnast as Julie, the football player as Frank, the golfer as Gracie, and the basketball player as Betsy.

General Description. The student-athletes in this study were four students from Oregon State University (OSU), playing sports in the PAC-10 conference, who were diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD). One interesting fact regarding all participants, is that they were not diagnosed with ADHD until after entering a university, three at OSU and one at a university in the East. All participants were age nineteen at the time of identification and diagnosis. Three of these student-athletes were women, and one was a man. At the time of conducting this study, their ages ranged from twenty-one to twenty-three years. The women self-identified as Caucasian, and the man identified himself as being non-Caucasian.

I want to tell a story that highlights these student-athletes' process of assimilating the diagnosis of ADHD into their identity. Through the telling of this story, I wish to convey the phenomenological experiences of these student-athletes as they made sense of being diagnosed with ADHD, sharing with you the information they shared with me about their history and lives. Allow me to introduce to you the student-athletes who participated in my study.

The Gymnast - Julie. Julie is currently an undergraduate student at OSU. Her academic major is undeclared at the time of this study.

Julie shares that she grew up in a strict Christian home and attended church on a weekly basis. For a period of time during her teenage years she "rebelled" against this strong religious upbringing and her parents' rules. At the time of the interview, she considers herself a Christian and as such continues to celebrate Christian religious holidays and events.

Historically, academics were difficult for Julie. She admits to "always hating school." She also admits to skipping school as much as possible due to this disregard. Reading and math were her most difficult subjects in high school. She liked "hands-on" projects as long as she did not have to sit for long periods of time. Her freshman year at OSU was unsuccessful as she "flunked out" due to difficulty making the adjustment from high school to university. Her academic difficulty eventually leads to the discovery that she has ADHD.

The one area in which Julie had longstanding success was gymnastics. She began the sport at age five after she attended a gymnastics meet where she thought the gymnasts "could fly." She wanted to do that too. So Julie became heavily involved in gymnastics during her childhood and early teen years. She states, ". . . growing up that was all I knew, was gymnastics . . . all of my hours were spent in the gym, I spent more time with my coaches than even with my parents or friends. I didn't even have friends outside of the gym." During her freshman year in high school Julie suddenly quit gymnastics. At that time she had reached national levels of competition - the USA Championships - and she was on her way to the Olympics. During the final trials she attempted to compete on a sprained ankle, and as she put it, "basically bombed that competition." Her coach responded to her quite negatively, ". . . he told me how I was an embarrassment . . . and made me feel like crap . . . so it just seemed like a good time to quit." Afterward Julie reported going through a difficult period. It was "depressing for a while, because that's who, like, everybody associated me with gymnastics, and that's who I was, that was my identity. And then after quitting, I wasn't really anybody. I was like, the ex-gymnast. And so that was hard, it was kinda lonely at that time."

Throughout the remaining years of high school, Julie does not participate in gymnastics. She tries a few other sports such as diving and track and field; however, she "missed gymnastics" during this time. She admits that "I always had these hopes and aspirations of some day coming back and being good." Her hopes and dreams did come true. Julie eventually returns to gymnastics upon entering Oregon State University women's gymnastics program. She is quickly back in routine and begins performing remarkably well that same season.

As Julie naturally flows back into her gymnastics routine, she does not experience the same progression in her academics. Unfortunately she falls increasingly behind with each passing day, begins skipping classes, and by the end of her freshman year has "flunked out." To her dismay, she doesn't alert anyone to the difficulties she is experiencing until it is too late. Once again her gymnastics career comes to an end as she is dismissed from school due to her academic failure. She begins working at a minimum wage job over the next year.

However, Julie's story does not end here. Marci, a Learning Specialist within the athletic department, suspects that there may be more to Julie's academic failure than just not liking school and skipping classes. Marci requests numerous tests be conducted to see if there is an underlying explanation for her difficulties. After cognitive/educational and psychological evaluations, Julie is identified as having ADHD. Under the NCAA guidelines, Julie is readmitted to the program based on a medical hardship.

The Football Player - Frank. Frank is an undergraduate at OSU. He is non-Caucasian. He begins playing football as a sophomore in high school, and plays on the OSU football team. He reports always being involved in sports and loving athletics. He describes his attitude in sports as "One-on-one I dominate you."

While playing football he has the philosophy, "I look on the whole line and I'm like, 'I'm gonna dominate the guard the whole game and he's gonna be my play thing.'"

Frank says that he is family oriented, and considers himself a "mama's boy." His reason for defining himself this way is that "My mother is, ya know, the sole figure in my life, that ya know, is completely reverent, ya know is, holds complete, ya know she's everything to me." He adds that "she has had one hell of a hard road in her life. So, ya know, I have nothing but respect and love for her." He says that coming to school has helped him to "really, really, really appreciate her." His parents divorced Christmas day when he was in the eighth grade.

Frank reports a history of physical aggression. He says that "I've been in more fights than I can count." He admits to having a criminal record. However, he claims to have "matured" since attending university, and he states, "I don't have as much of ah, an attitude, 'I'm tougher than you' attitude."

Frank considers himself to be "a very intelligent man." He reports achieving a 1290 on his SAT scores, however his educational records indicate an SAT score of 1180. He attended a college prepatory high school prior to attending OSU. He has a long history of academic difficulty. He reports that he cannot concentrate when it comes to studying and doing homework. In reference to academics, he considers himself "a big-time procrastinator," and says, "I'm lazy and I procrastinate, that's like my two sins." Academics do not appear high on his priority list, he says, "I'm not concerned with getting a high GPA and all that shit because, I mean, what am I going to do with that? Nothing."

Frank hopes to return to his home some day and have a family. His career goals include becoming a fire fighter. Playing in the NFL is something that he

says, "I've got in the back of my mind." However, he believes some of his teammates are ignorant to say, "Fuck school cause I'm just gonna go to the NFL and I don't have to worry about anything."

Marci, the Learning Specialist in the OSU athletic department, plays a role in the identification and assessment leading to Frank's diagnosis of ADHD. He has been struggling with academics for a long period of time. While discussing his difficulties with Marci, Frank states, "she was curious, she brought it up, she had me go in and do all this testing." As a result of cognitive/educational testing and a psychological evaluation, Frank is diagnosed with ADHD.

The Golfer - Gracie. Gracie is an undergraduate at OSU. Gracie reports a longstanding history of playing sports. She says, "I really enjoy sports. I grew up playing all sorts of things. I grew up playing with the boys. I play basketball, and volleyball, and football." She plays for the OSU women's golf team.

Gracie describes herself in the following manner. "As a person, I think generally, um . . . I'm pretty quiet, almost shy, quite humble, um . . . reserved I guess is the word. Um . . . I work well with people in groups. I think I'm a good leader and stuff." She adds that she is "independent" and enjoys her own space and quiet time. She also says that she is "an active person" who is always trying something new. She enjoys physical activities with friends, such as hiking, swimming, or bike riding. She states that being physically active keeps her "sane."

Gracie describes her family as a "very traditional," "Christian based" family, "conservative at times." Her parents have never been divorced and are "very loving" and "very supportive." She has a brother whom she describes their relationship as being "very, very close" and that they are "soul-mates." She describes him as the "snow-boarding king of the universe."

Gracie has several hobbies including painting, and writing poetry and short stories. She says that she would like to write children's books as well. She states, "I finished one, but the rest are ideas just waiting for me get them down. I need to get one of those recorders so I can just talk myself through it. It would be a lot easier, cause my hand can't keep up with my brain. Ha, ha (Laughs)."

Gracie's career plan includes teaching first and second grade children. She states that she "loves" working with children and is "real excited to teach." In the future she would like to have a family and settle down after all of her "travels." She is also considering the possibility of the Peace Corps.

Historically, academics have been challenging for Gracie. She states that she was never an "A" student. She says, "I've never really been a good student. It's kinda frustrating at times. I wished I was as good at taking tests as I was at playing some kind of sport. Ha, ha (Laughs). This may sound crazy, but . . . But, it's just, it's frustrating sometimes." Throughout the interviews, Gracie repeatedly expresses her deep frustration with academics.

Gracie is diagnosed with ADHD while at OSU. Gracie undergoes numerous educational and intelligence tests, as well as a psychological evaluation which result in the ADHD diagnosis.

The Basketball Player - Betsy. Betsy is an undergraduate at OSU. She reports having "always" been involved in sports since childhood, and she remembers playing basketball as early as the second grade. Her interest in basketball was sparked by her father who used to coach the game. She plays on the OSU women's basketball team.

Betsy describes her family as a traditional family unit. Her parents have been married for approximately thirty years. She has one brother. He manages one

of the family owned businesses. She describes her family relationships as being "close," especially with her brother, and she says that her family spent a lot of time together while growing up. She states that she had a difficult time when she was younger due to being physically taller than her peers. However, she gains confidence through playing basketball. The following statement illustrates this experience:

> When I was really young like I had a hard time because I was always a lot taller than everybody ya know. And so, like I was really shy, and like I had a hard time talking and stuff like that because I wasn't confident of myself. *Um, hm.* But, ya know I think as I got older, like I got a lot more confidence just from basketball and that kinda stuff.

Betsy's career goals include becoming a high school counselor. She describes her reason for setting this goal as follows, "I remember my high school counselor and like he had like a big impact on me when I was in high school." In the future she also plans to have a family of her own.

Betsy states that she has a history of not liking school. She says, "I really want to do the least amount of schooling I can." She describes school as "painful" and "boring" and says it causes her to fall asleep. She says that school "doesn't provide a lot of stimulation for me." Sitting through classes is difficult for Betsy; she says that "an hour is entirely too long. Ya know, entirely too long!" Betsy says that she started off at university "real bad," and describes her ongoing academic experience as being a continuous challenge.

Betsy believes that she inherited ADHD from her mother. She describes her mother as having "a lot" of the symptoms of ADHD, such as not being able to concentrate which has resulted in numerous auto accidents. Betsy is diagnosed

with ADHD during her freshman year while attending a university in the east. She transfers to OSU during her sophomore year.

## The Journey Begins

The story of Julie, Frank, Gracie, and Betsy is a journey of sorts. These four separate travelors journey on a road filled with twists and turns, highs and lows, and a few unexpected bumps along the way. Although each journeyer travels the same road, their experiences prove to be uniquely different. This is not to say that some of the treks aren't experienced in a similar manner, for indeed there are comparable jaunts. However, each traveler displays a recognizable complexion with distinct oddities, and unique peculiarities with which you will become familiar as you follow them on their journey.

The journey begins with Julie, Frank, Gracie, and Betsy entering into the university of their choice. All arrived at college riding the wave of an athletic scholarship due to their natural ability and excellence in athletics. Excellence at the highest level as they are now competing in one the top conferences in the nation. Fans come for miles to see these athletes, filling the stands, and collecting autographs like eager beavers gathering wood for a dam. The media crawls in like lions, lying in wait, stalking each of the journeyers. Cameras flash, the video rolls and the journeyer and their sporting event are broadcast nationally. This is the moment they have been waiting for - all of those hours of working out, sweating in the gym, pushing muscles harder each day just to be in this moment. The national anthem begins, "Oh say can you see . . ." and slowly fades off into the distance. Julie imagines twisting and twirling and landing perfectly flat, waiting for the

perfect 10 to appear on the judges' score cards. Frank sees himself tackling the quarterback, preventing him from throwing the winning touchdown. Gracie pictures the final putt on the eighteenth hole dropping in with ease for ten under par. Betsy envisions herself running down the court slam dunking the basketball in the net at the last second of the buzzer. The anthem fades back in, ". . . and the home of the brave." The roar of the cheering fans marks the start of the only experiences which really matter to the journeyers.

Monday morning, 9:00 a.m. Julie decides to sleep in and skip Math 111. She says to herself, "Why bother? I'm failing anyway." Frank has a meeting with his academic tutor. However, he forgets and heads for the gym. While talking about how fun it would be to play in the tide pools and watch the sea anemones, good friends Gracie and Betsy are overcome with excitement and drive out to the coast. Caught in the tide of their own symptoms, each person flows with the waves of ADHD.

## The Journey of Discovery: Theme # 1 - Discovery of ADHD

"Why don't you listen to me? What's wrong with you?" asks Betsy's coach out of utter frustration. "I don't know, I like, I try and sit in there, and I try to listen, but I can't." Betsy replies. Frank excuses his academic failure as, "It's just because I'm not going to class, that's why I'm not doing well." While reviewing a test in Health class, Gracie realizes, "Something is crazy. Something is not right" when she realizes what she has read is completely different from what the professor is describing. Julie's coach says, "There is something wrong with this girl" as she is dismissed from the gymnastics team and the university due to academic failure.

The journey of discovery begins with precipitating factors leading up to the identification and assessment of ADHD. Upon being diagnosed with ADHD, Julie, Frank, Gracie and Betsy demonstrate a variety of responses toward this information. Therefore, the manner in which I chose to present the theme Discovery is as follows: 1) the precipitating factors leading to the diagnosis of ADHD; and 2) the initial, varied reactions of the student-athletes.

Precipitating factors leading to the identification of ADHD. Julie, Frank, Gracie and Betsy are all diagnosed with ADHD at age nineteen while attending a university; three of them when attending OSU and the other when attending a university in the Eastern United States prior to transferring to OSU. The precipitating factors which lead to the identification and diagnosis of ADHD is academic difficulty and/or their coach(es) having suspected something being different in their behavior. Each student-athlete is then referred for psychological testing by a staff person in the athletic department who has more specific knowledge of the symptoms of ADHD than the coach(es).

Julie is initially suspected as having ADHD due to her academic difficulty during her freshman year at OSU. She relays the following story:

> I don't know, I didn't have any idea of anything, and then when I did come here there were certain signs I guess that um, that I might have ADD. Especially like in gymnastics like our whole team they always get like really high GPAs, and I was the one who was flunking. Ha, ha (L aughs). And they are like, "There is something wrong with this girl."

Julie is expelled from OSU near the end of her freshman year due to academic failure. As a result of her dismissal, further action is taken by Marci, a Learning Specialist, in an effort to explore the reason for her difficulty. After cognitive/educational and psychological testing, Julie is diagnosed with ADHD.

Frank is identified as having ADHD in his freshman year at OSU. Marci, the Learning Specialist in Athletic Services is the first to mention the possibility. Frank describes the situation as follows:

> She was wondering why I was doing, I mean in classes called "Methods of Study" ya know, basically a how to study class and some other stuff like that, like how I was doing so bad in those and, ya know, be as smart as I am. Ya know, so she actually brought it up. And I was like no, I was like, "Marci, ya know, it's just because I'm not going to class, that's why I'm not doing well." Ya know, she was like, "It might be more than that."

Frank is extremely resistant to the idea of ADHD, denying any problem beyond his laziness and infrequent class attendance. His initial response is, "I don't have ADD, I'm just lazy." The Learning Specialist persists and Frank eventually agrees to follow through with cognitive/educational procedures and a psychological evaluation which results in the diagnosis of ADHD.

Gracie remembers the precise circumstances which eventually lead to her diagnosis. She describes the precipitating event as follows:

> One day I was just sitting in class and I got my test back and I didn't do well at all and he was, the professor was reading over a couple of questions out loud that people had commonly missed or whatever, what he read and what I read were like two different things. And I was just, ya know I was kinda like taken aback for a second.

Gracie approaches Marci, the Learning Specialist in the OSU Athletic Department saying "something is crazy," and telling her about this experience in class. After following through with cognitive/educational and psychological assessments, Gracie is diagnosed with ADHD.

Betsy's coach is the first person to notice her difficulty with paying attention and her inability to concentrate. An example from Betsy illustrates as follows:

> I couldn't pay attention and like he (coach) was just like, he would talk to our, cause we had a team doctor that was just, like, our doctor, and like he would talk to the doctor and he'd just be like, "Betsy, she can't, she can't concentrate, she can't pay attention, blah blah blah" ya know and he would just, ya know, and he was like, so ya know, he would come, he didn't, ya know, he didn't, so he was like, 'Well maybe you should go.' So they had me go to this counselor guy . . .

Betsy follows through with this recommendation and meets with the counselor. The counselor then recommends a complete psychological evaluation. Upon completion of this evaluation, Betsy is diagnosed with ADHD.

It is interesting to note the role of the Learning Specialist and counselor in each of these student-athletes experiences. Due to their awareness and knowledge of ADHD, they refer these four students for an appropriate psychological evaluation. Perhaps these student-athletes would not be properly identified and diagnosed with ADHD if someone having an awareness and knowledge of adult ADHD did not recognize their symptoms.

