

CONTRASTING THE SECULAR AND NOUTHETIC APPROACHES TO ADD/ADHD

Timothy C. Seal, Ph.D.

(Dr. Seal is the Academic Vice-President at Mid-America Baptist Theological Seminary. He is also professor and chair of the department of Practical Theology.)

INTRODUCTION

Edward T. Welch defined Attention-Deficit Disorder (ADD) and Attention-Deficit Hyperactivity Disorder (ADHD) highlighting “three main symptoms: inattention, hyperactivity, and impulsivity. To receive the label, you must demonstrate inattention, hyperactivity-impulsivity, or both.”¹ His definition parallels the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) that provides the following parameters for diagnosis:

- A. Either (1) or (2):
- (1) Six (or more) of the following symptoms of inattention have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:

Inattention:

- (a) Often makes careless mistakes in schoolwork, work, or other activities.
- (b) Often has difficulty sustaining attention in tasks or play activities.
- (c) Often does not seem to listen when spoken to directly.
- (d) Often does not follow through on instructions and fails to finish schoolwork, chores, or 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 six 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 or restlessness).
- (d) Often has difficulty playing or engaging in leisure activities quietly.
- (e) Is often “on the go” or often acts as if “driven by a motor.”
- (f) Often talks excessively.

Impulsivity:

- (a) Often blurts out answers before questions have been completed.
- (b) Often has difficulty awaiting turn.
- (c) Often interrupts or intrudes on others (e.g., butts into conversations or games).

- B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age seven 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.

Considering the broadness and subjectivity associated with the parameters listed above, it is no wonder that some counselors are skeptical of the legitimacy of the means of diagnosis and the disorder itself. Dianne McGuinness, the author of *When Children Don't Learn: Understanding the Biology and Psychology of Learning Disabilities*, wrote,

“Methodologically rigorous research indicates that attention deficit disorder and hyperactivity as syndromes simply do not exist. We have invented a disease, given it a medical solution, and now must disown it. The major question is how we go about destroying the monster we have created.”² In contrast to McGuinness, the American Psychiatric Association (APA) concluded in 1987 that ADD/ADHD was a legitimate mental illness and included it in the DSM.

While no one, from either side of the controversy, doubts the existence of the symptoms of inattention or hyperactivity in some children, including adolescents and adults, the key question demanding an answer is, what are the cause (or causes) and the solution for such behaviors? This question warrants an answer for at least four reasons.

The Alarming Statistics on ADD/ADHD

Since the APA listed ADD/ADHD as a mental illness in the DSM, it is one of the most common psychological diagnoses among children and adolescents.³ The statistical increase is, if anything, alarming. The Centers for Disease Control and Prevention (CDC), in a new study done from 2003 to 2011, reported the following findings regarding ADD/ADHD in the United States:

- 6.4 million children reported by parents to have ever received a health care provider diagnosis of ADHD, including: 1 in 5 high school boys and 1 in 11 high school girls.
- A history of ADHD diagnosis by a health care provider increased by 42% between 2003 and 2011.
- The percentage of children 4-17 years of age taking medication for ADHD, as reported by parents, increased by 28% between 2007 and 2011.
- The average age of ADHD diagnosis was 7 years of age, but children reported by their parents as having more severe ADHD were diagnosed earlier. 5 years of age was the average age of diagnosis for children reported as having *severe* ADHD.
- By 2011, 6.4 million children were reported by their parents to be diagnosed by a health professional with ADHD compared to 4.4 million in 2003.
- An estimated 1 million more children were reported by their parents to be taking medication for ADHD in 2011, compared to 2003.⁴

With 6.4 million children receiving the diagnosis of ADD/ADHD in America and when children receive drugs between the ages of 4 to 17, it merits attention. Because of these exponential statistical increases regarding both the diagnosis of ADD/ADHD and the subsequent administering of medication to children as young as 5 years of age, we need to examine whether or not such actions are ethically tenable. Does the scientific evidence that exists at present prove conclusively that ADD/ADHD is an abnormality? Does the weight of the data support the drugging of an estimated 6.4 million children?

The Disputed Scientific Evidence regarding ADD/ADHD

According to the APA, ADD/ADHD is inattention or hyperactivity that exists for at least six months and is maladaptive and inconsistent with the expected developmental level of a normal child or adolescent.⁵ Since receiving formal recognition in 1987 by a vote of the APA and since its inclusion in the DSM, to question the scientific legitimacy of ADD/ADHD is paramount to heresy in the field of psychology.

Yet, Russell A. Barkley, in his book, *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment*, contended, “Little, if any, empirical research on this issue existed at the time”⁶ when ADD and the subtype of ADHD became a part of the DSM. More directly, Martin Whitely, Member of the Legislative Assembly of Parliament of Western Australia, vehemently questioned the legitimacy of the scientific evidence when he wrote, “ADHD was not discovered by science, it was voted into existence in 1987 by a committee of the American Psychiatric Association.”⁷ According to Fred A. Baughman Jr., an adult and child neurologist, “When a doctor, trained in the principles of medical diagnosis . . . presents ADHD as a disease, no matter the equivalent term that gets used, it is not the ethical practice of medicine; it is the practice of deceit.

It is 100% fraud.”⁸ Perhaps the greatest proof of the lack of evidence is that it is labeled a disorder, not a disease.

The Subjective Methodology of Diagnosing ADD/ADHD

A third reason for revisiting the issues surrounding ADD/ADHD is the methodology employed in diagnosing the disorder. For example, according to Baughman, “The DSM-IV criteria for ADHD were developed by a committee put together by the APA, who also publish the DSM. It consisted of 12 psychiatrists, 4 psychologists, and no pediatricians, which means that nobody with ongoing experience of primary care issues in children participated.”⁹ Richard C. Wasserman, in a journal article surveying 401 primary care pediatricians, wrote, “. . . only 38.3% used the DSM IV in making ADHD determinations.”¹⁰ Baughman, in lamenting this finding, wrote,

What does this mean? Probably that even the minimal requirements of the DSM are not met in practice and that children are being diagnosed as ADHD for just about anything that annoys adults, be it trouble finishing homework, not controlling their impulses well enough, the refusal to follow directions, moving around too much, not playing nicely with other children, talking back, and so on.¹¹