Clinical Diagnosis of ADHD - Mixed Reactions. Upon being diagnosed with ADHD, Julie, Frank, Gracie, and Betsy describe their initial reaction(s) to this new information. The reaction(s) of each student-athlete varies in the type and the range of emotional intensity.

**Excitement, sadness and the "labeling" affect**: Julie describes her reactions when diagnosed with ADHD as being "mixed." She says that she was "excited to find out . . . and sad to know I had it." As well as feeling sad, Julie says

that she did not want to be "labeled." "I was like really sad at first because whenever I heard of people with ADD, like . . . I don't look down on it, I just think it's like they're different. And different isn't always necessarily good. *Right.* And, so I didn't want to be labeled as that, so that was hard to deal with at first."

**Is it real? Relief and grief**: Frank describes his initial reaction to the diagnosis of ADHD as one of surprise. He illustrates as follows:

> It was like, "Holy Shit." Like maybe there is something else besides the fact that I'm from [. . .] and I'm laid back. Possibly, ya know, and I'm not, maybe I'm not just lazy and procrastinative (sic), ya know, maybe it is based on something else, ya know.

Frank also questions the validity of the disorder and is afraid of ADHD being an excuse, "I'm scared that it's an excuse and not an actual, ya know, thing." Even though he has doubts, Frank indicates a sense of loss in not having known earlier in life, "I wish I knew in second grade, I wish I knew in fourth grade, ya know, even in Junior High." Finally, he describes a sense of relief in "putting a name to my problem, " and the joy of discovery, "I think it's more of an epiphany when you find out that, ya know, it's like that light bulb, it's like 'Holy . . . '."

**Shock/concern, excitement/interest**: Gracie describes an initial sense of shock in conjunction with the following questions, "How can I do better? What's going to help me improve?" After the shock she says that she is "kind of interested, and kinda excited actually to figure out what's going on with me."

**Apathy**: Betsy's reaction is somewhat lacsidasical, "I was just like, all right, whatever, just give me whatever I'm supposed to do and that's what I did, ha, ha (laughs)."

It is clear that these student-athletes are initially impacted in a unique manner when presented with the diagnosis of ADHD. These different responses

clearly demonstrate a range of mixed reactions. Therefore, it is important to note the variability of responses that they experience as a result of the diagnostic process.

Monday, 12:00 noon. Julie awakes and wipes the sleep from her eyes. "I better hurry, Geography starts in fifteen minutes." On her way to class she meets a friend who says, "I'm going shopping, wanna come?" As Julie is trying on a pair of shoes in the shopping mall, she suddenly remembers that she is supposed to be taking a geography quiz. Five minutes into his Women's Studies class, Frank begins playing with his pen cap and starring out the window. Twenty minutes later he gives up the pretense of concentrating, gets up and leaves. Gracie complains to her friend Betsy about feeling overwhelmed because she has two midterms and a paper due. Suddenly Gracie gets up and walks away in frustration, "You never pay attention to what I'm saying!" Betsy realizes she has been thinking about a funny show she watched on the Cartoon Network last night instead of listening to Gracie.

## The Journey of Making Sense: Theme # 2 - Understanding ADHD

After the initial experience of being diagnosed with ADHD, Julie, Frank, Gracie, and Betsy all describe a process of attempting to make sense of this new information. Gracie identifies this process as a "puzzle," and she is the one who has to put the pieces together. For these student-athletes, this puzzle is wrought with extreme emotions ranging from a sense of relief to feelings of depression and sadness, and complicated by a plethora of conflicting information regarding their own knowledge and beliefs about ADHD. Questions which were raised by these student-athletes include the following: What is it? Why do I have it? What makes

my body have it? What do I have to do? What does it mean to have ADHD? How do I make sense of "having" ADHD? As each question is answered, a new question arises to take its place.

Attempting to understand ADHD appears to be a rather challenging process for each of them, a process filled with both failures and successes. The outcome of this particular process eventually lead to a new understanding of self. I view this as an assimilation process: one of reexamining and redefining one's self-concept in light of new information. This is an "opportunity" to adopt or reject a new paradigm from which to view one's life. Each participant attempts to understand her or his experiences in light of conflicting information regarding ADHD. This conflict consists of sorting through both accurate and inaccurate information (e.g., stereotypes) about ADHD.

These student-athletes' process of attempting to make sense of ADHD occurs in the following ways: 1) the using of clinical treatment, more specifically the using of psychopharmacotherapy; 2) the adopting of effective coping skills; and 3) the learning of new information, thus an educational component.

Clinical Treatment for ADHD – Psychopharmacotherapy. One way these student-athletes attempt to make sense of ADHD is by controlling their symptomatic behavior through the use of medication. Immediately upon the completion of the diagnostic assessment, the most common treatment option which presents itself to each person is psychopharmacotherapy, specifically the use of methylphenidate (Ritalin). These student-athletes initial reaction to this form of treatment is one and the same, hesitancy. However, each person agrees and attempts the use of the medication. Their combined experiences regarding the use of Ritalin results in a myriad of reactions, both positive and negative.

**Placebo Effect**: Julie, Frank, and Betsy question the actual effects of the Ritalin. Essentially they question whether the medication produces the desired effects or if it simply fabricates a placebo affect. Julie indicates that the medication does not help her focus any more or less than normal. She describes this in the following statement, "I think it (Ritalin) might have [helped] mentally, like, when I would take it, I'd think to myself, 'I just took my medication, so now I can sit down and study.' So, mentally it might have helped . . ."

While discussing the impact of Ritalin, Frank questions the potential for the placebo affect. He illustrates in the following statement.

> I don't know if it was like, shit, it could have been sugar pills and maybe I just convinced myself that I could concentrate better, ya know, I don't know. But sitting in class I'm taking notes better, and I don't know if it was because I'm taking these pills and thinking, OK - it's going to do this for me so I'm doing it.

Frank further describes an ongoing struggle, or what he terms "mind games," which consists of his experiencing the ability to concentrate while using the medication and believing that it was simply the result of a placebo, "sugar pills."

> I remember that when I had like, ya know, a four-page paper it took me like an hour to write it, ya know, two weeks after I got, ya know, and I was taking the Ritalin like every day and I had a four-page paper and it took me like an hour, I just pumped it out and I'm thinking, I'm thinking, is that real? Is it real or is it because I've convinced myself that it's real. So, I played mind games like that too much, ya know. I think, ya know, I definitely, definitely, definitely notice a difference when I'm on the medication - it's just sometimes I don't know if I accept it or if I'd be getting the same effect if you gave me sugar pills.

Betsy describes how the use of Ritalin helps her to be more decisive while playing basketball and helps to control her anger. However, immediately after identifying these positive benefits, she concludes by saying, "It kinda helps me control it, I think, but I don't really know if it really does, I just feel like it does, so I suppose it does. So, I don't know."

**Negative Effects**: These student-athletes describe several negative effects as a result of taking Ritalin. Julie is the only participant who believes that she did not benefit at all from the use of Ritalin. During both interviews she claims that it did not help her academically or otherwise. In fact, she describes the extreme negative physical disruption it caused her as "like I just had a coffee, kinda like a buzz, like jittery kinda thing." As a result of moving between highs and lows, she discontinues the use of Ritalin.

> I'll notice like I'll have an up and then suddenly I'm way down, like I almost like get a headache, like I feel like I have really low blood sugar and need to eat again, like I've been working out all day. And so, I didn't like that. And so it's either like take it all day long once you feel that low, like take more, or just don't take it. So I got to the point where I just don't take it.

Gracie indicates having negative physical reactions in reference to using Ritalin when she performs weight-lifting. She describes one experience as follows.

> One time I forgot that I had taken my medicine, and just recently I thought it was out of my system, I thought it was enough time, but it wasn't and ah, went into this pretty scary like arrhythmia thing. *Oh really?* Yeah, my body just shut down and everything was slow motion, like jello, just a bad trip or something.

Also, Gracie experiences a shortened temper under the influence of the medication. She describes one experience when she lost her temper while playing golf.

> The one thing that I found out about this medicine is I get a temper *Oh, really?* with it for some reason. *Oh really.* I don't know what it is but. Like when I play golf sometimes, I went out with my medication, usually like I'll hit a bad shot and I'm just like, OK, ya know, carry on. [She begins playing with chain]. But I found myself just like getting really upset, and just like 'I have to do good,' and just getting kinda, getting that speedy feeling out of it ya know. So I was like, 'Screw this stuff I don't need it for golf.' I've played golf long enough without it, ya know.

Several times during the interviews, Gracie reiterates that the use of Ritalin causes her to be tired, and she feels that it alters her mood and the functioning of her mind. She says, "I don't know, it makes you tired, and it makes you, it's no fun, you just really want to sit down and read a book. It's kinda boring. I don't know why people take that stuff for fun, I guess it's speed for fun." Finally, she indicates that it suppresses her appetite and causes her to feel "sick." As a result she has to alter her eating schedule.

Similar to Gracie, one major negative effect that the Ritalin has upon Betsy is the manner in which it alters the functioning of her mind (e.g., increased ability to concentrate). She repeatedly states throughout the interview process that the Ritalin causes her mind to be "stagnant." She complains that it causes her mind not to "wonder" about things, as if it somehow altering her sense of creativity.

> When I take it, ya know it makes me concentrate a lot, but . . . but I don't necessarily like to do that, ya know, and so, it's like, that's like how, I'll like, I'll get bored, I'll get really bored. Like if I'm sitting there and I'm listening to somebody and it's like I've

> taken my medicine so I won't fall asleep and I'll sit there and I'll look at her and I'll pay attention and I'll hear and blah, blah, blah, but, like inside it's just like my mind's really stagnant. And, um, but it's like when I don't take it, ya know, it's like, ya know, it's like I like to have a lot of thoughts going through my head and I like to have, ya know, I like to look at stuff and I like to, ya know, like, I really like to like go to the beach and ya know, like look at the little sea anemones and stuff like that, ya know, like I like to ya know wonder about stuff, but when I take the medicine, I don't wonder, I just look and I listen and I hear and blah blah blah and it's like that doesn't interest me, ya know, and so, I don't know.

Betsy further describes her dislike for taking Ritalin. She says that she does not like the feelings that it produces, such as feeling "crazy" and "trapped."

> I mean, for me as a person I think it's a negative thing because I don't, I don't like to do that, ya know, I don't like, I don't like the feeling of it, of that medicine. I mean, sometimes that medicine makes you crazy. Ha, ha (Laughs). I mean, ya know, and it's like you're trapped in it for hours, ya know, and it's almost like taking some crazy drug, ya know, and you're just like, ya know, like when you can't get out and you're just like, (whispers) "let me out, let me out." It's like you can't and you're just trapped in it and I just, so, I don't, I don't really like that at all.

Along the same train of thought, she says that she does not like the way Ritalin alters her "personality" by turning her in to someone who is "boring." She says that it causes her to become a "recluse."

> It's like when I take it, it's like I'm just, like I'm boring, ya know. Like I'm so concentrated, ya know it's like, 'Don't bug me.' And it's like, I mean like my personality, ya know. Like I like to just be hyper and be fun and outgoing and stuff like that. But, when I take it, I'm not any of those. I don't, ya know it's like I all of sudden turn into a recluse, ya know. It's like, 'I'm in my room and don't bug me cause

> I'm not coming out.' Ha, ha (Laughs). Ya know, I don't, I hate that!

Finally, Betsy complains that the Ritalin gives her "bad cotton mouth," suppresses her appetite, and makes her feel "sick." She says that as a result of a suppressed appetite she will get a low blood sugar level. Therefore, she has to become more conscious of her eating habits and adjust her eating schedule.

**Positive Effects**: These student-athletes describe several positive benefits resulting from the use of Ritalin. Except for Julie who has no positive effects, the other three student-athletes find that the most beneficial use related to the medications is upon their academics.

Frank repeatedly states throughout the interviews that he experiences a "definite noticeable difference" when using Ritalin. He says emphatically that "Ritalin pumps," and describes it as the "sole thing" that has helped him. However, he localizes its usefulness to academics. He describes the use of Ritalin as increasing his ability to concentrate. As a result he is able to take better class notes, categorize information, sit for longer periods of time, work more efficiently, and ultimately complete assignments. Frank states that it also has a calming affect upon him. He provides a very insightful description of how Ritalin aids his ability to concentrate and process information.

> It (Ritalin) helps me out as far as symptoms, like actual symptoms, ya know, like the things that go on in my brain. Like it's too hard to explain, I think, if you don't actually experience it, like what happens in your brain as far as, ah, ya know, just what fires off in your brain, ya know, being able to see thoughts come in, in almost like a picture, if you could picture, like, sentences just rolling in all at diagonals, like they is just coming in and then for you to just go like this and put the sentences like that [gestures], that's almost kinda what it does. I don't know if that's, that's really hard to explain, but . . . and then it a

> slows it down so it's not just comin' in like, "wha, wha, wha, wha" ya know what I mean, it's like, it'll just come "whaa" and then you'll just be like, all right, cool, ya know. Then you can just put it down, like I said I can type faster now, so maybe that helps. But, I mean, the Ritalin, like, pretty much the sole . . . *The sole thing, ah . . .*

During the second interview Frank summarizes this type of experience by saying it is "free falling chaos," and he points out the positive affects that the Ritalin produces. "Well like I said the first time about (Ritalin), ah, helping me formulate my ideas and not lose 'em, ya know, just kinda put 'em in that stacked order I was talking about, not like, ya know, instead of like that free falling chaos that goes on in my mind."

Similar to Frank, Gracie uses Ritalin primarily for assisting her with academics. And she experiences similar positive affects from the medication as Frank. She states that the Ritalin makes "a huge night-and-day difference." She reports an increased level of concentration which results in being able to sit for longer periods of time, take more complete notes during class, increase work efficiency, and "calm down and take my time on tests."

Betsy also shares that Ritalin has some positive affects upon her academic performance. However, she is less explicit than Gracie and Frank in her description of specifically how she benefits. Her most explicit description, although only brief, is as follows. "Um, the main positive for me really is just that it makes me concentrate and that I can actually sit down and do my homework." Betsy further indicates that Ritalin aids in her performance while playing basketball. She is the only one who saw a positive affect upon her athletic performance from the use of Ritalin. She provides the following example.

> I thought, I think a lot of it it helps in basketball, just because, like, ya know, I'm, I'm fairly good at the

> stuff that I'm good at, but when I take it, it's like, like I become really good at those things, but if I don't take it, then, like I don't really care if I take the ball to the basket, or ya know, maybe I'll just shoot it because I don't really feel like doing something else, ya know what I mean, ya know and it's just like, I mean, so I don't know it's like [. . . will] be yelling at me for something and I'll just be like, I don't know, I just didn't feel like doing it, ya know. And, like it's wrong, but it's like she wants an honest answer, ya know, I'll give it to her, ha, ha (laughs) ya know. *Sure.* So, I don't know, so, but she doesn't know I have it.

Betsy describes the medication as helping her to be more decisive and organized while playing basketball. She gives the following illustration.

> Well, ya know like . . . well, I think, I mean, I think it has effects because . . . um . . . ya know, because like when I don't take my medicine, like . . . I don't, I don't like, like my mind, like when I get the ball, like, it's mostly like when, even when I don't have the ball, it's like I don't think about what I want to do, like when I take my medicine like I think about like when I get the ball it's like I know, ya know, like I wanna give a pump-fake or I wanna jab-step or I wanna do some ya know it's like I think about what I wanna do, but when I don't, it's like I'm real indecisive. And so . . . a lot of times ya know, I'll jab-step, I'll pump-fake, I'll do 'em all and I just still won't know what I want to do with it so I'll just pass it, ya know, and it's like, like I'm really good at like being able to take the ball to the court and, I mean the ball to the hole and stuff like that and know what I want to do, like, ya know, like, I was never really gifted with, ya know a lot of quicks or a lot of hops or anything like that, so, I'm a little tricky, ya know, I mean you gotta do what you gotta do, ya know, but I, when I don't take my medicine it's like I don't, I'm real indecisive about anything, and it's like even when I don't have the ball, it's like I don't even know really where I want to cut, like I don't even think about it, like I just kinda wander around, ya know, and it's like, and so, ya know I think that that's

> mostly the effects that it's had on me playing, but I still don't like to take it when I play, because . . . I don't know, I kinda like to play rat ball, ya know, and it's, it's like, it's like I'm so organized when I take it that, ya know, it's like I wanna run the play and if you don't pass the ball where you're supposed to ya know it's like it makes me mad. Ha, ha (Laughs). *Ha, ha (Laughs).* Ya know what I'm saying? Ya know, or if you don't come and set the screen or if you don't go and set the screen for somebody else ya know that makes me mad. It's like I know what's supposed to happen and y'all need to do it, but when I don't take it, it's just like well, whatever, ya know, I'm not really doing what I'm supposed to be doing either, so . . . ya know.