Hence, if there is a flaw in the means of diagnosis or if there is disregard for the means of diagnosis, it is logical to deduce the applied solution is suspect as well. Evidence indeed suggests the means of diagnosis, the DSM, is suspect. In 1952, the DSM-I listed 106 disorders; in 1980, the DSM-III listed 265 disorders including children who have a distaste for math – developmental-arithmetic disorder. In 1994, the DSM-IV listed 297 disorders. Complaints about this ever-increasing total led the chair of the DSM-V task force, David Kupfer, to announce that the total number of disorders in

DSM-V will not increase.¹² In a *Time.com* opinion, Richard Saul, a Behavioral Neurologist, wrote,

Today, the fifth edition of the DSM only requires one to fulfill five of eighteen possible symptoms to qualify for an ADHD diagnosis. If you haven't seen the list yet, look it up. It will probably bother you. How many of us can claim we have difficulty with organization, or a tendency to lose things; that we are frequently forgetful, distracted, or fail to pay close attention to details? Under this subjective criteria, the entire U.S. population could potentially qualify.¹³

This issue begs the question, "How does one execute a freeze on cataloging the disorders if the disorders are legitimate?" Moreover, if the disorders are questionable, what does it suggest about the solutions?

The Abuses of Power Regarding ADD/ADHD and Medication

"In the vast majority of the cases," wrote Baughman, "it is the schools, with the process usually kicked off by a classroom teacher, who initiate the ADHD labeling and drugging process, not parents or physicians."¹⁴ Barkley confirmed that a large percentage of teachers consider their students as aberrant. In one study they labeled 57 percent of the boys and 42 percent of the girls overactive. In another study, teachers found that among the boys, 30 percent were overactive, 46 percent disruptive, 49 percent restless, and 43 percent short in attention span.¹⁵ Hence, a serious reason to consider both the etiology and the approach to the treatment of the symptoms of ADD/ADHD is the considerable power wielded by schools and by psychiatrists to force parents to accept both their diagnosis and their medical solution. Baughman warned,

Another practice, which has become more common in recent years, is for school officials to threaten to report parents to social service agencies if they resist medicating their children. This very threat was made to Larry and Kelly, who feared that they could lose custody of their children if they did not comply. Testifying before the House Education Committee in 2001, Larry said, . . . "We were threatened with social services if we didn't get him on the medication."¹⁶

The abuse of power extends not only to teachers who have little to no qualifications to diagnose, but also to psychiatrists who prescribe drugs as though they were dispensing candy. According to a 2002 study conducted by Yale University, Dorothy E. Stubbe and W. John Thomas found that 9 of 10 children who visit a child psychiatrist are given a prescription for a psychotropic drug.¹⁷

Bearing in mind the alarming statistics, the disputed scientific evidence, the diagnostic subjectivity, and the abuses of power related to ADD/ADHD, both in diagnosing and administering medications, it is obvious a need exists to take a fresh look at the problem. In doing so, we must revisit the etiology and the contrasting approaches to the problem of ADD/ADHD in an effort to provide competent counsel to those who struggle with these issues.

THE SECULAR APPROACH TO ADD/ADHD

In considering the secular approach to ADD/ADHD, two areas are important to note. First, it is vital to address the issue of causation. What is the cause of the symptoms known as ADD/ADHD from a secular perspective? Second, what is the treatment often prescribed?

The Secular Etiology regarding ADD/ADHD

Etiology is a Greek term derived from *aitia*, meaning to cause and refers to the study of causation or origination.¹⁸ In considering the causation of the symptoms known as ADD/ADHD, from the secular perspective, the general view is that it is a disease of the brain or mental illness. The four basic arguments offered as proof are as follows: the chemical imbalance argument, the neuroimaging argument, the genetic argument and the consensus argument.

The Chemical Imbalance Argument

A common argument among secular scholars is that ADD/ADHD is a physiological problem due to a chemical imbalance in the brain. Repeatedly, articles and literature associated with ADD/ADHD claim ADD/ADHD results from a chemical imbalance in the brain.¹⁹ Joseph M. Carver, for instance, wrote,

Neurological research has identified over fifty (50) neurotransmitters in the brain. Research also tells us that several neurotransmitters are related to mental health problems—Dopamine, Serotonin, Norepinephrine, and GABA (Gamma Aminobutyric Acid). Too much or too little of these neurotransmitters are now felt to produce psychiatric conditions such as schizophrenia, depression, bi-polar disorder, obsessive-compulsive disorder, and ADHD.²⁰

Carver's paradoxical assertions that neurological research "has identified," not may have identified, a connection between neurotransmitters and ADHD and more subjective statements such as "are now felt to produce" are much too common in literature regarding the cause of ADD/ADHD. Headlines proclaim *ADHD Sufferers Have Lower Brain Chemicals*, but the details of the study or the article dribbles into nothingness using words like "may help explain."²¹

Another example of the dogmatism that exists is the quote by Nancy C. Andreasen who helped formulate the APA's official DSM III in 1980. In her popular book, *The Broken Brain: The Biological Revolution in Psychiatry*, she wrote, "The major psychiatric illnesses are diseases. They should be considered medical illnesses just as diabetes, heart disease, and cancer are."²²

Until recently, the dogmatism, by researchers and clinicians regarding ADD/ADHD left little room for disagreement. Persons who did raise the alarm or dared to disagree risked being minimalized in their field or even suffered the loss of their jobs.²³ Now, the pendulum has swung so that fewer experts in the field still believe ADD/ADHD

results from a chemical imbalance in the brain.²⁴ Breggin, physician and psychiatrist, summarized well the sordid history:

At first psychiatrists called hyperactivity a brain disease. When no brain disease could be found, they changed it to ‘minimal brain disease’ (MBD). When no minimal brain disease could be found, the profession transformed the concept into ‘minimal brain dysfunction.’ When no minimal brain dysfunction could be demonstrated, the label became attention deficit disorder. Now it’s just assumed to be a real disease, regardless of the failure to prove it so. Biochemical imbalance is the code word, but there’s no more evidence for that than there is for actual brain disease.²⁵

Echoing Breggin, Edward Drummond, M.D., Associate Medical Director at Seacoast Mental Health Center in Portsmouth, New Hampshire, in his book, *The Complete Guide to Psychiatric Drugs*, wrote,

First, no biological etiology has been proven for any psychiatric disorder (except Alzheimer’s disease, which has a genetic component) in spite of decades of research. . . . So don’t accept the myth that we can make an ‘accurate diagnosis.’ . . . Neither should you believe that your problems are due solely to a ‘chemical imbalance.’²⁶

At present, while there is still division on the matter, the latest research regarding a connection between ADD/ADHD and a chemical imbalance is inconclusive. Yet, the dogmatism continues unabated.

The Neuroimaging Argument

Some of the most often cited evidence in support of ADD/ADHD as a physiological brain disease focuses on the similarities found in the brains of persons diagnosed as ADD/ADHD through neuroimaging techniques. Stephen V. Farone and Joseph Biederman, in the article, *Neurobiology of Attention-Deficit Hyperactivity Disorder*, wrote, “. . . taken together, the brain imaging studies fit well the idea that dysfunction in the frontosubcortical pathways occurs in ADHD.”²⁷

Yet, in a study done in 2001, Alan A. Baumeister and Mike F. Hawkins contradicted the findings of Farone and Biderman:

In recent years, neuroimaging techniques have been used with increasing frequency in attempts to identify structural and functional abnormalities in the brains of person with ADHD. In contrast to assessments in conventional lines of investigation, there seems to be consensus among experts that the neuroimaging research provides compelling evidence for the existence of such abnormalities.

Paradoxically, at the same time that the experts cite the neuroimaging literature in support of a biologic basis for ADHD, most acknowledge the existence of contradictory findings. Indeed, even a cursory examination of the literature reveals much inconsistency. . . . The principle conclusion is that the neuroimaging literature provides little support for a neurobiologic etiology of ADHD.²⁸

Colorful images of brains, purporting to give absolute proof of dysfunctions in the brains of ADD/ADHD patients, grace the pages of journals, newspapers, magazines, the internet and media outlets. However, the actual evidence drawn from peer reviewed research paints a more subdued portrait. A survey of the evidence, as the study by Baumeister and Hawkins demonstrated, is that, at best, the black and white truth is the data is inconclusive. In the words of Elliot S. Valenstien, Professor Emeritus of Psychology and Neuroscience at the University of Michigan, “Contrary to what is often claimed, no biochemical, anatomical, or functional signs have been found that reliably distinguish the brains of mental patients.”²⁹

The Genetic Argument

A considerable body of research purports that ADD/ADHD results from a genetic disorder.³⁰ The crux of the research is that significantly higher correlations of ADD/ADHD exist between monozygotic twins than between dizygotic twins. While two other approaches to demonstrate genetic etiology, namely temperament and heritage, receive attention; the primary argument regarding genetics focuses on the study of twins. Albert Galves and David D. Walker convincingly refute the genetic evidence in their letter entitled, *Debunking the Science Behind ADHD as a “Brain Disorder.”* Galves and Walker argued,

. . . all of this research is based on the assumption that monozygotic twins and dizygotic twins are raised in equivalent environments. That assumption is erroneous . . . [second] that the process through which genes influence the behavioral characteristics of a person is itself greatly influenced by environmental factors [and] . . . that in order to scientifically demonstrate genetic etiology for any trait, the precise genetic mechanism involved must be identified.³¹

Joseph Glenmullen, M.D., clinical instructor in psychiatry at Harvard Medical School, in his book *Prozac Backlash*, wrote,

In medicine, strict criteria exist for calling a condition a disease. In addition to a predictable cluster of symptoms, the cause of the symptoms or some understanding of their physiology must be established. . . . Psychiatry is unique among medical specialties in that we do not yet have proof either of the cause or the physiology for any psychiatric diagnosis. . . . In recent decades, we have had no shortage of alleged biochemical imbalances for psychiatric conditions. Diligent though these attempts have been, not one has been proven. Quite the contrary, in every instance where such an imbalance was thought to have been found, it was later proven false. . . . No claim of a gene for a psychiatric condition has stood the test of time, in spite of popular misinformation.³²

A thoughtful review of the research reveals that scientific evidence does not exist to prove a genetic link between ADD/ADHD.

The Consensus Argument

The consensus argument purports that the supposedly best minds in the field generally agree that ADD/ADHD is a neurobehavioral disorder and, thus, even though evidence does not exist to prove it, it is most assuredly true. William Carey, at the National Institutes of Health Conference on ADHD in February of 2000, referred to the matter before the Conference: “The DSM—IV does not say so but virtually all articles in the professional journals and textbooks assume that the ADHD behaviors of high activity and low attention span are largely or entirely due to abnormal brain function.”³³

Addressing this flawed reasoning, David Kaiser, M.D., and a psychiatrist, noted:

I am constantly amazed by how many patients who come to see me believe or want to believe that their difficulties are biologic and can be relieved by a pill. This is despite the fact that modern psychiatry has yet to convincingly prove the genetic/biologic cause of any single mental illness. However, this does not stop psychiatry from making essentially unproven claims that depression, bipolar illness, anxiety disorders, alcoholism and a host of other disorders are in fact primarily biologic and probably genetic in origin, and that it is only a matter of time until all this is proven. This kind of faith in science and progress is staggering, not to mention naive and perhaps delusional.³⁴

When all is considered, the fact remains that the arguments made to prove a physiological or medical etiology for ADD/ADHD are fictional. Whether one considers the evidence for a chemical imbalance, neuroimaging, genetic research, or the majority rules argument, the answer is the same. The evidence is inconclusive. To prescribe a medical treatment on nonexistent evidence is disingenuous at the least and, at the most, bordering on dishonest.