During the second round interview, Betsy states that the medication helps her to control her anger toward her coach.

> Ya know, but, I mean that's the only way that I can think of that it really impacts the way I play. I mean . . . just because . . . ya know, and my coach was, 'What are you doing? Why did you shoot it?' Ya know. But, ya know if I do take my medicine, like I'll, I mean I'll, ya know most of the time I try and do the right thing, but, there's a part of me that, ya know, just wants to take the ball and stick it up [. . .] rear (laughs) ya know. And I'm just, ya know, and it's just like . . . that comes out a little more when I don't take my medicine (laughs), so . . .

Developing Effective Coping Skills/Strategies. A part of the process of making sense of having ADHD is the development of effective methods of learning to cope. There are several key coping skills these student-athletes employ in order to manage their symptoms of ADHD. These skills include developing organizational skills such as establishing a routine, time management, breaking large tasks into small tasks, taking breaks, and quiet time. For example, Julie indicates that prior to knowing she had ADHD, she coped with her ADHD symptoms by using avoidance - such as skipping classes, sleeping, and at one point

in time, drinking. After learning of her ADHD diagnosis, Julie began to develop more effective coping skills. She breaks large tasks down into small, manageable portions, and also uses a support system. The following example illustrates these strategies.

> It helped me realize some of the issues I was dealing with . . . just not being able to pay attention and avoiding problems is like part of it. And then, once I realized that I did have ADD and getting help with it, then I could break down my problems [. . .] like my freshman year I'd have two tests and a paper due and practice and a competition that week, and so if I had too much going on I would just avoid everything and stop going to class and not do any of my homework. But now that I realize that I do have ADD I get help, and I write down my schedule and I have people saying 'tonight, go study for this . . .' or they help me break it down so that it becomes a lot less complicated in my head. "

Frank states that he finds time management, organization, having a routine and scheduling to be helpful in managing his symptoms of ADHD, and he says that scheduling is what helps him the most by establishing a routine. He adds that "scheduling was always the best, when I did best in school is when I scheduled . . . seeing my coach every, like once a day and talk about school." Also, Frank says that taking small breaks helps him to "regroup."

Gracie states that as a result of being diagnosed with ADHD she has learned several coping skills to manage related "struggles and stresses." She says that she has learned the following:

> I need a routine. I've always known a routine is comfortable, but I didn't realize how much I needed it. So just making time, like ok, "I'm going to lift here," "I'm going to eat here," "This is my break," "Do this later," "This is my study." Ya know, just actually planning it out helps me tremendously. It

> just, it takes that much more, it takes so much strays off of me. Um, time management, I'm usually pretty good with that, but I found that just keeping things in order in general helps me out a lot.

Gracie adds several other useful coping skills, such as quiet time, keeping things simple, taking breaks, changing activities regularly, and physical activity "cause I need that release from things, just to go run and play." During the second interview, she reiterates the "four big ones: time management, organization, scheduling and having a routine."

Betsy employs several coping skills that work positively for her. She states that taking breaks is the most effective coping skill for her.

> I, I mean I take a lot of breaks. When I'm trying to do something, like I probably, ya know most people they say go for an hour and take fifteen minutes or something like that ya know, but for me I ya know, I try to work for maybe like a half-an-hour, and then take like, sometimes I take fifteen, sometimes I take another, I take a half-hour to take a break. *Sure.* And . . . but . . . I do, I find myself taking a lot of breaks, just . . . because I feel like if I take a break then ya know like, ya know if I work for a half-hour ya know I deserve a break. Ha, ha (Laughs). Ya know, so I take one, and ya know I feel like I gotta do something else to work for a break.

It is evident that the most common coping skills which these student-athletes employ are organizational skills such as time management, organization, scheduling and having a regular routine to follow. Other useful skills include taking breaks, breaking large tasks into small tasks, quiet time, keeping things simple, changing activities regularly, and physical activity.

<u>A Learning / Educational Process.</u> Another part of the process of making sense of having ADHD is the learning of new information and the gaining of new insights and self-awareness. It is interesting to note the evaluative statements that

Julie, Frank, Gracie, and Betsy make as a result of learning new information and attempting to understand themselves through a new paradigm.

Gracie believes that being diagnosed with ADHD has been an "overall" positive experience for her. She indicates learning more about herself. She states the following:

> Um, I think overall it's been, it's been really good. It's been nice for me having been diagnosed with it. I found out a lot more about myself, and ways to overcome, like, daily struggles and stresses that I didn't realize were stresses before.

Also, Gracie believes that having been diagnosed with ADHD and "going through it" will assist her in her work with children. She says,

> I think it'll, just knowing about it, and having it, going through it, I think it is going to help me teach kids a lot better. Ya know, even if they are not diagnosed, I think it's going to help me a lot, just working with kids. Helping them put their little lives into routines. Ha, ha (Laughs). My little kids'll just be like, "Here's recess and here's this . . ." Ha, ha (Laughs).

Having been diagnosed with ADHD, Gracie states that it helps her by increasing her awareness and "realizing" areas where she experiences difficulty. She also describes these realizations as an ongoing process.

> Ya know still day to day, ya know I'll see something, realize that this is, this is just a little thing I do, this is one of my tendencies, or this is, I have trouble in this area. And just like the realization of what areas I struggle in, and then coming upon ways or how to fix that or ya know lessen them out a little bit or however you want to say it. Um, I mean I'm still doing it. I think I've pretty much figured it out as far school goes and stuff but, there are still a lot of things that ya know I just realize when I get in certain situations ya know, I might stare out the window and twirl my hair

> for two hours and not pay attention, not hear a word that anyone is saying not even professors, I just find myself doing that, which is kinda funny. Sometimes I'll laugh at myself, *ha, ha (laughs)* find myself shaking my head. But . . . I don't know, I think I, ya know, I work on it . . . still.

Near the end of the first interview, Gracie provides a summary of her experience of having ADHD. She states the following:

> Overall it's been good. Because I've been able to overcome those things that were stressful and that I was struggling with as far as school goes and stuff. Um, I've been able to find out more about myself, why I do the things I do. And ah . . . um . . . the positive and negative things . . . I think, ya know, overall it has been good. I'm glad we finally got down and figured it out. *Yes.* Otherwise I'd just be even crazier, ha ha, still on the same line just going batty, studying my brains out and still not doing any good. So, I think it's a good thing.

Frank also indicates that knowing he has ADHD has helped him in several ways. He says that "it's helped me understand a lot of stuff," and provides the following example of how it helped him to understand his longstanding difficulty with reading.

> Understand why I was being like I was when I was younger, ya know, second grade, third grade, fourth grade, like that, ya know. Cause I specifically recall, ya know, things like having trouble with the reading thing, ya know. It's like a paragraph long, but at the time, I mean, I'm like struggling with the words, ya know. Ya know, and, so it's helped me understand that.

Frank adds that "it's helping me understand that I could if I wanted to, ya know, actually, probably concentrate better, ya know, as far as writing papers, writing fast, taking notes, ya know." And he summarizes the past couple of years knowing he has ADHD as:

> . . . a learning experience. It has caused more reflection on to why things are the way they are. And just, I guess I've learned a lot from it, ya know, I've ah, it has helped me explain things. And it has also helped me look at things in, like, in a way like, I'm like, "I don't want to crutch on it," so you know. So I guess in that sense it has effected in that where I'm thinking, like I guess, so I mean it makes me more inquiries, ya know. "Why am I doing this?" *Why you do certain things?* Why I do certain things, and reflection.

Frank further describes the experience of discovering ADHD as a process of "soul searching," and summarizes this experience as "intriguing." He explains this reasoning:

> Because of all the questions and all the soul searching that goes on because of it. Looking for explanations, finding explanations, um, yeah, it has just been what I learned. Like I say, I don't, ya know, I don't put school super high on my priority list, but I do love to learn. And I think the reason I don't like school is because of the homework. If it was just the case of I go to class and I learn and I experience life, more of life, that's what I appreciate and that's what I yearn. So, for me to have learned as much as I have about myself and questions I brought up, ya know, I think it is truly intriguing, and that's exceptionally, and that's what I get from it.

Julie says that finding out about ADHD "turned my life around" and helped her to get back into the university. She says it also helped her to "realize" some issues that were on-going, such as avoiding problems, and enabled her to begin developing effective coping skills.

Betsy attributes certain aspects of her personality as the only positive part related to ADHD. She states the following:

> I guess I like the way my personality is because of it, but . . . I like my personality because it's like, I really like people that seem, ya know, really fun and

> interested in life and, and really like to do stuff and like to go places . . . but it's like, I don't know, I just, like I really do like, like my kind of personality in other people, ya know. And, it's just like because I just feel like they're fun, ya know.

The learning of new information proves to occur differently for each person. The manner in which each person understands ADHD varies accordingly, and uniquely as it applies to his or her life experience.

Monday, 4:00 p.m. Julie breaks down crying in practice because she is afraid of flunking out again. In an attempt to alleviate her stress, the coaches send her home to study. Instead of feeling relieved, Julie becomes sad. She feels punished because she isn't being allowed to do the thing she loves the most, gymnastics. In the locker room, the football coach maps out a play on the chalkboard. Frank only hears half of the play. Soon afterward, while out on the field practicing, he is chastised by the coach for "messing up." Upon returning from the coast, Gracie and Betsy each go to their separate practices. Gracie walks behind the rest of the team spitting sunflower seeds, dreaming off into her own world about an idea she has for a children's story. As Betsy sprints down the court she doesn't hear the coach calling out the plays. She begins running her own plays causing confusion amongst the players.

## The Journey of Assimilation: Theme # 3 - Assimilating ADHD

While attempting to make sense of ADHD, these student-athletes proceed along a parallel process of assimilating this new information into their identity. This raises the question, "What is the experience of not knowing you have had ADHD for your entire life and then suddenly, as an adult, finding out that you do have ADHD?"

Imagine yourself being informed that you have ADHD, what would that be like for you? For Julie, Frank, Gracie, and Betsy this process is filled with conflict and turmoil paralleled by a sense of relief and understanding. It is further complicated by conflicting information and a broad range of intense, and extreme emotions. By no means is this an easy process to endure. What makes this process so complex is that the defining and redefining of one's identity occurs on three different levels: the past, the present, and the future. The conflict occurs between defining oneself in reference to the new information about ADHD and redefining the self in light of the "old" information about self. One way these student-athletes experience this conflict is through the attempt to distinguish between what is their personality and what are symptoms of ADHD.

Personality vs. ADHD. The knowledge of having ADHD provides the participants with new lenses from which to view themselves. This creates an opportunity for them to understand and redefine themselves in a new way(s) and/or from a new and different paradigm. However, all of these student-athletes describe this "opportunity" and information as creating a conflict. The conflict is the attempt to distinguish between what is ADHD and what is their personality. Gracie captures this conflict in the following statement, "I have trouble, like defining the line what I might consider being my ADHD and just being part of my personality, I mean they kinda, they go together." Gracie gives a prime example when trying to distinguish between her creativity and symptoms of ADHD:

> Um . . . I think I, I think I'm, I don't know if it's cause of ADD, I'm a really creative person. Ya know, like I said I'll just go into fairy tale land. Like if people just knew the stories I made up in my head all day, they'd probably ship me off somewhere. Ha, ha (Laughs). I mean my mind is just constantly going, it's real easy for me to slip into, even when

> times get like, like overwhelming, like we were talking about, too much at once. (Snaps fingers) I, I'm there just like that. *Into thinking about "other world" stuff?* Yeah. So I don't know if that is part of it.

Frank's experience reflects a similar "conflict" which results in his questioning the validity of ADHD. He makes following statement:

> I run into the, I run into . . . ah . . . like, not contradictions, but ya know, where I'm not sure if this is happening to me because of ADD or because I'm lazy or because I'm a procrastinator or because, ya know, ya know my dad raised me like this in school, or you know what I'm saying. So a lot of times I run in to that conflict I think . . . like I'm like, I wonder if that's really true.

Frank lends another example in reference to talking about his particular symptoms of hyperactivity. He illustrates in the following:

> See I don't know, is that [hyperactivity], is that a characteristic of ADHD or is that a characteristic of a personality, I mean, like shit, you could be outgoing anyway, ya know, *Um hm*, and like, I see hyper kids all the time, ya know, but, ya know I, I was a, ya know, a pretty outgoing child and I think that has to do with being, more has to do with how I was raised, ya know, not so much . . . *Not so much about the ADHD?* Yeah, no not at all.

Julie provides an example of not being able to distinguish if her childhood activity in the gym was simply due to being a child or if it was due to ADHD. She gives the following illustration:

> Well, when I was little I remember being really hyper. We'd be on a certain event, and I'd be off playing at another. And I don't know if that is because I was a kid. But I remember always getting into trouble. But then sometimes it actually helped me, because since I did have so much energy I would do . . . like, say that they'd give us an assignment of

> make ten routines, I'd just have so much energy I'd do twenty routines. Ha ha (Laughs). So, or like, I'd be finished with something I'd go bounce off and work on other things, and my coaches liked that. So . . . and I don't know if that is part of the ADD-thing.

In the following illustration, Julie describes this struggle in contrast to how she performs differently than other gymnasts.

> In competitions, I do better when I don't think about what I'm doing. Like, I just kinda go into this numb state, where I just let my body do what I know how to do, rather than my mind. So I always thought that was kinda strange. Because when I talked to other gymnasts, they are not like that at all. So, so I don't know if I'm weird or that is part of ADD or what. I don't know.

Julie also is not able to distinguish whether her inability to visualize in her head is a symptom of ADHD or not. She says "I don't know if this is part of it but, we've had, I think it was you who came in and we were supposed to visualize our routines in our heads, and I don't know if this is part of ADD."

Self-Contradiction. Self-contradiction is reflected in numerous statements these participants make during the interviews. For example, Julie states that discovering ADHD was a positive event in her life, "It turned my life around and helped me, and now it has helped me because I'm back in college. So, I look at it as being helpful instead of as a hindrance." Shortly after making this statement in the interview, she states the exact opposite, "I look at it as more of a bad thing than a good thing having ADD. So, even though some good things have come out of it, overall it is more of a bad thing."

Gracie contradicts herself several times as well. For example, she states, "School for me has always been fairly easy." And immediately afterward says "I

didn't get good grades ... I was never an "A" student ... I never go above that "C" average."

Betsy contradicts herself in the following way. She states that "it really doesn't bother me" having ADHD. Shortly afterwards she indicates that she doesn't like to be put in the situation where it can be "held against" her, and further that she doesn't like to be seen as having a "learning disorder."

The numerous self-contradictions are indicative of the mixed messages and feelings about having ADHD. These unresolved messages create an internal conflict when attempting to assimilated the ADHD paradigm into self-identity.

"Labeling" Effect. There are several negative connotations that these student-athletes struggle with as a result of having ADHD. One such negative message includes not feeling "normal" due to having a "disorder," which results in being devalued and feeling "different" than others. For example, Julie does not want other people to know she has ADHD for fear of not fitting in and being looked down upon. "I just want to fit in and I don't want them to know I'm different . . . and I don't want them to look down on me at all or think that I'm any less." During the second-round interview Julie reiterates, "I just want people to think I'm normal."

Betsy also does not want to be "labeled" as having a learning disorder. She states, "No, I don't like, I don't, no, I don't have a learning disability and I don't like that they say that I do [. . .] I don't like people to tell me that I have a learning disability 'cause I don't." Whereas Julie feels as though ADHD is a learning disorder and therefore she avoids telling others due to feeling dumb. "I don't know, I feel like it [ADHD] is some kind of learning disorder and makes me feel dumb if I tell people I have it."

Excuse/Crutch. Julie, Frank, Gracie and Betsy fear that by accepting the diagnosis of ADHD they will be viewed as using a "crutch" or an "excuse." Julie provides the following example:

> I forget to do certain things. And then that gets me into trouble with my coaches a lot. Because I'll forget to lift weights and then . . . I'm in trouble. And then people get mad at me. And then I get disappointed and frustrated with myself, because I honestly, like can't remember what to do, and it seems like a cop-out kinda thing. Like maybe they think I didn't want to lift weights or I didn't want to go to the meeting, when really I completely blanked it out and cannot remember. *You just don't remember?* Yeah. *So, sometimes other people may perceive that* . . . Yeah, like maybe as an excuse, "She has ADD, that's an excuse."