The Secular Solution regarding ADD/ADHD

The secular solution involves three simple steps. First, the secular counselor establishes the problem by utilizing the latest DSM. At present, the latest DSM is the DSM-5. Second, the secular approach involves prescribing the appropriate medicine for the diagnosed mental illness. Third, and finally, the secular counselor tries to determine the appropriate dosage and medicine by querying how the medicine makes the client feel. Breggin described and bemoaned the modern secular solution:

Many people continue to think of the psychiatrist as the wise, warm, and caring person who will help them tackle their problems. But the modern psychiatrist may have no interest in ‘talking therapy.’ His or her entire training and commitment is more likely devoted to ‘medical diagnosis’ and ‘physical treatment.’ He or she may look at you with all the empathy and understanding of a pathologist staring through a microscope at germs, and then offer you a drug.³⁵

THE NOUTHETIC APPROACH TO ADD/ADHD

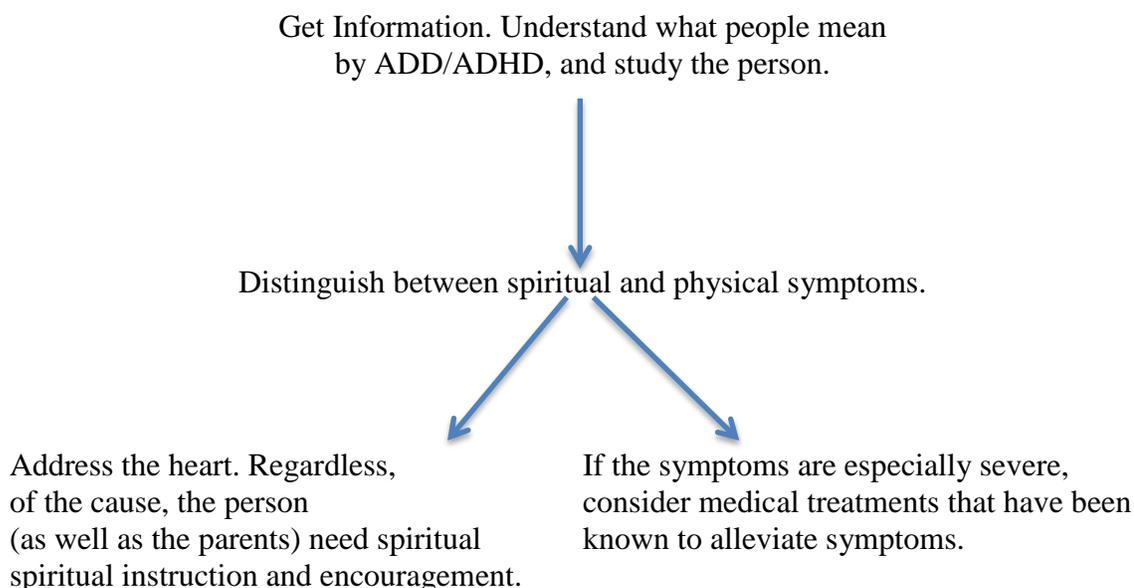
Jay E. Adams is the father of *nouthetic* counseling. This form of counseling is

biblical as opposed to secular or integrational (wedding theology with psychology). Adams derived the term from the Greek New Testament and specifically Romans 15:14. According to Adams, the Greek infinitive, *νοθετεῖν*, conveys three key elements that are vital in describing *nouthetic* counseling:

The first element in the word, *nouthesia* involves the idea that there is something wrong in the counselee's life that God wants to change. . . . The second element in the word is that the change is attempted by use of appropriate verbal means in personal confrontation. . . . a third element . . . [is that] the confrontation takes place in order to change the man for his own benefit; for his own welfare.³⁶

In seeking to diagnose and treat the presupposed problem, ADD/ADHD, *nouthetic* counselors follow a biblical process. Welch, a student of Adams, sets forth the process in graphic form in his book, *Blame It on the Brain?* The diagram below depicts the *nouthetic* view of approaching the problem of ADD/ADHD:

Figure 1. Biblical Guidelines for Approaching ADD/ADHD³⁷



From Welch's Figure 1 above, it is apparent that three core phases come into play in the *nouthetic* approach to counseling: the data gathering phase, the analysis phase, and the counseling phase. While these phases follow a certain logical ordering, it is important to realize that the phases should not be compartmentalized. Data gathering, analysis, and counseling might occur simultaneously throughout the counseling process.

The Data Gathering Phase

Nouthetic counselors, like any other counselor, have common means in gathering data, namely, listening and assimilating the pertinent information. Counseling sessions usually begin by going over information collected on a previously collected personal data information form (PDIF).³⁸

The Analysis Phase

Two key elements are critical in the analysis phase: the presuppositions for analysis and the diagnostic analysis. The first element is critical for the interpretation of the data and the second for identifying the core problem.

The Presuppositions for Analysis

Nouthetic counselors acknowledge the acceptance of certain key presuppositions.³⁹ First, *nouthetic* counselors believe in the existence of God, the spiritual realm (Psalm 14:1). Therefore, they work in two realms, vertical and horizontal, as opposed to the closed system of the secular psychologist or psychiatrist.⁴⁰ Second, the ultimate epistemological base of authority, for determining what is true or not, is the Word of God (2 Timothy 3:16).⁴¹ Third, the problems of mankind result mainly from the Fall (Genesis 3; Job; John 9:1ff). Adams wrote regarding the matter of sin and *nouthetic* counseling,

Now, let me say one thing at the outset and be done with it. The notion that is so widely spread abroad (sometimes by those who ought to know better), that *nouthetic* counseling considers all human problems the direct result of actual sins of particular counselees, is a gross misrepresentation of the facts. From the beginning (cf. *Competent to Counsel*, 1970, pp. 108, 109), I have stated clearly that not all problems of counselees are due to their own sins.

While all human misery—disability, sickness, etc.—does go back to Adam's sin (and I would be quick to assert that biblical truth), that is not the same as saying that a *quid pro quo* relationship between each counselee's misery and his own personal sin exists. . . . Neither is it true that all the suffering that some deserve they get in this life. Nor is it true that all the suffering that others receive in this life they bring upon themselves.⁴²

Fourth, apart from regeneration by the Holy Spirit, *nouthetic* counselors believe the natural man cannot understand the things of God (Romans 8:8; 1 Corinthians 2:13-15).⁴³ Hence, all *nouthetic* counseling focuses on evangelism. In fact, Adams does not hold that it is true Christian or biblical counseling until the counselee comes to faith in Christ.⁴⁴ *Nouthetic* counseling is, therefore, not for persons who remain unregenerate.

A fifth presupposition is that God deals with the heart and He uses Christian counseling through verbal means, based on the Word, to transform their heart (Psalm 119:9, 11; John 17:17).⁴⁵ In the view of Adams, the goal of a *nouthetic* counselor is to deal with the behavioral and heart matters of the counselee in conjunction with God (Genesis 4:6-7; 1 Samuel 16:7; 1 Corinthians 4:5).⁴⁶ Sixth, the goal of *nouthetic* counseling is to conform the counselee to the image of Christ (Romans 8:29).⁴⁷ A seventh presupposition is that all Christians can gain victory over their problem through the counsel of the Word (1 Corinthians 10:13; Philippians 4:13; 2 Peter 1:3).⁴⁸

Diagnostic Analysis

After collecting the data using the PDI form, with the aforementioned preconceived notions, the *nouthetic* counselor assesses whether the ADD/ADHD

symptoms suggest a physical or a spiritual component or whether a combination of both components is present. If the problem is spiritual, then a spiritual solution follows. If the problem is physical, then a physical solution follows. If the problem is a combination of both components, then a physical and a spiritual solution together are the answer. Welch asserted,

Both the spiritual and the physical must be taken seriously. If you ignore the spiritual, there will never be a place for repentance and faith in your child's life. Sinful behavior will be excused. The power of the Gospel will be ignored. If you ignore physical or brain-based strengths and weaknesses, you will never find the creative methods you need to help the person learn. When the teaching style is poorly suited to the individual, he or she will soon be confused and hopeless.⁴⁹

In the case of ADD/ADHD, the *nouthetic* counselor assesses whether or not there is a physical component by having the counselee go for a physical, preferably to a Christian doctor although it is not necessary that the doctor is a Christian. The purpose of sending the counselee to the doctor is to assess whether the counselee is suffering from a physical disease and to consider if some symptoms of the ADD/ADHD may be side effects of prescribed medications.

Charles D. Hodges, M.D., in Appendix B of his book, *Good Mood Bad Mood: Help and Hope for Depression and Bipolar Disorder*, listed a dozen diseases that can alter mood and behavior.⁵⁰ Regarding diseases or physical problems related to ADD/ADHD, Welch wisely noted, "For example, thyroid problems can affect energy level [hyperthyroidism], and [vision or] hearing impairments can make paying attention difficult. A good physical exam can rule these out."⁵¹

Another critical reason for a doctor's visit is to assess if the counselee has any ill effects from prescribed medications. Bruce Levine, a psychologist, in his book, *Commonsense Rebellion: Taking Back Your Life from Drugs, Shrinks, Corporations, and a World Gone Crazy*, wrote, "As one well-known psychiatrist put it: "[SSRIs] are not correcting a biochemical imbalance, these drugs create severe imbalances in the brain."⁵²

Traditionally, doctors and psychiatrists prescribe three main drugs to treat ADD/ADHD: Ritalin, Adderall, and Dexedrine. According to the Drug Enforcement Agency (DEA), these drugs are Schedule II drugs.⁵³ Baughman noted, "A Schedule II drug is a classification the DEA reserves for the most dangerous and addictive drugs that can be prescribed legally."⁵⁴

Regarding Ritalin, Welch wrote, ". . . there is little evidence that Ritalin significantly improves academic performance. After two years of taking Ritalin, many children who receive the drug perform at about the same level as their ADD-labeled counterparts who do not."⁵⁵ In addition, Baughman noted, "Though Ritalin is usually presented as a mild stimulant, it is nearly identical to cocaine and is actually more potent at comparable dosages."⁵⁶ Breggin wrote regarding Ritalin, "It seems to have escaped Ritalin advocates that long-term use tends to create the very same problems that Ritalin is supposed to combat—'attentional disturbances' and 'memory problems' as well as 'irritability' and 'hyperactivity.'"⁵⁷

What about the use of Adderall and Dexedrine? Baughman described the checkered history of Adderall and Dexedrine:

It hit the scene in a big way during the mid-90s, when Shire Pharmaceutical decided to overtake Ritalin with a product of its own and launched a multi-million dollar campaign to promote Adderall, a mix of amphetamine salts that had been a big money maker as a diet drug in years past but was taken off the market in the early 1980s because so many omen became addicted to it.

Despite its sordid history Adderall, like Dexedrine before it, made a comeback as an ADHD drug, too dangerous for dieting adults but perfectly okay for fidgety kids.⁵⁸

The bottom line is that no ADHD drug has ever been shown to enhance academic performance over the long-term, according to Louis H. McCormick in the *Journal of Family Practice*, August of 2003.⁵⁹

Hence, a *nouthetic* counselor, where no biologically confirmed etiology exists, should eschew the use of these drugs. If, however, the counselee is already taking one of these drugs, the counselor should not advise the counselee to stop without a physician's oversight. Breggin warned that "After several days or longer of medication, withdrawal from the drug can produce depression, anxiety, and irritability as well as sleep problems, fatigue, and agitation. The individual may become suicidal in response to the depression."⁶⁰

Continuing the assessment of the data, the *nouthetic* counselor should consider whether the symptoms set forth by the DSM-V are truly abnormal symptoms at all. In light of the information gathered in the present work, the *nouthetic* counselor should, at least, question whether or not the claim that the symptoms related to ADD/ADHD are abnormal. Especially in view of the final statement made by the panel from the National Institutes of Health Consensus Conference on ADHD, November 18, 1998, namely, "We do not have an independent, valid test for ADHD, and there are no data to indicate that ADHD is due to a brain malfunction."⁶¹ In addition, at that same conference, William B. Carey wrote,

The literature of ADHD defines the inattention and high activity behaviors as abnormal and easily differentiated from normal temperamental variations, using "cutpoints" in numbers of symptoms.

However, temperament research shows a normal range of its several traits from high to low, with half of any population being more active and half less attentive than average. No solid data support the current cutpoints, where normal high activity and inattentiveness leave off and abnormal amounts begin (Levy, Hay, McStephen, et al., 1997). Yet, any temperament trait may, as a risk factor, induce a "poor fit" with the particular environment and dysfunction in the child. Children with the "difficult" temperament cluster (low adaptability, negative mood, etc.) are more likely to develop social behavior problems, and those with the "low task orientation" cluster (high activity, low persistence-attention span, high distractibility) are more likely to do poorly in academic achievement. But even at their extremes, these traits do not necessarily lead to dysfunction unless other factors are present.⁶²

Considering these statements, the *nouthetic* counselor is to consider seriously whether the child/adolescent labeled ADD/ADHD is not abnormal, suffering from a debilitating disease, but is normal, just inattentive, impulsive, and hyperactive. Even the presumption of inattention, impulsivity, and hyperactivity need not necessarily be accepted as fact. Baughman makes the point well:

Particularly offensive is the inference that children are okay, or not okay, depending on how ‘easy’ they are to have around. In effect, children can only safely avoid meeting this criteria and being considered to suffer from a neurological abnormality only by acting like sedentary and placid adults.