Julie is adamant that she does not want ADHD to be used as an excuse either by herself or others. During the second interview she states the following:

> I don't want to use it as an excuse or for people to think of it as an excuse. If I forget to do something, I don't want to use that, "Well I have ADD so I don't have to do that," or "I forgot to turn in something because of it," so I don't want people to think it is an excuse and I don't want to use it as an excuse!

Prior to his diagnosis, Frank believed that ADHD was just an excuse. And, he states that he continues to feel that way "in a sense." The following example illustrates his belief and his unresolved conflict:

> I always thought, I thought ADD was fake. I always thought it was someone's excuse. I was like, they don't really have it, they're just, it's just an excuse that they want to give themselves, like a crutch. "Oh, I can't do that because I've got ADD." Ha, ha (Laughs). And I still feel like that in a sense, ya know, cause you can unlearn, you can like learn how to go on even though, ya know what I'm saying, even

> though, cause like I've since read a couple books, okay I've never read a whole book, but I mean articles, ya know, and ah, just dealing with that, saying, "Hey, ya know you can unlearn habits that coincide with, ya know, your Attention Deficit."

Similar to Julie, Frank is adamant about not wanting to use ADHD as a crutch. He states that for this reason it becomes difficult for him to "accept" the validity of the disorder. He illustrates this fact in the following example:

> And I hate, I hate, I absolutely hate to be, to crutch ADD, ya know. I would hate to do that. That's why I sometimes, I don't accept, I think, I think I'll do this and I'll just do it on my own, ya know and I'll try to just fight it. So that's actually what I do sometimes, ya know, I'll type my paper and I'll just fight it.

When asked how he feels about having ADHD, Frank replies, "Like I said, I'm scared it's an excuse and not an actual, ya know "thing." Near the end of the first interview, Frank reiterates this point, and he adds that he believes it is "wimpy" to use it as a crutch, "I hate for it to be an excuse or a crutch [. . .] I think it's wimpy." During the second interview Frank distinguishes two different uses of the term "excuse." He maintains that he does not want ADHD to be a crutch, "I don't want it to be a crutch like, 'Okay, I'm not going to do my homework so here's my excuse.'" However, he clarifies that use of the term "excuse" by suggesting that it can be understood as a term which can convey one's limitations. "It's like, 'I'm going to do my work, but hey if I can't do it to the . . . ya know . . . in, in under your, ya know, guidelines because, because of this, then yeah, I want you to know.'"

Gracie indicates that she too doesn't want to use ADHD as an excuse. Even though she struggles "a lot in school," she informs her professors only when it is absolutely necessary for obtaining extra time on tests. And, she states that she does

not use it to excuse her symptomatic behavior. She provides the following example:

> I mean I don't want people to . . . to see it as something, like if I'm using it as an excuse or something, like I mentioned that I won't, I don't choose to tell my professors or anyone unless I have to, like if they need a reason for extension and extra time on tests then I'll tell 'em. And I haven't really had too much problem with it, but at the same time I don't, I don't, I don't use it a lot, ya know. If someone tells me I'm bouncing off the walls or not paying attention, ya know, I won't say, "Oh, ADD" or something like that ya know, cause I don't want, I just don't want that as an excuse or as a handicap. I think in some sense it is a handicap, I mean really, I struggle a lot in school with it but I won't use it as an excuse.

Betsy suggests that other people may use the fact that she has ADHD as an "excuse" against her in a negative manner. She says, "I don't like people to have something [to hold against you], like like, ya know, it's like an excuse, like I, I think that ADHD is like, I think that a lot of people can use it for an excuse, ya know, when . . . when that's not right."

Shame/Embarrassment. The process of assimilation seemed to be filled with a range of emotion for these student-athletes. Two such emotions include shame and embarrassment. Julie indicates having strong feelings of embarrassment due to having ADHD. She responds by hiding it and keeping it silent.

> I don't like to talk about it to a lot of people. Like, I don't know if everyone on my team actually even knows that I have ADD. I think that they know there is something, but they don't know. And like, people I date, I don't tell them. I don't know, I feel like it is some kind of learning disorder and makes me feel dumb if I tell people I have it. And so, I'd rather not tell anyone. And it's not something you can visually

> see, I wouldn't look at someone and say, "You look like you have ADD." *Right.* So, it's something that you can hide from people who don't know you really well. So . . . so I think I hide it. I think I'm embarrassed about it for some reason. *Yeah. Almost like a sense of shame about* . . . Yeah, about who I am, or what it is.

After her ADHD diagnosis, Gracie describes an initial sense of embarrassment about having ADHD when confronted with the opportunity to receive additional educational services. The following example illustrates this point:

> Um, when I first was diagnosed and stuff, and Marci wanted me to go get some note-takers and to actually talk to my professors about it and get some time extensions on tests, that was kind of the hard initial step for me, um . . . 'cause, I mean, I don't know if I felt bad about it, but I just didn't . . . ya know, I just, I wasn't comfortable with myself and having it yet, ya know, and I, it was, it was like really the first initial step, so it was kind of a whole new thing, and I think, ah, I don't know if I, yeah I guess I was kind of embarrassed to be telling people about it.

Betsy describes a situation in which she was embarrassed by her coach due to having ADHD. It is as follows:

> Yeah. I mean I guess the only way is that, like, like my coach at [. . .] because like, like he knew. He would be like, if I was just like messing up one day or if I wasn't paying attention he'd just be like, ya know and it was, I guess it was kinda embarrassing in a way because it was like he'd just do it front of the whole team, ya know he'd be like, "Did you take your medicine today," ya know, "Can't you do something right," ya know, something like that. Ya know and it's like . . .

Secrecy/Silence. These student-athletes keep the knowledge of having ADHD very quiet and secretive. They express several concerns about other people

knowing that they have ADHD. These concerns include being punished or treated in a negative manner, people thinking negative things about them, not wanting to be seen as using an "excuse" or "crutch," and feeling a sense of shame and embarrassment.

Gracie avoids telling others about having ADHD and informs others only when absolutely necessary. She states the following: "So . . . I don't know, I don't tell people unless I have to, I mean it's not something I try to, some people look at you like it's an excuse that you don't do well, or you're screwing off, that's an excuse. So I don't let too many people know."

Betsy indicates not wanting others to know because then she would have to be more accountable to take her medicine. She states the following:

> I just like I don't really like having like I guess people knowing I have it, ya know, because then I gotta take the medicine. And, it's like, if I mean, if, if nobody knows, and I can tell that nobody knows then I won't take it. Ha, ha (Laughs). *Ha, ha (Laughs).* Ya know, I'll just be like, "well, ya know, I forgot today."

Also, Betsy maintains a level of silence about her ADHD with her parents. She states that her mother has been informed of her having ADHD but not her father. However, her mother does not know that she has received medical attention and is taking Ritalin as a form of symptom management. Betsy gives the follow illustration:

> Like my parents, my mom knows that I have it, but she really doesn't know that I go to the doctor and she doesn't really know that I take medicine for it. My dad doesn't know. But, it's like because, ya know it's like, for my, it's like for my dad, he would see it, he would say that I just need to concentrate more. Ya know, like he wouldn't, he'd just be like, "You just need to concentrate more and not worry

> about it, this is stupid," ya know. And so it's not really, to me it's not really worth it to, ya know, it's not, I don't think of it like as big deal, so I don't really say anything [. . .] it's like they just come from another generation, they don't get it.

Punishment. Another reason Betsy maintains the secrecy of the knowledge of ADHD from her coach is because she does not want it to be used against her. She states the following:

> Sometimes, it's like I'm afraid, like I don't want, ya know, like it's just like, like about [. . .], it's like I don't want to tell her because like I don't want people to hold things against me, ya know. But, other than that, ya know, like she's the only one that I've ever asked not to be told, because ya know, like she's the only person like I think maybe in my whole life that I feel like she would hold something like that against me, ya know, so . . ."

Julie also feels "punished" for having ADHD. When academics become "overwhelming," she gets frustrated or begins to cry. Her coaches respond to this stress by lessening her gymnastic workout so that she can focus on her academics. However, she feels disciplined by not being able to do "the thing I love" - gymnastics. She gives the following illustration.

> I almost feel like it is a punishment sometimes. Because since [. . .] and [. . .] do know that I have ADD and when I come all frustrated or if I cry for no reason, then they know what's going on. And they say, "You need to go and do your stuff," and then I feel like I'm being disciplined for having ADD, kinda, and I don't get to do the thing I love. So . . . that makes it hard.

"Wonder" - Questioning the Effect of ADHD on Athletic Performance. While attempting to make sense of ADHD, Julie, Frank, and Gracie do not see or make the connection how ADHD impacts their athletic performance. As a matter

of fact, they all believe that ADHD does not impact their athletic performance in any way. However, they admit to questioning the possibility of such a connection; but, they have yet to investigate the potential impact. For example, Julie says,

> Even knowing that I have ADD . . . it doesn't affect me any differently in sports [. . . ] I always found that kinda strange . . . I've never been able to figure that out. It's always been a question. Like when I first found out it, then I thought, 'Why didn't it affect me?' because of how I progressed in gymnastics to the level I got to, and it didn't affect me."

Frank calls this "the eternal question." He says that he has never been able to put a "correspondence" between ADHD and its impact upon his athletic performance. However, he states that he does "wonder" about this, and that his father has also raised that question. He goes as far as to question if the using of Ritalin would assist his athletic performance, "Would it help me athletically? Maybe I could think quicker on the field." When asked if he has made any attempts to discover the effects of using Ritalin on the field, Frank quickly responds with the following rationale, "No, cause you don't think that much on the field. It's so much more reactions and instinct." He describes this rationale in more detail; exactly what he means by "reactions and instinct," as rote learning.

> That's just the thing though, it's all physical. Like everything that happens on the field, is physical. Like I'll watch this guy, ya know, pull, and then, ya know, I mean I know what to do. So, ya know, I mean, it's reactions. It's not so much . . . thinking, ya know. *It's quick thinking. I mean, you're, you're instinctually* . . . See, but it's instinctual, it's not really like um, it's not really a thought process. There's no process that goes on. *Yeah, not like at school, writing a paper process, thinking.* Right, or even just the process of, ya know, thinking, ah . . . like I don't go, "OK, the guard is gonna, ya know, he's pulling, so that means . . ." It's more like

> guard's pulling and I follow and then it's just like "boom," this guy's in the way and I shad, I know which way to shadow, automatically, not even... and it's from, rote, like . . . ya know, what's that called? Rote? . . . Just rote learning.

Gracie believes that ADHD "really hasn't effected or made an impact on my sport really." However, she has thought about the potential connection. She reveals the following:

> Ya know, Hyperactivity Disorder, whatever, you're always running around, you're active, you want your hands on stuff. It makes sense. So I think that's probably the connection between the two. Um, just getting out there and being able to run, to work and play, being free. Maybe that's why student-athletes aren't good in the classroom. Ha, ha (Laughs).

During the second-round interview, Gracie reconfirmed her belief that ADHD has no impact on her athletic performance. However, she reiterates a potential connection between athletic performance and ADHD.

> Whatever sport you're playing that's what you're doing is hands-on, feet-on, whatever . . . you're running, you're, you're doing something, you're always in constant motion. *Um, hm.* And I think that's part of . . . ya know, you don't notice, you don't notice the affects of ADHD, you're not sitting down, concentrating on one thing for too long, you do, everything's always changing, and, ah, I like that and I'm sure other people do to. *Right, for sure.* It's kind of a sanity, I mean, that in itself is kind of time away from that, you spend enough time in classes and places where it affects you or bugs you or frustrates you, but I think the sports, the athletic performance part of it takes you away from it, ya know. Something that you can do, easily. *Right, it's almost like a nice outlet.* Um hm. A big outlet. *Um, hm.* Especially like for the real hyperactive ones.

## The One Word Summary of ADHD

At the end of the first interview, Julie, Frank, Gracie, and Betsy summarize their experience of having ADHD in a single word. Their summaries are as follows. Julie states "in one word, frustrating. And, maybe secretive." Frank's summary word is "intriguing." Gracie's word is "positive." And finally, Betsy's summary word is "sporadic."

## MODEL: Identity Development / Assimilation of ADHD

From the themes which emerged from the interviews, *Discovery of ADHD*, *Understanding ADHD*, and *Assimilating ADHD*, I have developed a model depicting the process of discovering, understanding, and assimilating the knowledge of ADHD into one's identity. This identity development model for these athletes with ADHD consists of five steps as follows: 1) precipitating factors leading to the discovery of ADHD; 2) assessment and diagnosis of ADHD; 3) initial reactions of these student-athletes; 4) attempting to make sense of ADHD; and 5) a process of redefining oneself or identity. The process is displayed in Figure 5.

The first three phases in this model are linear and impermanent and the two final phases are continuous and circular. The model begins with precipitating factors leading up to the identification of ADHD. The precipitating factors can include such things as academic difficulty and the identification of behavioral symptoms of ADHD (e.g., inability to concentrate during meetings or instruction). These precipitating factors lead to the assessment and diagnosis of ADHD. When

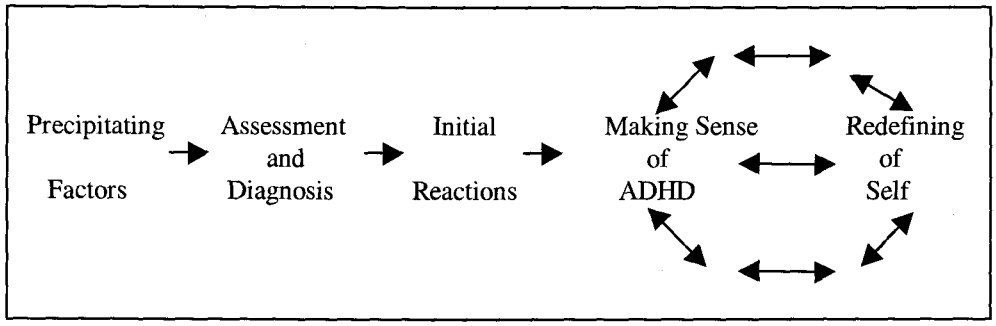


Figure 5: Model of Identity Assimilation Process

this diagnosis occurs in adulthood, the process can result in a mixture of initial responses ranging from relief to disbelief.

Following these initial reactions, the final two steps, making sense of ADHD and redefining self, can be understood as a continuous, circular processes. Here, I believe attempts are made to further understand ADHD and assimilate the knowledge of ADHD into one's identity. Knowledge of ADHD often consists of both accurate and inaccurate information. Inaccurate information is often derived from various stereotypical concepts (e.g., people with ADHD are using it as an excuse). Due to the natural conflict created by competing information, the assimilation stage is rich and full of complexities. Therefore, the process of assimilation is fluid and may range from full acceptance to complete rejection of the ADHD paradigm.

## Personal Reflections on the Interview Process

Over the course of this study there have been several highs and lows for me personally as the participant researcher. I can remember being very excited about

completing the first interview; it was tremendous to finally get it off the ground. I wrote in my journal, "I just finished my first interview, wow, it feels great and I'm way excited."

I began to develop a sense of disappointment and apathy part way through the study due to missed appointments and phone calls not returned from the participants. I was also anxious and fearful that two of the participants would not complete the second round of interviews. I had spent several weeks attempting to contact them without response. I remember at one point just wanting to get the second round interviews done. I felt like I had to practically beg them to come in for the last interview. When I finally did meet together with these participants, the interviews proceeded just fine. However, frustration is the emotion that stays with me to describe the middle part of my study.

One of the participants was late for the last interview. This person subsequently rushed to get through it. I felt like I was also rushing and trying to just get any response to each question so that the study would be complete. It felt somewhat patronizing to me the way this person completed the last interview. It seemed apparent that this person didn't really want to be there. In some respects it felt as though the rushing devalued my efforts in this study. And, without intention I know that I fed the participants behavior by my responses to him. I realize that this behavior is so typical of living with ADHD that I easily excused it after some time passed. I was happy about finishing the last interview; it felt as though a major milestone had been reached. A sense of relief set in and I felt my anxiety

level instantly dissipate. I was so grateful for all that the student-athletes had done for me that I impulsively offered them each a small thank you gift. Three of the four participants accepted. Finally, I included personal reflections on the interview process.

## Summary

This chapter presented the results of this study. Profiles of the participant student-athletes were presented, immediately followed by a telling of their story. The story outlined three distinct journeys: that of discovery, making sense, and assimilation. Within these three journeys, the emergent themes of this investigation were discussed: 1) the Discovery of ADHD; 2) the Understanding of ADHD; and 3) the Assimilation of ADHD.