How much fidgeting does it take to become a problem? Constant fidgeting, once or twice a day, constantly? And what is a fidget? Can a small amount of movement be considered one, or does it take a lot? As Tony Soprano once asked, ‘What constitutes a fidget?’ Same problem with squirming. If I am doing the evaluating, what is a squirm and how many does it take? Does a slight squirm count, or is there a minimal movement quota? . . . And God forbid a child should climb when it is forbidden, no matter how alluring the object being ascended is. When does this running or climbing become excessive? The obvious answer is—whenever an adult is disturbed by it. Anybody who expects kids to play or engage in leisure activities quietly is simply not being rational.

Signs of ADHD are absent in all of us when we are doing things that are rewarding. Naturally, though, there is no mention of a child’s need for interesting environments influencing how he acts in a dull one. The preference is to drug the ones whose actions point out our own shortcomings. And why not? Children are the ones in the equation with the least power.⁶³

If a child/adolescent exhibits symptoms of inattention, impulsivity, or hyperactivity, the *nouthetic* counselor must determine whether these actions are a transgression of the law of God, namely, sin. The question to ask is, Is his/her lack of control a sinful act? At this juncture, Welch’s caution is appropriate:

Let’s say, for example, that you told your child to clean his room. When your return twenty minutes later, he is still playing with toys amid the chaos. Is this a spiritual problem? On the surface, it would seem certainly so. The child has violated the command to obey his parents. Yet there might be other explanations. Perhaps the child does not know how to ‘clean his room’—the idea might be too general and abstract. . . . In other words, what you may be seeing is a weakness in the child’s ability to follow through with the directions rather than overt disobedience.⁶⁴

So, it is vital to differentiate between what is sinful rebellion and a misunderstanding.

The Counseling Phase

In giving counsel, the *nouthetic* counselor should include the following paradigm. First, where sin is present, there should be dehabitation and rehabilitation. Second, the counselor should give advice about providing structure and homework to build in and

reinforce rehabilitation. Third, if a physical problem is possible, such as hyperthyroidism, the counselor should encourage the parents to consult a biblically knowledgeable physician.

Provide Counsel on Dehabituation and Rehabilitation

With the distinction between overt disobedience clearly in mind, if the counselee is behaving sinfully by overtly disobeying his/her parents, the counsel of Scripture is clear. In Ephesians 4:20-24, the Bible sets forth a two-factored process, dehabituation and rehabilitation.⁶⁵ Adams explained, “These two factors always must be present in order to effect genuine change. Putting off will not be permanent without putting on. Putting on is hypocritical as well as temporary, unless it is accompanied by putting off.” The parents should discipline the child to bring about obedience (Proverbs 13:24), but they also should train and nurture the child/adolescent in the admonition of the Lord (Ephesians 6:4). As Adams rightly noted, “Paul calls for genuine change; change in the person. Not merely in the actions.”⁶⁶ We should note at this point that the means of discipline may vary depending on the type of disobedience, the temperament and the age of the child. The counselor, therefore, should settle for nothing short confession of sin and repentance (1 John 1:9).

Provide Counsel on Structure and Homework

For a child/adolescence who has trouble with the matter of self-control (inattentive, impulsive, hyperactive), a disciplined structure is critical. Welch gave the following advice:

Structure means having predictable, clear, simple, and written household rules. These rules should be rehearsed weekly with the child and consistently enforced. Avoid lengthy, abstract explanations. If you tend to deliver monologues, don't. If you need time to develop a particular teaching or explain a form of discipline, dialogue with the child to keep his attention. Ask him to explain where he disobeyed. When giving instructions, make sure the child is paying attention; have him look you in the eyes, then ask him to repeat the instructions. You might even review his plan for carrying out the instructions. . . . Well-prioritized 'to do' lists are a must.⁶⁷

Structuring is vital. Give concrete homework at every session and check up on the homework to make sure it is done.⁶⁸ Homework insures the establishing of the necessary practices.

Provide Counsel on Medical Treatment

If the child/adolescent appears to have a medical issue, consult a knowledgeable physician. As mentioned earlier, some legitimate medical matters warrant medical treatment. However, it is important when dealing with an impulsive, inattentive, or hyperactive child to remember that “the vast majority of ADD-labeled children will have

normal physical exams, but many physicians will suggest medical treatment anyway.”⁶⁹ That being the case, it is vital to develop a relationship with a local doctor who does not automatically default to prescribing medicines when nothing physically abnormal is present.

CONCLUSION

What does the data reveal about the diagnosis and treatment of ADD/ADHD? Five facts are clear. First, no settled science verifies that ADD/ADHD is a mental illness. Second, the means of diagnosing ADD/ADHD, the DSM-5, is so subjective as to render it ineffective. Third, the medical solution (Ritalin, Dexedrine, and Adderall) is not a solution, but merely a dangerous and addictive means of masking the symptoms. Fourth, although the logical approach in light of the evidence, from a secular perspective, is to treat the symptoms as a behavioral problem, it is painfully obvious that the money is too lucrative to switch the course regarding treatment. Fifth, the most effective approach of dealing with ADD/ADHD is the biblical *nouthetic* approach. Even if the secular psychiatrists, psychologists and pharmaceutical companies abandoned the medical approach and turned to a behavioral approach, it would not prove as effective as the *nouthetic* approach because the *nouthetic* approach focuses on nothing short of a heart change by the power of God through the Scriptures, not just a behavioral change.

Footnotes:

¹Edward T. Welch, *Blame It on the Brain? Distinguishing Chemical Imbalances, Brain Disorders, and Disobedience* (Phillipsburg, New Jersey: Presbyterian and Reformed Publishing, 1998), 132.

²Seymour Fisher and Roger P. Greenberg, eds., *The Limits of Biological Treatments for Psychological Distress: Comparisons With Psychotherapy and Placebo* (Florence, KY: Routledge, 2013), 155.

³National Institute of Mental Health, “The Numbers Count: Mental Disorder in America,” <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml#ADHD> (accessed March 8, 2014).

⁴Centers for Disease Control and Prevention, “Attention-Deficit/Hyperactivity Disorder: Key Findings: Trends in the Parent-Report of Health Care Provider-Diagnosis and Medication Treatment for ADHD: United States, 2003—2011

www.cdc.gov/ncbddd/adhd/features/key-findings-adhd72013.html (accessed March 8, 2014).