In the next chapter, I discuss the material that was presented in Chapter 4 with reference and interface to the literature that was presented in Chapter 2. A critique of the methodology follows. Implications are presented as well as recommendations for future research. Finally, I provide a personal reflection on my process throughout this study and its relationship to my own experience with ADHD.

# CHAPTER 5: DISCUSSION

## Interpreting the Data

The purpose of this qualitative study was to examine the life experiences of university student-athletes who have been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). A phenomenological approach to understanding their experiences was employed in an effort to capture the essence and richness of their experiences, particularly the meaning each participant constructed throughout their life history in relation to ADHD. The participants, Julie, Frank, Gracie, and Betsy reported significant changes in how they understood themselves as a result of being diagnosed with ADHD. Three major themes emerged: 1) discovering ADHD; 2) understanding ADHD; and 3) assimilating ADHD.

This chapter interprets and discusses the data in Chapter 4. Of interest is the manner in which the experiences of Julie, Frank, Gracie, and Betsy are or are not reflected in the literature and provide new insights or contradict the current understanding of ADHD. In this chapter I will do the following: 1) relate the themes that emerged from this study to the research literature; 2) personally reflect on the themes and insert my subjective comments and reactions; 3) introduce the literature regarding identity development models and compare how three of these models both fit and don't fit the experiences of Julie, Frank, Gracie, and Betsy; 4) present my own model of identity development with regard to ADHD; 5) discuss the limitations of this study; and 6) provide future recommendations.

The Journey of Discovery

Precipitating factors leading to the identification of ADHD

My Reflection. I believe that the role of Marci, the Learning Specialist and the Counselor involved in the identification of potential ADHD symptoms and referral for diagnostic assessment of Julie, Frank, Gracie, and Betsy was significant. This recurring event points to the importance of professionals needing current information and knowledge of this disorder, particularly in the arena of athletics. Because of the physical nature of athletics, symptoms of ADHD seem to be masked by the physical activity and subsequently many remain unidentified. Therefore, student-athletes may be potentially a high risk population for under-diagnosis of ADHD.

Professionals working with this student population are in a strategic position to detect the signs and symptoms of ADHD that may cause difficulties such as academic failure, as was the case with Julie, Frank, Gracie, and Betsy. As a result of the identification and diagnosis of ADHD, they have had the opportunity to access academic accommodations. Such as extra time while taking tests or note-takers for classes. Despite availability of accommodations, they did not take full advantage of these services. Therefore, they have continued to struggle academically.

Reference to the Literature. The diagnosis of adult ADHD is a relatively new phenomena. Popular beliefs once held that ADHD was primarily a childhood

disorder which was outgrown during the early teen years. Only recently has it gained acceptance as a valid adult diagnosis (Nadeau, 1995; Wender, 1995). The fact that the four participants in the study were diagnosed at age nineteen supports the growing acceptance and recognition of ADHD in adulthood.

It has been documented that ADHD children, adolescents and adults tend toward lower academic achievement (Barkley, 1990, 1998). Many ADHD children who are now adults reveal a level of educational attainment less than that of their counterparts (Mannuzza et al., 1993). Therefore, it is no surprise that the participants in this study struggled academically. In a study of ADHD by Weiss and Hechtman (1993), approximately 20% of the participants entered into a college program with a completion rate of only 5%. This trend has been evident in these participants as the gymnast was dismissed from the university after her first year and later readmitted. Several other participants have been on the verge of dismissal due to academic failure.

## Clinical Diagnosis of ADHD - Mixed Reactions

My Reflection. The diagnosis of ADHD appears to be the catalyst for a mixture of participant reactions as well as the opportunity to adopt a new paradigm from which to view one's life experiences. It was evident that Julie, Frank, Gracie, and Betsy accepted this paradigm within varying degrees. Gracie, the golfer appeared to have assimilated this new view to a greater degree than the other three student-athletes. Perhaps this was due to the fact that she recognized that

"something was wrong" with her and sought out assistance with her problem; whereas the other three participants were simply told that they had a "disorder." This openness and willingness to understand her difficulties may have made Gracie more amenable to accepting the ADHD paradigm. The other three participants may have been resistant to the assimilation process due to the fact that they were not necessarily seeking answers for their struggles, and in some respect, did not view themselves as having a "problem." Therefore, assimilating the notion of ADHD into their self-identity was a much more difficult process for them.

I believe that another reason for the lack of assimilation may have been due to the very limited attempts made by Julie, Frank, Gracie, and Betsy to pursue current information about the disorder. This lack of education was coupled with acceptance of misinformation and stereotypical knowledge about ADHD. For example, ADHD is only a "crutch." As a result, this process led to an inherent conflict for Julie, Frank, Gracie, and Betsy between making sense of and assimilating ADHD into their self-definition. This raises the question, "What would the assimilation process look like if the student-athletes had further education about ADHD?" Perhaps Julie, Frank, Gracie, and Betsy would not have experienced such intense internal conflict had they been fully educated regarding ADHD.

The results of this study suggest that there are both positive and negative features related to the assessment and diagnosis of ADHD in adults. The mixed reactions of Julie, Frank, Gracie, and Betsy in this study suggest the need for

further investigation related to ADHD. It also suggests the necessity for clinicians and those working with student-athletes, and for that matter all adults recently diagnosed with ADHD, to assist in the processing of these reactions. Future research may help to understand this mixture of reactions more clearly and may lead to the development of more effective ways to guide people through the diagnostic process. Optimal results would reveal a process that would reduce negative reactions to an ADHD diagnosis.

Reference to the Literature. The myriad of reactions that follow a formal diagnosis of ADHD are not specifically discussed in the professional literature on ADHD. Instead, the primary focus of the literature is the importance and methods of making an accurate diagnosis (Barkley, 1990, 1998; Wender, 1995). However, at least one of the recent "pop-psychology" books on ADHD reports reactions similar to these participants' (Hallowell & Ratey, 1994). Hallowell and Ratey (1994) say the lack of information in the professional literature reveals the need to pursue reactions to the diagnostic process as it relates to adult ADHD.

## The Journey of Making Sense

### A Learning / Educational Process

My Reflection. Given the fact that Julie, Frank, Gracie, and Betsy did not actively pursue educating themselves about ADHD, their knowledge of the disorder was limited. Each person openly admitted having only a small amount of

information regarding the disorder. I found it interesting that each one freely acknowledged this fact, and that each one seemed to regret having not read a single book or attended a seminar on the topic. Perhaps this is symptomatic of the disorder itself. Also, Julie, Frank, Gracie, and Betsy held a common assumption, the belief that ADHD differed according to the individual. For example, when asked about her knowledge of ADHD, Gracie stated:

> Um . . . well I haven't really known much about it for too long, um . . . . I think it's, well it's attention deficit. Um, but I think it's different for every person. I have quite a few friends who are ADD or ADHD, which ever one, ya know, it all effects them differently. And I think, attention deficit could be any way, somebody just not wanting to pay attention, or actually being hyper, hyperactive. I don't know, I don't know that much about it, (voice lowers) which is kinda strange.

Information regarding ADHD that Julie, Frank, Gracie, and Betsy possessed was derived from several different sources: 1) popular beliefs, often stereotypical, held prior to being diagnosed with ADHD; 2) information they received during the assessment and diagnosis process; and 3) and "discussions" that they had with others (friends, family, counselor, and the learning specialist) after the diagnosis.

Although Julie, Frank, Gracie, and Betsy did not have a significant amount of "textbook" knowledge of ADHD, each one was able to speak of the specific manner in which the disorder impacted his or her life. It appears that each person honed in on the symptoms which were identified as affecting him or her most negatively. The most commonly identified symptom was inattention; the area having the most negative impact was that of academics. Beyond the arena of academics, there were very few areas in which Julie, Frank, Gracie, and Betsy saw or understood the impact of ADHD in their lives. For example, information was

absent regarding the impact of ADHD on social interactions, employment, relationships, or even on the sports in which they were participating.

I found this lack of awareness very interesting. Aside from the few concrete examples given by Betsy, the other three participants, Gracie, Frank and Julie, simply only "wondered" if and how ADHD might have impact on their athletic performance. Beyond this wondering, they did not believe that ADHD had any affect on their sport. Due to the pervasive nature of ADHD, my assumption is that the symptomology does affect athletic performance. I suspect that the major reason Betsy made the connection between her athletic performance and ADHD was because it was in the context of athletics that her coach initially identified her symptoms. Whereas, Julie, Frank, and Gracie's ADHD difficulties were identified in the context of academics and subsequently they established an association between ADHD and academics.

Therefore, the precipitating factors and the context from which the diagnosis of ADHD was established, had deep impact on the assimilation process. It affected this process by limiting and localizing one's understanding of ADHD symptomology. For example, the participants tended to formulate their understanding of ADHD based upon the context, mostly academic, from which it was derived. Due to this specific association, perhaps they were less likely to extend the impact of the disorder beyond academics into other contexts, such as social, work, or relational contexts.

Reference to the Literature. The literature clearly supports the notion of educating adults about the symptoms of and available treatment for ADHD (Barkley, 1990, 1998; Jackson & Farrugia, 1997; Nadeau, 1995; Wender, 1995). Several authors describe methods of educating adults with ADHD (Barkley, 1990,

1998; Nadeau, 1995; Wender, 1995) including educating adults toward the ADHD symptomology, treatment modalities including psychoparmachological approaches and behavior management skills, and establishing a treatment regime that is specific to each individual. However, to date, there is no research available that describes what the learning process is like for adults recently diagnosed with the disorder.

## Clinical Treatment for ADHD - Psychopharmacotherapy

My Reflection. The use of medication seems to be a standard treatment response for Julie, Frank, Gracie, and Betsy. I found it interesting that three (Frank, Gracie, and Betsy) of the four participants found significant benefit from the use of Ritalin but did not take it on a regular basis. I also thought it of interest that Frank, Gracie, and Betsy who did find the medication helpful stated that upon graduation from the university they would discontinue the use of Ritalin. It appears as though they did not comprehend the potential multiple uses and benefits of the medication outside of the realm of academics.

Reference to the Literature. Regarding the use of medication, the experiences of these student-athletes closely reflect the information found in the literature. The fact that three of the four participants were responsive to Methylphenidate (Ritalin) supports the finding that approximately 75% patients do respond positively to this medication while 25% of patients with ADHD do not respond to their first trial of a psychostimulant (Barkley, 1990).

The negative effects from the use of Methylphenidate that were reported by these student-athletes are supported by the literature. Their complaints included

decreased appetite, irritability, anxiety, stomachaches, insomnia, lack of interest in others, and talking less, all of which have been documented in the literature (Barkley, 1990, 1998). The side effects reported by these student-athletes appeared to be within the normal limits when compared to the existing literature.

The positive effects of the Methylphenidate reported by these student-athletes included increased ability to concentrate, sustained attention to tasks, and reduction in task-irrelevant restlessness and motor activity. All of these resulted in increased academic performance and productivity. Once again, numerous studies have documented such identical positive effects from this medication (Barkley, 1990, 1998).

## Developing Effective Coping Skills/Strategies

My Reflection. Along with use of medication, certain coping skills are necessary to manage ADHD. The development of coping skills was evident each participant's diagnosis with the disorder. They were aided in this process by Marci, the Learning Specialist and other professionals including teachers, tutors, and counselors. It was interesting to note that Julie, Frank, Gracie, and Betsy were able to determine, and then later describe, the specific skills that were effective for themselves. It was evident that the most common coping skills which they employed were organizational skills such as time management, scheduling and having a regular routine. Other useful skills included taking breaks, breaking large tasks into small tasks, quiet time, keeping things simple, changing activities regularly, and physical activity.

Reference to the Literature. The coping skills developed by the student-athletes are reflected in the literature. Numerous research validates the importance

of establishing structure such as a routine and regular schedule, developing organizational skills such as using a daily planner, breaking large tasks into small tasks, time management, use of quiet time, and physical exercise (Barkley, 1990, 1998; Faigel, 1995; Ratey, et al., 1992; Weiss, 1993; Wender, 1995).

## The Journey of Assimilation

It is important to discuss the journey of assimilation in relation to identity development. There have been many models of identity development proposed over the past fifty years beginning with Erik Erickson's (1959, 1980) stage theory, and James Marcia's (1966, 1980) four identity stages. More recent models have been proposed addressing specific issues related to identity such as Cross's Black racial identity theory (1971); Cass's (1979) model of homosexual development; D'Augelli's (1994) model of lesbian, gay, and bisexual development; Helms' model of White racial identity development (1984); Downing and Roush's (1985) feminist identity development model; the multiethnic model by Banks (1984); the Minority Identity Development (MID) model by Atkinson, Morton, and Sue (1989); Helms' (1990) model of womanist identity; Root's (1990) biracial identity development model; and finally the Multidimensional Identity Model (MIM) by Reynolds and Raechele (1991).

In this section I discuss my identity development model in relation to three models of identity development: 1) Marcia's (1966, 1980) four identity stages; 2) the Multidimensional Identity Model (MIM) by Reynolds and Raechele (1991); and 3) Cass' model of homosexual development. I believe that the stages outlined in each of these models may help to explain the essence of the assimilation process

experienced by Julie, Frank, Gracie, and Betsy. I discuss the manner in which these models fit and do not fit my proposed model of ADHD assimilation.

Marcia's Four Identity Stages

Marcia's (1966, 1980) four identity stages consist of Diffusion, Foreclosure, Moratorium, and Achievement. These stages are not necessarily progressive in nature nor are they permanent. A person's identity may or may not change over time. Two interacting variables of crisis and commitment occur during each stage. Crisis, or "exploration," is defined in terms of "the presence or absence of a decision-making period" (Marcia, 1980, p. 161). After a period of crisis, commitment is established, that is the personal investment or ownership one attaches to values or goals. In the state of Foreclosure, the individual accepts parental values; commitment comes without crisis. In the state of Diffusion, commitment is not possible. People in Diffusion are thought of as "carefree or careless, charming or psychopathic, independent or schizoid" (p. 161). In a state of Moratorium, individuals actively question parental values; crisis comes without commitment. They are either "sensitive or anxiety-ridden, highly ethical or self-righteous, flexible or vacillating" (p. 161). Finally, there is the state of Achievement. Here crucial choices are made and strong commitments are achieved. Individuals in this state are seen as "strong, self-directed, and highly adaptive" (p. 161).

The experiences of Julie, Frank, Gracie, and Betsy reflected a similar process in relation to assimilating the diagnosis of ADHD into their identity. When comparing their process of assimilation with Marcia's stages, parallels to each

stage are evident. In the state of Foreclosure, Julie, Frank, Gracie, and Betsy held to assumptions and identifications from childhood and teen years regarding their identity. For example, they held specific beliefs about their identity such as "I'm lazy" or "I'm a procrastinator." In the Diffusion stage, they were not able to commit to the information about ADHD. The Moratorium stage was filled with crisis and conflict. The internalized beliefs about self came in direct conflict with the information about ADHD. For example, this is where the questioning between personality and ADHD reached its strongest conflict and crisis resulted. The stage of Achievement was obtained when they were able to work through the crisis, separate the old messages of self from the new messages of ADHD, and establish a distinct identity. For example, Julie, Frank, Gracie, and Betsy were able to distinguish between impulsive behavior versus just having fun. The line between personality and ADHD became clear to them. Once again, these stages are not linear and therefore help to explain the circular process of assimilating the diagnosis of ADHD into self-identity.

## The Multidimensional Identity Model (MIM)

The Multidimensional Identity Model (MIM) by Reynolds and Raechele (1991) provides a further basis for understanding the process that Julie, Frank, Gracie, and Betsy experienced in relation to identity development. This model discusses four possible options for identity resolution that occur within a dynamic process of exploration and self-growth. The model is displayed in Figure 6.

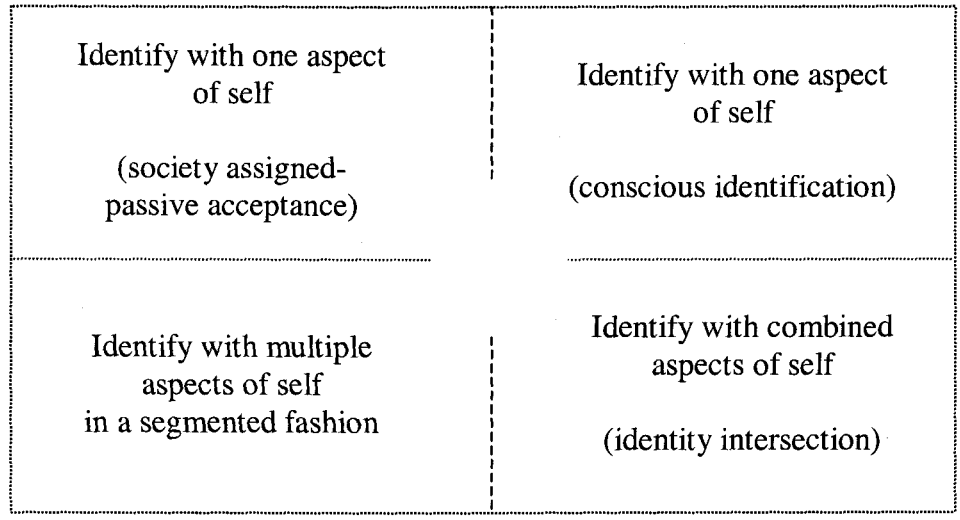


Figure 6: Multidimensional Identity Model

In the first two options of this model, individuals identify with just one aspect of their identity. This choice may be "passive (allowing society or one's community or family to determine one's primary group) or active (making a conscious choice of self-identification)" (Reynolds & Raechele, 1991, p. 178). One result of this choice may be individuals suppressing one aspect of themselves to feel more accepted amongst their community or family.

Another option Reynolds and Raechele's (1991) model involves the choice to embrace all aspects of one's identity by "living in separate and sometimes unconnected worlds . . . [by doing so, an individual] presents a one-dimensional, incomplete, and segmented self" (p. 179). The following example illustrates this point, "A nonlesbian Puerto Rican woman embracing her racial-ethnic heritage in her Puerto Rican community yet also becoming involved in predominantly White feminist groups where she can more fully celebrate her female self" (p. 179).

For members of several oppressed groups, the final option in Reynolds and Raechele's (1991) identity resolution process is the identification with a new group. Individuals integrate their multiple identities by focusing on the specific intersections of their identity. The following example illustrates this point, "rather than identifying as a woman or as person with a disability, a deaf woman might make connections with other women with disabilities so she no longer has to segment and dichotomize the different aspects of herself" (p. 179). Other examples include gay/lesbian/bisexual and people of color that are embracing the intersections of their identities.

Reynolds and Raechele's (1991) model supports all options and creates opportunities for the positive development of self-esteem and pride. The sense of self is maintained and integrated as a whole unit. The model (see Figure 6) exemplifies the dynamic and fluid nature of this process of identity development by the use of its broken lines between the various options. Movement among these lines varies depending upon the environment, reference group, and personal needs.

As it applies to this study, Reynolds and Raechele's (1991) model can be viewed as an internal process which occurs in ADHD individuals. In the first two options of the MIM model, identification is made with one aspect of identity, either passively or actively. The passive identification refers to simply identifying with the self-identity that was established prior to the ADHD diagnosis, whereas the active identification refers to the deliberate choosing of either the old identity (e.g., "I'm lazy or stupid") or the new ADHD identity (e.g., "I'm impulsive or distractable").

In the lower left quarter of the model, Julie, Frank, Gracie, and Betsy seem to identify with multiple aspects of self based on a mixture of messages about their

identity. This "mixture" of messages includes both the new information regarding ADHD (both accurate and stereotypical information) and old messages consistent with the preestablished self-identity. For example, they see how the symptoms impact academics (e.g., inability to concentrate) but do not apply the same symptomology to other areas such as work, relationships, or social situations.

Finally, in the lower right quarter of the model, Julie, Frank, Gracie, and Betsy integrated their "multiple identities." They began to assimilate the symptomology of ADHD with their "personality" and with all other aspects of their identity. For example, in light of academic difficulties they negotiated old self-identity information/messages such as "I'm stupid" in light of the ADHD paradigm which suggested that they are "distractable" or have "difficulty concentrating," and therefore, are academically challenged. Thus, redefining one's self identity in a more accurate context of ADHD symptomology, and thus a new frame of reference. Minus the pathological notions that are associated with ADHD, the new paradigm can result in a more positive understanding of self.

## Cass' Model of Homosexual Identity Formation

Cass (1979) presented a model of homosexual identity formation based on her work in Australia with gay and lesbian individuals. She describes identity formation as "the process by which a person comes first to consider and later to acquire the identity of 'homosexual' as a relevant aspect of self" (p. 219). This model reflects both cognitive and emotional components indicating how individuals view themselves and subsequently feel about themselves. Cass' original model outlines six stages: 1) identity confusion; 2) identity comparison; 3)

identity tolerance; 4) identity acceptance; 5) identity pride; and 6) identity synthesis.

Stage 1. Identity confusion, begins with an individual's first awareness of homosexual thoughts, feelings, and attractions. Confusion and anxiety arise. A positive response leads to further exploration of the thoughts, feelings, and attractions. A negative response, rejecting any such inclinations, leads to foreclosure. This process parallels the precipitating factors stage of the model I am proposing. Individuals are first identified, self or otherwise, with having symptoms of ADHD. A positive response leads to assessment, whereas a negative response leads to denial of the ADHD paradigm.

Stage 2. Identity comparison, occurs when individuals accept the possibility of being gay or lesbian. Individuals either seek out explanation for their inclinations by learning from other gays or lesbians, or attempt to change their homosexual behavior and feelings by inhibition and denigration of such. In my proposed model this stage compares to the assessment and diagnosis phase. Individuals may or may not go through with an official assessment, if they do not, they inhibit and minimize their ADHD symptomology. However, if they complete the assessment and are diagnosed with ADHD, they move into the next phase of initial reactions.

Stage 3. Identity tolerance, is when individuals acknowledge that they are probably gay or lesbian and seek out others to reduce feelings of isolation and receive acceptance. Negative experiences during this stage can lead to foreclosure, whereas positive experiences lead to the next stage. Although this stage is not an exact fit with the initial reactions phase of my proposed model of assimilating ADHD, there are some crossovers. If the initial reactions are not too

overwhelming, individuals begin to "tolerate" the diagnosis and begin seeking help from others. Depending on the nature of the assistance provided, individuals may foreclose the notion of ADHD or will continue its acceptance and move into attempting to make sense of the disorder.

The last three stages of Cass' (1979) model are parallel in some respects to the last two phases of my proposed model. The major difference between these two approaches is that, in my model, the last two phases are circular, whereas Cass' (1979) three stages are linear.

Stage 4. Identity acceptance, entails a positive connotation placed on homosexuality. Friendships are established with other gay and lesbian individuals, and the norms and behaviors of this culture are adopted. In this study, participants did not actively seek out other individuals with ADHD. Therefore, in this respect our models are dissimilar. In my model, individuals begin to view the ADHD paradigm in a positive fashion and understand their behaviors from this perspective. One manner in which our models are similar is that individuals begin to be open to others about having the disorder without a sense of shame or guilt, and secrecy and silence are not maintained.

Stage 5. Identity pride, takes place when individuals focus on homosexual issues and activities. Feelings of both pride in things gay and anger in things not gay propel individuals toward activism and confrontation. Individuals who are received negatively may foreclose. Although my model does not have an outward identity "pride" per se, the parallel is rather an internal sense of security with "having the disorder." "ADHD pride" occurs when individuals can accept the ADHD paradigm and feel good about their acceptance. Less focus is given to the

pathological aspect of the "disorder," and individuals view their behaviors in terms of the ADHD symptomology.

Stage 6. Identity synthesis, is the final stage of Cass' (1979) model. Individuals are not dichotomized between homosexual and heterosexual worlds. Acceptance is based on personal qualities rather than sexual identity. Homosexuality is viewed as only one aspect of self, integrated with the whole. In the model I am proposing a similar process transpire within individuals. For example, as people internalize the notion of ADHD; no longer do the lines between personality and ADHD become so distinct. When they view the symptomology as one aspect of self, they integrate this paradigm into the larger whole of their identity.

## My Proposed MODEL: Identity Development / Assimilation of ADHD

As a result of investigating the phenomenological experiences of Julie, Frank, Gracie, and Betsy, who were diagnosed with ADHD, I propose a model depicting their process of identity development and assimilation. This overall process was previously displayed in Chapter 4 (see Figure 5). My identity development model for these athletes with ADHD consists of five phases: 1) precipitating factors before the discovery of ADHD; 2) assessment and diagnosis of ADHD; 3) initial reactions; 4) attempting to make sense of ADHD; and 5) a process of redefining oneself or identity in relationship to this new paradigm. Although this model was developed in relation to these student-athletes, I believe that it may be extended to include a broader range of adults who are diagnosed with this disorder.

Precipitating factors before the discovery of ADHD. This first phase reflects the time when there is suspicion that something is different or "wrong" with individuals due to certain behaviors or difficulties in their lives. Precipitating factors are a result of the symptoms of ADHD. A person is first identified by the degree of disruption that the primary symptoms of ADHD cause in his or her life. Basically this phase consists of uncontrolled symptoms of ADHD being manifest in one's life. The precipitating factors are the displaying of inattention, hyperactivity, and impulsivity in at least one area of the individual's life. For example, in this study the main arena in which the precipitating factors of ADHD evidenced were in academics. Other areas may include family life, social life, work, or relationships. Individuals may or may not continue to the next phase of determining if ADHD is the cause of the behavioral difficulties.

Assessment and diagnosis of ADHD. The assessment and diagnosis phase is fairly straightforward when it actually occurs. When individuals are suspected of having ADHD, they are frequently referred for a clinical assessment. Getting to a professional for an assessment is often a push-pull, avoidance process. Especially for adults, resistance may be quite strong to overcome. Depending on the outcome of the assessment, they are or are not assigned with the ADHD diagnosis. When "officially" diagnosed with ADHD, individuals automatically move into the next phase.

Initial reactions. The initial reactions of individuals to the ADHD diagnosis vary in both range and intensity. As seen in this study, the participants' reactions ranged from a sense of joy to sadness, from a sense of relief to grief, and from a sense of understanding to confusion. These reactions are unpredictable and are unique to each individual. However, it seems from this study that individuals who

sought out information regarding the root cause of their symptoms experienced fewer negative reactions to the diagnosis and were able to move more efficiently into the next phases.

The next two phases, attempting to make sense of ADHD and redefining oneself or identity in relationship to the ADHD paradigm, are both continuous and circular in nature. Therefore, in some ways it is difficult to pull them apart and describe them as separate from each other. These combined processes can lead to two different paths. The first path is the assimilation of the ADHD paradigm into the self-identity. The second path is the rejection of the ADHD paradigm; the lack of assimilating it into self-identity. The acceptance or rejection of this paradigm occurs over time, and, therefore, may only be a partial acceptance or rejection of the disorder. Certain aspects of the paradigm may be accepted, while other parts may be rejected. The more accurate information and knowledge that individuals obtain about ADHD and the more clearly they understand their life experiences in regard to this knowledge, the more successful the assimilation process appears to be. When there is minimal and stereotypical information received, a stronger rejection of the ADHD paradigm is more likely; less assimilation of the ADHD paradigm occurs. As was the case for individuals in this study, assimilation of the ADHD paradigm occurred primarily around academics and did not extend into other areas of daily functioning (e.g., work, social relationships).

Attempting to make sense of ADHD. The process of attempting to make sense of new information is similar to putting together the pieces of a "puzzle." As the pieces of a puzzle are all mixed up and scattered, so too is much of the information regarding ADHD, as well as personal feelings associated with this matter. The primary process in this phase is one of sorting through the puzzle-pieces of

information regarding ADHD and trying to see how one piece fits together with the next. This is the phase in which the acceptance or rejection of the ADHD paradigm occurs.

If acceptance of the ADHD paradigm occurs, I believe that individuals may move into the next phase and begin to redefine their self-concept. If people reject this paradigm, they do not seem to move into the next phase of redefining self, and instead maintain pre-established messages of self (e.g., I'm lazy). These pre-established messages are then reinforced and solidified as being the content of the self-concept.

The outcome of this phase seems to rely on both the content of information (accurate vs. stereotypical information) and the process in which individuals apply knowledge of the disorder to their self-concept. The outcome can be negative, positive, or neutral.

Redefining oneself or identity in relationship to the ADHD paradigm. The process of redefining the self-concept occurs simultaneously with the previous phase. As information about ADHD is obtained and understood in reference to experience, redefining aspects of self in light of this new understanding occurs. For example, the ADHD symptom of interrupting others in conversation can be understood as a behavior of ADHD instead of just being "rude." This understanding then provides a new explanation for the behavior of "always butting in" on conversations, and challenges the negative associations (e.g., being rude) that have defined one's past behavior.

A positive outcome of this phase of redefining the self-concept in relationship to the ADHD paradigm is the reduction of and possible elimination of guilt and shame associated with negative messages formally used to define the self. For

example, shame and guilt that was connected to the internalized message of "I'm rude" would be diminished by the replacement of "I'm impulsive and, therefore, often interrupt others."

The model I have proposed is the beginning of a theoretical framework that defines the process described by student-athletes that were studied in this research project. It is my hope that this model will lay the groundwork for future research to expand on our knowledge of the impact of ADHD on athletic performance in student-athletes.

## Methodological Considerations

The particular qualitative methodology employed in this study provides a unique advantage toward understanding the phenomenological experiences of these four university student-athletes diagnosed with ADHD. The richness and depth captured in this study would not have been possible under a more traditional type of design. I believe the "proof is in the pudding"; that the information presented here, the life stories of each individual, captures the essence and uniqueness of the phenomena under investigation that may have otherwise been simply overlooked in a quantitative design. Capturing this essence suggests the need for further research of this kind, particularly when attempting to understand the uniqueness of university student-athletes with ADHD.

The use of a semi-structured interview provided freedom to explore new areas and information during the interview process that otherwise would have been uncharted. I found this method to be particularly helpful in allowing me to move in different directions when such opportunities were presented. This flexibility often

yielded significant and rich information. I believe it would have been too limiting to use a rigidly structured interview format when attempting to explore new areas presented in this type of investigation. Therefore, I support using the semi-structured interview protocol for future research when attempting to gather data of a similar nature.

Although the semi-structured interview proved to be a useful method of collecting data, the manner in which I conducted the interviews may not have been the most productive. More specifically, the participants and I sat in an office for the entire length of the interviews. Nearing the end of each interview it became apparent that it was truly difficult for the participants to sit relatively still for the duration of the hour or so exchange. Participants became restless which may have compromised their ability to concentrate and provide thorough answers.

Perhaps a more effective method of data collection would be to employ the use of physical activity, such as walking, or an activity that allows for physical movement while gathering the data. (One participant suggested I conduct the interview while they executed a weight-lifting workout; however, I had to decline the offer due to issues related to confidentiality). Another option would be to gather information in smaller blocks of time. When conducting future face-to-face interviews with people who have ADHD, I suggest finding a conducive environment and format more appropriate to the individual needs of the participants.

Interviews were conducted on the OSU campus. It leaves the question, "Would the participants have responded differently in an unfamiliar setting?" Perhaps the participants would have responded differently during the interviews in another setting.

Implications

Implications for student-athletes with ADHD include considering the developing of effective coping skills such as time management, study skills (e.g., taking breaks), and the establishment of a regular routine/schedule. A further implication for those recently diagnosed with ADHD is the need to foster an awareness of the discovery process, making sense, and assimilating the ADHD paradigm into self-identity. Perhaps by understanding this assimilation process, student-athletes will be more accepting of self and will be able to focus on the positive aspects of understanding their ADHD diagnosis. Negative feelings such as shame and embarrassment may also be diminished as they incorporate into their self-concept the knowledge of ADHD in a positive manner.

A related implication is that of group support for individuals with ADHD. Dissimilarities were noted when comparing stage 4 of Cass' model (1979) with the ADHD identity development process of the participants in this study. For example, participants did not actively seek out friendship with other people with ADHD as do homosexual individuals in Cass' model. In fact, the opposite occurred in this study, participants held the knowledge of the diagnosis a secret and kept silent about having ADHD. Cass' model helps to inform us of the importance of establishing relationships and support. Therefore, it seems even more imperative that group support be established for student-athletes with ADHD due to the fact that they do not actively seek out supportive relationships.

Implications for coaches who have student-athletes with ADHD are far reaching. Coaches have the unique opportunity to assist student-athletes who struggle with ADHD in several ways. First, coaches are in a position to identify the signs and symptoms of ADHD and can facilitate the assessment process for

undiagnosed students who suffer with the disorder. This was the case with Betsy. Second, by recognizing the unique learning style of these student-athletes, such as a "hands on" approach, coaches may be able to adapt their athletic programs to suit the learning needs of these students. Third, because organization and regular routine are so important to keeping ADHD student-athletes on task, coaches can assist in establishing these. Finally, coaches may learn not to "punish" students who have ADHD. Instead, they have the unique opportunity to convey respect for student differences associated with ADHD and display an understanding of their difficulties and struggles in managing the ADHD symptomology. This, in turn, may result in validation of the student's feelings and a reduction in feelings of shame and embarrassment.