⁵The APA definition is accessible in the *Diagnostic Criteria from DSM-V* (Washington, D.C.: American Psychiatric Association, 2013).

⁶Russell A. Barkley, *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment* (New York, NY: The Guilford Press, 2006) 53.

⁷Martin Whitley, foreword to *The ADHD Fraud: How Psychiatry Makes 'Patients' of Normal Children* by Fred A. Baughman Jr., M.D. and Craig Hovey (Victoria, BC: Trafford Publishing, 2006) xi.

⁸Fred A. Baughman and Craig Hovey, *The ADHD Fraud: How Psychiatry Makes 'Patients' of Normal Children* (Victoria, BC: Trafford Publishing, 2006) 94.

⁹Baughman, *The ADHD Fraud*, 116.

¹⁰Richard C. Wasserman, et. al. "Identification of Attentional and Hyperactivity Problems in Primary Care: A Report From Pediatric Research in Office Settings and the Ambulatory Sentinel Practice Network." *Pediatrics* 103 (March 1999): e38.

¹¹Baughman, *The ADHD Fraud*, 116.

¹²Robin S. Rosenberg, *Abnormal Is the New Normal: Why Will Half of the U.S. Population Have a Diagnosable Mental Disorder?*
http://www.slate.com/articles/health_and_science/medical_examiner/2013/04/diagnostic_and_statistical_manual_fifth_edition_why_will_half_the_u_s_population.html (accessed March 8, 2014).

¹³Richard Saul, *Doctor ADHD Does Not Exist*, March 15, 2014,
<http://time.com/25370/doctor-adhd-does-not-exist/> (accessed March 15, 2014).

¹⁴Baughman, *ADHD Fraud*, 4

¹⁵Russell Barkley, *Hyperactive Children: A Handbook for Diagnosis and Treatment* (New York, NY: Guilford Press, 1981).

¹⁶Baughman, *ADHD Fraud*, 4.

¹⁷Dorothy E. Stubbe and W. John Thomas, "A Survey of Early-Career Child and Adolescent Psychiatrists: Professional Activities and Perceptions," *Journal of the American Academy of Child and Adolescent Psychiatry* 41, no. 2 (February 2002): 123-30.

¹⁸James Swanson, *Dictionary of Biblical Languages with Semantic Domains: Greek (New Testament)*. Oak Harbor: Logos Research Systems, Inc., 1997.

¹⁹Joseph M. Carver, *The “Chemical Imbalance” in Mental Health Problems*, <http://www.drjoecarver.com/clients/49355/File/Chemical%20Imbalance.html> (accessed March 9, 2014).

²⁰*Ibid.*

²¹Rebecca Smith, *ADHD Sufferers Have Lower Brain Chemicals: People with Attention Deficit Disorder Have Lower Levels of a Chemicals in the Brain Needed to Experience the Sensations of Reward and Motivation, Research Has Shown*, <http://www.telegraph.co.uk/health/healthnews/6156719/ADHD-sufferers-have-lower-brain-chemicals.html> (accessed March 10, 2014).

²²Nancy C. Andreasen, *The Broken Brain: The Biological Revolution in Psychiatry* (New York, NY: William Morrow, 1985), 29.

²³Peter Breggin, *Toxic Psychiatry: Why Therapy, Empathy, and Love Must Replace Drugs, Electroshock, and Biochemical Theories of the “New Psychiatry* (New York, NY: St. Martin’s Press, 1991), 15.

²⁴Tracy Pederson, *Chemical Imbalance Is Probably Not Behind ADHD*, <http://psychcentral.com/news/2013/11/02/chemical-imbalance-is-probably-not-behind-adhd/61512.html> (accessed March 10, 2014).

²⁵ Breggin, *Toxic Psychiatry*, 278.

²⁶Edward Drummond, *The Complete Guide to Psychiatric Drugs* (New York, NY: John Wiley and Sons, Inc.: 2000), 15-16.

²⁷Stephen V. Barone and Joseph Biederman, “Neurobiology of Attention-Deficit Hyperactivity Disorder.” *Biological Psychiatry* 44 (1998): 951-8.

²⁸Baumeister, Alan A. and Mike F. Hawkins, “Incoherence of Neuroimaging Studies of Attention Deficit/Hyperactivity Disorder,” *Clinical Neuropharmacology* 24 (2001): 1-4.

²⁹Elliot S. Valenstien, *Blaming the Brain: The Truth about Drugs and Mental Health* (New York, NY: The Free Press, 2002), 125.

³⁰Robert Goodman and Jim Stevenson, “A Twin Study of Hyperactivity—II. The Aetiological Role of Genes, Family Relationships and Perinatal Adversity,” *Journal of Child Psychology and Psychiatry* 30 no. 5 (1989): 691-709; D. L. Pauls, “Genetic Factors in the Expression of Attention-Deficit Hyperactivity Disorder,” *Journal of Child and Adolescent Pharmacology* 1 (1991): 353-60; Joseph Biedermann et al, “Further Evidence

for Family-Genetic Risk Factors in Attention Deficit Hyperactivity Disorder,” *Archives of General Psychiatry* 49 (1992): 728-38; J. J. Gillis, et al, “Attention-Deficit Disorder in Reading Disabled Twins: Evidence for a Genetic Etiology,” *Journal of Abnormal Child Psychology* 20 (1992): 303-15; C. Edelbrock, et al, “A Twin Study of Competence and Problem Behavior in Childhood and Early Adolescence,” *Journal of Child Psychology and Psychiatry* 36 (1995): 775-86; D. K. Sherman, W. G. Iacono, and M. K. McGue, “Attention-Deficit Hyperactivity Disorder Dimensions: A Twin Study of Inattention and Impulsivity-Hyperactivity,” *Journal of the American Academy of Child and Adolescent Psychiatry* 36 no. 6 (1997): 745-53.

³¹Albert Galves and David D. Walker, *Debunking the Science Behind ADHD as a “Brain Disorder,”* <http://www.academyanalyticarts.org/galvesealker.htm> (accessed March 11, 2014).

³²Joseph Glenmullen, *Prozac Backlash: Overcoming the Dangers of Prozac, Zoloft, Paxil, and Other Antidepressants with Safe, Effective Alternatives* (New York, NY: Simon and Schuster, 2001), 192-193, 196, 198.