The implications for the field of Counselor Education include collegiate athletics as a future area of discovery and exploration. Minimal research in Counselor Education has examined this population; even less as it relates to ADHD. Also, the results of this study prove to be a valuable addition to the growing body of information in the field of Counseling. Counselors may be better prepared to work with students and coaches alike who are affected by the symptoms of this disorder.

One final implication is toward the further development of a model concerning the identity development and assimilation of mental disorders. Although the model I present here is specifically related to ADHD, I believe it has the potential to be extended to incorporate other mental disorders as classified by the American Psychiatric Association in the DSM-IV (APA, 1994).

Recommendations and Limitations

This foundational study lays the groundwork for future research to begin to clarify the role of ADHD and athletic performance. One recommendation is for the continued development of theory related to athletics/physical activity in relation to ADHD. It is possible that these four student-athletes were not identified as having ADHD until early adulthood due to their excessive involvement in athletics since childhood. Therefore, athletic involvement during childhood and teen years may account for the under-diagnosis of ADHD. Closer examination of ADHD is called for amongst athletically inclined children and teens.

Because the participants were identified and diagnosed with ADHD at age nineteen, after they had entered into the university system, the data reflects the recent history of their diagnosis. Perhaps their views and knowledge of ADHD and the manner in which they constructed meaning of having ADHD would have been different if they had been diagnosed and treated at an earlier age. Therefore, another recommendation for future research would be to use a purposeful sample of university student-athletes who have a longstanding childhood diagnosis of ADHD. This effort may capture the essence of those having the knowledge of a diagnosis of ADHD throughout their life history and could be compared to the experiences of the student-athletes in this study.

A future area of research includes support groups for student-athletes with ADHD. This study was limited in that the participants never had the opportunity to meet each other, nor the opportunity to offer support to one another. A future recommendation includes examining the shared experiences of university student-athletes within a group setting.

A limitation of this study is that, although in some respects diverse, the sample did not reflect all aspects of diversity. Gender issues did not emerge from the data as a major theme during the constant comparative analysis, and subsequently issues related to gender were not focused upon throughout the course of this study. For example, any gender differences between the male football player versus the other three female participants did not specifically come forth in the data. Even though the sample was fairly racially diverse, there was a lack of focus on racial differences found in this sample population. It is important to note that I did make a concerted effort to be aware of these factors throughout the research process. However, no discernable differences emerged. Therefore, I recommend future research examine the specific nature and influence of diversity issues as they relate to ADHD and the university student-athlete.

## Summary

The purpose of this study was to examine the life experiences of university student-athletes who have Attention Deficit Hyperactivity Disorder (ADHD). The subjects were four student-athletes at Oregon State University competing in the PAC-10 conference.

The qualitative design used in this research was based upon the Constant Comparative Methodology using coding categories developed as themes emerged from the data. This design focused on extracting the language and description of the phenomenological experiences from the participants. This textual material and subsequent analysis led toward an emergent theory of ADHD and its relationship to university student-athletes.

Three major themes for student-athletes diagnosed with ADHD emerged from the data analysis: 1) the discovery of ADHD; 2) the making sense of ADHD; and 3) the assimilation of ADHD. These are related to an identity development process of incorporating the ADHD paradigm into one's self-concept.

This foundational study lays the groundwork for future research. To the degree that efforts are made to integrate theory and practice, the need for further evaluation of ADHD in university student-athletes is required. A logical next step in the research process would be to replicate this study and examine the applicability of its findings. Further investigation is needed with larger sample sizes and diverse populations in order to determine if the experiences of these student-athletes are shared by other athletes in different socio-economic and socio-cultural environments.

# CHAPTER 6: POSTSCRIPT TO THIS STUDY

## My Final Reflection

As I mentioned in Chapter 1 of this study I, too, was formally diagnosed with ADHD as an adult, at age twenty-eight. Realizing that no research is completely without bias, I offer a reflection on my process as participant-researcher upon completion of this project.

It was difficult at times and exciting to listen and understand each participant's story about living with ADHD. I genuinely felt their pain and the turmoil that they had experienced. This provoked compassion and empathy in me toward each of them. I deeply appreciated their openness and honesty as each person shared her or his story that was very personal in nature. I was thankful for the trust that they displayed in me during each interview. Each of their stories strengthened my resolve to complete this research document to allow the reader the opportunity to experience their story as I had. It also facilitated further understanding of my own struggles with being formally diagnosed as having ADHD and opened the door for me to share my story as participant researcher.

The manner in which I formulated the understanding of each of the student-athlete's life experiences has furthered my understanding of my own living journey with ADHD. Although I was not conscious of this fact, it seems as if the emergent themes from this study capture the essence of my story as well. My journey began with discovering that I had ADHD as an adult, and attempting to make sense of this discovery, and the journey continues to this day as an ongoing process of assimilation into my identity. As I listened to each of their stories, many feelings and events rang true for me and my own experience.

The discovery phase was initiated by my clinical supervisor after I completed my masters degree in counseling. When she first introduced the notion that I might have ADHD, she did so in a nonchalant, joking manner. At least that was how I understood her comment - as joking, primarily because she was reflecting on the fact that a large portion of my client caseload was children and teens with ADHD. However, upon further discussion, she informed me of her general observations over time which led her to suspect the possibility of my having ADHD. She suggested that I might want to pursue a formal assessment. Being that she was a specialist in treating ADHD and other childhood disorders, I knew for certain that she believed that I had ADHD, and at that point she had "unofficially" diagnosed me.

My reaction to this notion, like that of Julie and Gracie, was a mild sense of shock and disbelief. I had another interesting reaction as well. As a clinician assigning ADHD diagnoses on a daily basis, I did not want to believe that there was "something wrong with me." I could not possibly be "disordered," nor could I have what my clientele had. I hated the fact that I had this reaction and that I thought of myself as somehow "above" those I was treating. I chose to ignore her recommendation and did not pursue an assessment at that time.

Over the course of the next several months I began to recognize my own symptomatic history mirrored in the stories and behaviors of the ADHD children and teens that I was treating. I could no longer deny the possibility that I had ADHD. I pursued further education on adult ADHD, reading a variety of books and articles and attending a workshop presented by an expert in the field. Finally, I followed through with an assessment and, as I knew would be the case, I was formally diagnosed with ADHD.

Like the student-athletes in this study, the first treatment option presented to me was medication. Initially I rejected the use of medication because I feared that if it worked, then that meant that something really was "wrong" with me. But I also wanted to know the truth of the matter, and eventually I experimented by taking Ritalin. Much like Frank, the effects I experienced from the medication were profound. I was able to better concentrate, remain attentive and focus more clearly. However, the side effects disrupted my appetite and eating patterns. Therefore, I discontinued its use on a regular basis. Similar to Frank, Gracie and Betsy, I also struggled with seeing the positive benefits of the use of medication outside the realm of academics. For example, it was hard for me to believe that the medication would help socially where most often I was "the life of the party." Finally, having to take the medication each day was somehow a constant reminder that I was indeed "disordered." There was something about taking the medication that brought negative, pathological connotations of ADHD to the surface. Therefore, this aspect made it psychologically difficult for me to take the medication.

I remember having a tremendous amount of difficulty reading as a child. One story that rang true for me was when Frank shared about his struggle with reading.

> I'll read the first sentence 5 times and still not get it. I'll read the whole paragraph and have no idea what the hell it was just talking about. And I'll just go back to the beginning and read it again and I still won't have an idea . . . Like a lot of the times, ya know, I mean, I'll be reading a sentence and then I'll just read the same sentence. It's only one frickin' sentence and I'm still not, it's not assimilating, it's just not soaking in.

As Frank told this story, I remembered having similar experiences with reading. I felt the same sense of frustration reading one sentence over and over again, not comprehending the words on the page. I remember how the first few words of a sentence would take my mind off into "wonderland" as I began, in my head, to write a story of my own. Simultaneously, my eyes continued reading as if disconnected from the wiles of my imagination. Suddenly I would realize that while my eyes had traveled down to the bottom of the page, I had absolutely no recall of the words they had just read.

I remember feeling the same sense of shame and embarrassment that Julie experienced and as a result not wanting to tell others about having ADHD. I related to the following story she shared.

> I don't like to talk about it to a lot of people. Like, I don't know if everyone on my team actually even knows that I have ADD. I think that they know there is something, but they don't know. And like, people I date, I don't tell them. I don't know, I feel like it is some kind of learning disorder and makes me feel dumb if I tell people I have it. And so, I'd rather not tell anyone. And it's not something you can visually see, I wouldn't look at someone and say, "You look like you have ADD." *Right.* So, it's something that you can hide from people who don't know you really well. So . . . so I think I hide it. I think I'm embarrassed about it for some reason.

I remember feeling the strongest sense of shame and embarrassment for the period of time immediately after being officially diagnosed. Like Betsy and Julie, I did not want to tell family members or friends. I was even ashamed to inform my clinical supervisor of the final outcome of the assessment. There are certain situations, even to this day, in which I experience these feelings . . . particularly as

it relats to employment. Like the participants in this study, I do not want the knowledge of my having ADHD used against me as a form of punishment.

In terms of the assimilation process, Gracie's statement about personality captured the essence of my experience. She said, "See that's where I have trouble like, defining the line of what I might consider being part of my ADHD and just being part of my personality, I mean they kinda, they go together, ya know." Numerous times I have struggled to define that which is ADHD and that which is my personality. This struggle has made me sad because it seemed that part of my personality which I liked the most, the fun, outgoing, spontaneous part, was from my "disorder." It somehow invalidated and devalued that lively part of me; as if it really was not me but rather something from outside of me, something foreign that made me "be" that way. Times when I would behave spontaneously or just be having fun, negative thoughts would come to my mind such as "The disorder has taken over," or "I'm not really fun, it's my disorder."

Through the process of assimilating the ADHD paradigm I have come to understand certain aspects of my behavior more clearly. For example, having difficulty with concentration and inattention, I, too, employ effective coping skills. Similar to Julie and Gracie I have come to understand that I need to break large tasks into smaller tasks otherwise I get "overwhelmed." I have also found establishing a routine and other time management techniques to be very successful management skills.

As it relates to athletics, my story further resembles the participants of this study in that I was actively involved in athletics throughout my childhood, teen years, and into my adulthood. I believe this involvement may have masked the primary symptoms of ADHD that I had as a child and contributed to being

undiagnosed. I also related to Gracie in that I need to keep physically active in order to remain "sane." Physical exercise helps me think more clearly and remain focused. I incorporate exercise as a coping skill when studying and writing.

## "Why is a Weed a Weed?"

So I ask the question, "Why is a weed a weed?" Take a thistle for example, with beautiful purple flowers bloom at the top of its prickly stem. And what makes the thistle so different from a rose? Is it because a thistle grows in the wrong place? Is it because nobody planted, watered, or tended the thistle? Or is it because nobody will purchase a thistle and place it in a vase?

I believe a weed is a weed because someone identified or "diagnosed" it as such. A thistle becomes a weed only because someone calls it such based on his or her definition of a weed. Perhaps a thistle is weed because someone said it pricks and thus is not useful. However, from the standpoint of the "pricker bush," pricking is a positive quality; a very effective form of self-protection against most dangers.

I ask this question, "Why is a weed a weed?" because it reflects my deepest bias as researcher related to this study of ADHD. So, "Why is ADHD ADHD?" Simply because the American Psychiatric Association (APA) defines it as such, and we the citizens and consumers of society believe it to be "true." Due to the fact that people who demonstrate the signs and symptoms of ADHD do not always behave in a socially acceptable manner or learn in traditional educational environments, they are defined by the APA as "disordered." Perhaps under different "socially acceptable" conditions and in alternative learning environments

these people would not be defined as "disordered" and would be considered normal functioning individuals.

Utilizing the DSM-IV (APA, 1994) diagnostic criteria, there are millions of children, teens and adults who can be and are diagnosed with ADHD. Under such a diagnostic paradigm, I intellectually understand the validity of ADHD as a "disorder;" I understand the value of this construct as it provides several methods of "treatment" for millions of people. However, at the same time, I do have some difficulties with the construct of ADHD.

One fundamental difficulty I have with the ADHD paradigm is that it devalues and dehumanizes the individual. As illustrated in this study, for some people being diagnosed with ADHD can be a difficult experience. I believe that one reason for this type of experience is because ADHD is defined in pathological terms. The simple fact that ADHD is understood within a diagnostic paradigm establishes its etiology as pathological. In many respects I agree with those (e.g. Hartmann, 1993) who view ADHD from a paradigm that is not entirely pathological. An alternative paradigm from which to understand persons with ADH "D" is from a manner which changes the "D" of Disorder to a "D" of Difference. People with ADH "D" obviously function very differently than other individuals who do not demonstrate these signs and symptoms. Does this make them pathological? I think not.

As a result of this study and my own experience, I believe that the assimilation process of ADHD can be both a positive and negative experience. It is positive in that it provides a useful framework from which to understand some aspects of the self. It is negative being that the ADHD paradigm consists of pathological connotations which individuals must somehow reconcile with their

self-concept. In part, these negative overtones create a conflict for individuals when attempting to assimilate ADHD as an epistemology from which to view themselves. For this reason, I support the movement toward a developmental Diagnostic and Statistical Manual (Ivey & Bradford, 1999) to explain behaviors. Perhaps one day we will also have a "Diagnostic and Statistical Manual of Mental Health" (Ivey & Bradford, p. 490). If we continue in the current vein of thinking and understanding behavior from a "mental illness" paradigm, perhaps the assimilation process of ADHD and all "disorders" will continue to be difficult and have negative consequences.

Monday 8:00 p.m. Julie has begun to break down her homework assignments into small, manageable tasks. A sense of relief sets in as one by one she completes the assignments. That evening she falls asleep feeling happy, knowing that she has accomplished her tasks and that she can return to the gym the next morning. After sitting for two hours at the computer, trying to pump out an eight-page paper, Frank finally decides to take his Ritalin. Soon afterwards, he begins collecting and organizing his thoughts in an orderly fashion and starts writing the paper. Several hours later Frank crawls into bed, the eight-page paper running off on the printer. At the Nike outlet store, Betsy picks out a pair of shoes she just has to have. While lying in bed that evening and reflecting on her purchase, she realizes her impulsive attraction and decides to return the shoes the next day. Gracie's imagination running wild, she begins to create a children's story. With paper and pen in hand, her eyelids close immediately upon writing "The end."

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# APPENDICES

# APPENDIX A

DSM-IV Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder (APA, 1994):

A. Either (1) or (2):

(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:

Inattention

(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 activity

(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 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

(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:

Hyperactivity

(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 or 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 motor"

(f) often talks excessively

Impulsivity

(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 into conversations or games)

B. Some hyperactivity-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

C. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and 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, or a Personality Disorder).

# APPENDIX B

## INITIAL INTERVIEW QUESTIONS (semi-structured)

Examining the Role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the Life Experiences of University Student-Athletes

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Name: Age:
Phone: Scholastic Year:
Major: Length of time at OSU:
Team/Position:

---

Tell me about yourself?

- Who you are?
- Background? Growing up?
- Family(traditional, etc.)? Parents? Siblings?
- Education?
- Goals? Aspirations? Hopes? Dreams? Etc?

---

1. What can you tell me about your understanding of ADHD?
2. Tell me about your experience having ADHD?
3. How do you feel about having ADHD?
4. How long have you had ADHD?
5. How did you find out you had ADHD?
6. What does it mean to you to have ADHD?
7. What are your symptoms of ADHD?
8. What has it been like for you having ADHD?
9. How does having ADHD affect your everyday life?
10. What are the struggles, if any, of having ADHD for you?
11. How has having ADHD helped you, if at all, in your life?

12. How has having ADHD hindered you, if at all, in your life?
13. What do you do to help control or manage your symptoms of ADHD?
14. What has helped you the most in managing your ADHD?
15. What, if any, special services and treatment have you received for your ADHD?
16. Are you taking medications for ADHD? If yes, how do they work for you?
17. What effects, if any, has ADHD had on playing your sport?
18. What relation, if any, do you see in having ADHD and becoming involved in sports?
19. How has having ADHD helped you, if at all, in your sport?
20. How has having ADHD hindered you, if at all, in your sport?
21. What kind of distractions, if any, do you encounter while playing your sport?
22. What does your coach(s) need to know about you having ADHD?
23. What do your team-mates need to know about you having ADHD?
24. What kind of feelings have you had being in sports and knowing you have ADHD?
25. What is your summary of your experience of having ADHD?
    - personally?
    - as it relates to the sports you participate in?
26. If you could summarize your experience with ADHD in one word, what would that word be?
27. What would you like to add?

APPENDIX B-1

## MAJOR THEMES FROM 1ST ROUND OF INTERVIEWS

What things stick out for you from our interview?

There were fourteen main themes that were common to all of you student-athletes as a result of the first interview. Can you talk about your reaction to each of the following themes as they apply to you? If feel that any do not apply to you, please let me know. They are listed below:

THEME: **There are mixed reactions regarding the use of medication - both positive and negative aspects of taking Ritalin**

- Tell me more about the positive and negative aspects of taking the medication

THEME: **There is some attraction to the symptoms of ADHD**

- Talk about what you like about having ADHD, being hyper and impulsive

THEME: **Don't want ADHD to be seen as a crutch/excuse/handicapped**

- What is it like for you thinking ADHD is used as a crutch?

THEME: **There is a sense of secrecy and silence about having ADHD**

- What is your worst fear about others knowing you have ADHD?

THEME: **There is shame and Embarrassment about having ADHD**

- What makes you feel ashamed or embarrassed knowing you have ADHD?

THEME: **You are treated differently than others due to having ADHD**

- How do you feel that others treat you differently knowing you have ADHD?

THEME: **A "Hands-on" learning style is preferred**

- Talk more about a "hands-on" way learning

THEME: **Knowledge of ADHD - Self**

- How much would you say you know about what ADHD is?

THEME: **Knowledge of ADHD - Others**

- How much do others know, or need to know about you having ADHD?

THEME: **Impact of ADHD upon academic performance is negative**

- If you weren't involved in sports, what role would academics play in your life?

THEME: **There is little to no impact of ADHD on athletic performance**

- If ADHD doesn't effect your athletic performance, why do think that is?

THEME: **Been involved in sports/athletics since childhood**

- Tell me more about your attraction to physical activity throughout your life

THEME: **No awareness of ADHD until attending University**

- Tell me more about finding out you have ADHD while at University

THEME: **Current ADHD symptoms of ADHD - hyperactivity, impulsivity, inattention**

- How do you see these symptoms in your life?

THEME: **There are certain skills used to compensate for ADHD**

- time management
- organization
- scheduling
- having a routine
- changing activities regularly
- taking small breaks
- "fighting through" the ADHD symptoms
- using alcohol and drugs
- avoidance
- denial
- sleeping
- How do these work for you?
- What others do you use?

---

There were four areas I had incomplete information about. They are as follows:

I. **INJURY**: Tell me about how often you have an injury in your sport?
II. **FAMILY HISTORY**: Tell me more about your family history of ADHD?
III. **FAMILY REACTIONS**: How does your family (parents) feel about you having ADHD?
IV. **FEELING DIFFERENT**: As you were going through school and playing sports, did you feel you were any different from your teammates or classmates? If so, how?

# APPENDIX C

## APPLICATION FOR APPROVAL OF THE OSU INSTITUTIONAL REVIEW BOARD (IRB) FOR THE PROTECTION OF HUMAN SUBJECTS

Principal Investigator* Lizbeth Gray, Ph.D. . E-mail: grayl@orst.edu

Department: Counselor Education . Phone 737-5972

Project Title: Examining the Role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the Life Experiences of University Student-Athletes

Present or Proposed Source of Funding: N/A

Type of Project: Faculty Research Project

X Student Project or Thesis*:

Student's name: Shannon D. Smith

Phone (Wk)737-5969 (Hm) 752-2950 E-mail: smiths3@ucs.orst.edu

Student's mailing address: OSU 100 Education Hall, Corvallis OR

Type of Review Requested: Exempt X Expedited Full Board

Description of Significance

The purpose of this study is to examine the Role of Attention-Deficit/ Hyperactivity Disorder (ADHD) in the life experiences of University Student-Athletes. The study investigates the impact of ADHD symptomology in the life experiences of university student athletes. Common properties, themes, and patterns will be identified and solidified into an emerging theory, which will enhance understanding of individuals and their experiences of having ADHD. There are currently no documented studies in this particular area of research.

Description of Methods/Procedures

Procedures used for this project will include recruiting university student athletes who have been diagnosed with ADHD. Participants will be recruited from OSU athletic departments via referral from a person in the department who has knowledge of students diagnosed with ADHD. Diagnosis of ADHD will be confirmed by psychological report. Students who are willing to participate will be asked to schedule a time and place for a private audiotaped interview (see Appendix B) to be conducted by Shannon Smith, Ph.D. student in Counselor Education and Supervision, School of Education at OSU. This interview will last approximately one and half hours in length. The interview will consist of broad questions focusing on the experiences of student athletes with ADHD. Questions during the second interview will be asked to confirm or add information obtained from the previous interview. At least one follow-up phone interview will be scheduled at a later time at the convenience of the participant. Participants will be invited to review the information for accuracy and assurance of anonymity and confidentiality.

Description of Benefits/Risks

The primary benefit of this research project is that study participants have the opportunity to increase their level of understanding of ADHD, and further inform the greater body of knowledge about the experiences of university student athletes with ADHD. Participants will receive no incentives for participation, except the chance to participate in the study. The primary risk of participating in this study may include potential for the recollection of events which were emotionally painful, and may lead to uncomfortable or painful emotions. Strict coding procedures will be followed to enhance anonymity and confidentiality of

participants and material. Names will not be attached to data. In the case of historical records (e.g., psychological reports) names will be replaced with participant identification numbers.

American Counseling Association (ACA) ethics regarding counseling research will be followed by the researcher. In addition to the ACA ethical codes, the researcher will make appropriate referral if participants are in need of counseling or psychological services due to participation in this study. The researcher will not be financially responsible for any such services employed by participants. The only time confidentiality will be breeched, according to the ACA ethical guidelines, is in the situation where a participant presents a danger to self or others (e.g., suicidal/homicidal ideation), or the participant reports having committed an act that requires mandatory reporting (e.g., abuse of a minor child).

Description of Subject Population

The population will be comprised of four ADHD student athletes at Oregon State University. Criteria for inclusion in this sample includes the following: 1) a diagnosis of ADHD, 2) current enrollment as a university student, 3) involvement in playing a collegiate sport, and 4) a willingness to participate in this study. The following exclusion criteria is proposed: 1) no current legal condition or pending charges (which may subject the researcher to have to act as a witness or give testimony in a court of law), 2) no major mental illness such as a psychotic condition or disorder (e.g., Schizophrenia), thought disorder (e.g., Delusional Disorder), depressive disorder (e.g., Bipolar Disorder), et cetera, 3) no current suicidal or homicidal ideation. These criteria will be reviewed with the potential participants during an informational meeting (see Pre-Study Screening in Appendix D) by the researcher. If the potential participants qualify for the inclusion criteria

and deny meeting any of the exclusion criteria, they will be asked to participate in the study. However, if the potential participants qualify for the inclusion criteria and admit meeting any of the exclusion criteria, they will have the opportunity to dismiss themselves from further participation and/or will be asked by the researcher not to participate in the study.

Recruitment.

The sampling procedures consists of *purposeful sampling* in effort to facilitate the expansion of the developing theory (Bogdan & Biklin, 1998), and utilizes the notion of "information rich cases" so that a greater degree of depth can be obtained regarding the participant experiences and focus of inquiry (Lincoln & Guba, 1985; Patton, 1990). The number of subjects for this research will amount to four.

Study participants will be recruited through the Oregon State University (OSU) athletic department via referral from a contact person. The contact person is a certified Learning Specialist who has opportunity to work with university students with disabilities, including ADHD, and is able to identify university students who have a previous diagnosis of ADHD or have been recently diagnosed with ADHD. This contact person will identify student athletes who are diagnosed with ADHD, and inform them of the nature of this study via an Information Letter (see Appendix E). The letter briefly describes the nature of this study, and provides a contact number and e-mail address so that interested participants can initiate contact with the researcher.

Copy of Informed Consent

See attached (Appendix D).

Description of Methods of Obtaining Consent

Consent of participants referred to the researcher will be acquired after the researcher meets with the participant and describes the nature of this study during an informational meeting. Questions and concerns will be addressed prior to their consent. Participants will be informed of the potential risks and benefits as outlined above, and given permission to dismiss themselves at any point in time during this study. Participants will also be informed of exclusion criteria (see above) which will result in termination from this study.

Description of Methods Anonymity/Confidentiality

All participants' forms will be given pseudonyms in effort to match assessments/interviews during the study. No given names will be attached to any documents whatsoever, although a list of original participants will be kept separate. This process will be used to further ensure confidentiality and anonymity. The only person who will have access to this information will be the investigators. No names will be used in any data summaries or publications. Audio tape, transcriptions, and psychological evaluations will be kept secure under a locked file cabinet of the researcher. Audio recordings, according to the OSU research office, do not have a set time limit on how long they must be kept. Therefore, audio recordings will be kept for the duration of this study, and will be erased upon completion of the dissertation. Participants will be informed of this information.

Copy of Questionnaire/Survey/Testing Instrument/Etc.

See attached: Appendix B (semi-structured interview).

# APPENDIX D

*Counselor Education and Supervision Ph.D. Program, School of Education*

*Oregon State University, Corvallis, Oregon*

Examining the Role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the Life Experiences of University Student-Athletes

INFORMED CONSENT DOCUMENT

**Investigator(s):** Shannon D. Smith, Ph.D. student, Counselor Education and Supervision at OSU; Lizbeth Gray, Ph.D. Counselor Education, Doctoral Committee Chair at OSU.

**Purpose:** This research study examines the role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the life experiences of University Student-Athletes. It is anticipated that the information gathered from this study will increase the understanding of this population. In addition, it will add to the literature surrounding this body of knowledge.

**Procedures:** I have received an oral and a written explanation of this study and I understand that as a participant in this study the following will happen:

**Pre-Study Screening:** I will meet together with the investigator who will describe the nature and purpose of this study, as well as the expectations of my participation. Criteria for inclusion in this study includes the following: (1) a diagnosis of ADHD, (2) current enrollment as a university student, (3) involvement in playing a collegiate sport, and (4) a willingness to participate in this study. Exclusion criteria is as follows: (1) no current legal condition or pending charges (which may subject the researcher to have to act as a witness or give testimony in a court of law), (2) no major mental illness such as a psychotic condition or disorder (e.g., Schizophrenia), thought disorder (e.g., Delusional Disorder), depressive disorder (e.g., Bipolar Disorder), et cetera, (3) no current suicidal or homicidal ideation.

**Participants Responsibilities:** I authorize the release to the researcher a copy of the psychological evaluation from the OSU athletic department that pertains to my diagnosis of ADHD. In addition, my participation will consist of two face to face audio-taped, in-depth interviews for approximately 60 to 90 minutes, and one

follow-up phone interview. I will be given the opportunity to review a typed transcription of the interview(s). I will also be given the opportunity to suggest modifications for accuracy, clarity, or new information within approximately two to three days after the face to face interview to allow time for transcription.

**Foreseeable Risks or Discomforts:** I understand that there are no known risks by participating in this study, except the minuet possibility that experiencing emotional discomfort or recollection of unwanted memories may occur during the interview process. I understand that I will be given opportunity to debrief at the end of the interview, and process these feelings and/or thoughts that I have as a result of my participation. In addition, I will be supplied with an appropriate referral to pursue these feelings and/or thoughts at greater length if I request such, or the interviewer presents concern for my well being. The investigator(s) will not be financially responsible for any cost incurred from a referral, or any other services rendered as result of my participating in this study.

**Benefits to be Expected from this Research:** My participation in this study will aid in the understanding of university student athletes who experience Attention-Deficit/Hyperactivity Disorder (ADHD). It is the intention of the researcher to use this information to enhance the understanding of university student athletes with ADHD and those who work with and provide primary treatment for such individuals. The only direct benefit I will receive by participating in this study is the potential to gain new understanding and personal satisfaction in contributing to the greater understanding of the role of ADHD in the life experience of university student athletes.

**Confidentiality:** Every effort will be made to ensure that the information I provide remains confidential. By using pseudo names, it becomes highly unlikely that information from my interviews/questionnaire(s) can ever be connected to me. I understand that my name will never be included anywhere in the published study or subsequent publications. Any information obtained from me will be kept confidential, except in the case of danger to self or others (such as suicidal or homicidal intentions) as presented by the American Counseling Association (ACA) code of ethics. For your information, the researcher will provide you with a copy of the ACA code of ethics. Pseudonyms will be used to identify any test results or other information that I provide. The only person who will have access to this information will be the investigators, and no given names will be used in any data summaries or publications. Audio tape, transcriptions, and psychological evaluations will be kept secure under a locked file cabinet of the researcher. Audio tapes will be erased upon completion of this study.

**Voluntary Participation Statement:** I understand that my participation in this study is completely voluntary, and that I will not be paid or compensated in any way for my participation in this study. I may either refuse to participate, refrain

from answering any questions, or withdraw from the study at any time without penalty or prejudice.

**If You Have Questions:** I understand that any questions I have about the research study and/or specific procedures should be directed to Shannon D. Smith, Room 100, Education Hall, Oregon State University, Corvallis, Oregon, 97331-3502, (541) 737-5969, or Shannon D. Smith's Doctoral committee Chair, Lizbeth Gray, Ph.D., Room 100, Education Hall, Oregon State University, Corvallis, Oregon, 97331-3502, (541) 737-5972. If I have questions about my rights as research subject, I should call Mary Nunn, Director of Sponsored Programs, OSU Research Office, (541) 737-0670.

**Results of Study:** I understand that if I would like information about the results of this study (no specific individual results will be given), I can ask the researcher to reserve a copy for me when it becomes available. This information will be provided free of charge.

**My choice to participate in this study indicates that I have read and that I understand the procedures described above, and give my informed and voluntary consent to participate in this study through my free act and deed. This form also serves as a release of information document to obtain a copy of any psychological evaluation from the OSU athletic departments. I understand that I will receive a copy of this consent form.**

_____ _____

Signature of Participant Name of Participant (Please Print)

_____

Date Signed

_____ _____

Participant's Present Address Participant's Present Phone

_____ _____

Signature of Principal Investigator Date Signed

# APPENDIX E

## INFORMATION LETTER

Examining the Role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the Life Experiences of University Student-Athletes

Dear Potential Participant,

I would like to invite you to participate in a research project examining the role of Attention-Deficit/Hyperactivity Disorder (ADHD) in the life experiences of university student-athletes. My belief is that this research information will help counseling professionals and others (e.g., coaches, trainers, academic advisors, sports psychologists, and educators) to understand the role of ADHD in the lives of student athletes such as yourself. This research will hopefully lead to effective methods of assisting students in the management of the symptoms of ADHD and the impact upon athletic performance

This is a qualitative study which begins with a preliminary (informational) meeting with myself (the researcher) to further inform you of the nature of this study and answer any questions you may have. This informational meeting also informs you of both inclusion and exclusion criteria established for participation in this study. If you qualify for participation in this study, and agree to proceed after the informational interview, you will participate in two in-depth interviews with myself, and one follow-up phone interview. The interview questions will be primarily about your experiences as a student athlete who has ADHD. Each

session will be approximately sixty to ninety minutes, will be audio taped, and later transcribed. You will also be given the opportunity to suggest modifications of the information you shared and check for accuracy and clarity. You may also add new information. To allow time for transcription, this feedback process takes place approximately two to three days after the face to face interview.

I will analyze the interviews as they occur, using a method of comparison in order to uncover themes or categories and the relationships among them. Specific themes and categories which emerge from interviews with students like yourself will hopefully lead to a theory of the role of ADHD in the life experiences of university student-athletes.

In order to protect you as a participant in this study and ensure confidentiality, pseudonyms known only to myself and my OSU doctoral committee chair-person, will be used. Tapes, transcripts, field notes, the key to the pseudonyms, and any other information gathered from you will be stored in a locked filing cabinet.

Participation is voluntary and you may withdraw without consequences at any time. If you decide to participate in this study, please keep this letter for your own records, and establish the initial contact with me at (541) 737-5969 or e-mail smiths3@ucs.orst.edu address. We will then agree upon a time and location for a

preliminary informational meeting. Thank you for your interest in this study. I look forward to meeting with you in the very near future.

Sincerely,

Shannon D. Smith
Doctoral Candidate
Counselor Education and Supervision Program
Oregon State University
Corvallis, OR 97331
(541) 737-5969, smiths3@ucs.orst.edu