³³William Carey, “National Institutes of Health Consensus Development Conference Statement: Diagnosis and Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD),” *Journal of the American Academy of Child and Adolescent Psychiatry*, 39 no. 2 (2000): 182-93.

³⁴David Kaiser, *Commentary: Against Biologic Psychiatry,* <http://www.psychiatrytimes.com/articles/commentary-against-biologic-psychiatry> (accessed March 11, 2014).

³⁵Breggin, *Toxic Psychiatry*, 11.

³⁶Jay E. Adams, *The Big Umbrella: And Other Essays on Christian Counseling,* (Nutley, New Jersey: Presbyterian and Reformed, 1972) 12-13.

³⁷Welch, *Blame It on the Brain?*, 132.

³⁸Jay E. Adams, *Competent to Counsel: Introduction to Nouthetic Counseling* (Grand Rapids, Michigan: Zondervan, 1970), 271-74.

³⁹Adams, *Competent to Counsel*, xxi.

⁴⁰Jay E. Adams, *The Big Umbrella: And Other Essays and Addresses on Christian Counseling* by Jay E. Adams (Nutley, New Jersey: Presbyterian and Reformed, 1972), 97.

⁴¹Adams, *Competent to Counsel*, xxi.

⁴²Jay E. Adams, *A Theology of Christian Counseling: More Than Redemption* (Grand Rapids, Michigan: Zondervan, 1979), 139-40.

⁴³Adams, *Competent to Counsel*, 20-21.

⁴⁴Jay E. Adams, *A Theology of Christian Counseling*, 120.

⁴⁵Adams, *Competent to Counsel*, 45.

⁴⁶Jay E. Adams, Change Them into What? *The Journal of Biblical Counseling*, 13, no.2 (1995): 17.

⁴⁷Adams, *A Theology of Christian Counseling*, 120.

⁴⁸Adams, *The Big Umbrella*, 34.

⁴⁹Welch, *Blame It on the Brain?*, 136.

⁵⁰Charles D. Hodges, *Good Mood Bad Mood: Help and Hope for Depression and Bipolar Disorder* (Wapwallopen, Pennsylvania: Shepherd Press, 2012), 187-91.

⁵¹Welch, *Blame It on the Brain?*, 142.

⁵²Bruce Levine, *Commonsense Rebellion: Taking Back Your Life from Drugs, Shrinks, Corporations, and a World Gone Crazy* (New York, NY: Bloomsbury Academic, 2003), 277.

⁵³*DEA Background Paper on Methylphenidate, Drug Enforcement Administration*, US Department of Justice, Drug and Chemical Evaluation Section, Office of Diversion Control, 8.

⁵⁴Baughman, *ADHD Fraud*, 2.

⁵⁵Welch, *Blame It on the Brain?*, 144.

⁵⁶Baughman, *ADHD Fraud*, 2.

⁵⁷Breggin, *Toxic Psychiatry*, 307.

⁵⁸Baughman, *ADHD Fraud*, 168.

⁵⁹Louis H. McCormick, "ADHD Treatment and Academic Performance: A Case Series," 52 (August, 2003): 620-24, 626.

⁶⁰Breggin, *Toxic Psychiatry*, 307.

⁶¹Fred Baughman, Final Statement of the Panel of the National Institutes of Health Consensus Conference on ADHD, delivered, November 18, 1998.

⁶²William B. Carey, Is ADHD a Valid Disorder? *National Institutes of Health Consensus Development Conference on Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder* (November 1998): 33.

⁶³Baughman, *ADHD Fraud*, 110-14.

⁶⁴Welch, *Blame It on the Brain?*, 138.

⁶⁵Jay E. Adams, *The Christian Counselor's Manual: The Practice of Nouthetic Counseling* (Grand Rapids, Michigan: Zondervan, 1973), 176-77.

⁶⁶Adams, *The Christian Counselor's Manual*, 177.

⁶⁷Welch, *Blame It on the Brain?*, 141-42.

⁶⁸Jay E. Adams, *Helps for Counselors: A Mini-Manual for Christian Counseling* (Grand Rapids, Michigan: Baker, 1980), 5.

⁶⁹Welch, *Blame It on the Brain?*, 142.

SELECTED BIBLIOGRAPHY

Books

- Adams, Jay E. *Competent to Counsel: Introduction to Nouthetic Counseling*. Grand Rapids, Michigan, 1970.
- _____. *The Big Umbrella: And Other Essays on Christian Counseling*. Nutley, New Jersey: Presbyterian and Reformed, 1972.
- _____. *The Christian Counselor's Manual: The Practice of Nouthetic Counseling*. Grand Rapids, Michigan: Zondervan, 1973.
- _____. *A Theology of Christian Counseling: More Than Redemption*. Grand Rapids, Michigan: Zondervan, 1979.
- _____. *Helps for Counselors: A Mini-Manual for Christian Counseling*. Grand Rapids, Michigan: Baker, 1980.
- Andreasen, Nancy C. *The Broken Brain: The Biological Revolution in Psychiatry*. New York, NY: William Morrow, 1985.
- Barkley, Russell A. *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment*. New York, NY: The Guilford Press, 2006.
- _____. *Hyperactive Children: A Handbook for Diagnosis and Treatment*. New York, NY: Guilford Press, 1981.
- Baughman, Fred A. and Craig Hovey. *The ADHD Fraud: How Psychiatry Makes 'Patients' of Normal Children*. Victoria, BC: Trafford Publishing, 2006.
- Breggin, Peter. *Toxic Psychiatry: Why Therapy, Empathy, and Love Must Replace Drugs, Electroshock, and Biochemical Theories of the "New Psychiatry"*. New York, NY: St. Martin's Press, 1991.
- Drummond, Edward Drummond. *The Complete Guide to Psychiatric Drugs*. New York, NY: John Wiley and Sons, Inc.: 2000.
- Fisher, Seymour and Roger P. Greenberg, eds. *The Limits of Biological Treatments for Psychological Distress: Comparisons with Psychotherapy and Placebo*. Florence, KY: Routledge, 2013.

Glenmullen, Joseph. *Prozac Backlash: Overcoming the Dangers of Prozac, Zoloft, Paxil, and Other Antidepressants with Safe, Effective Alternatives*. New York, NY: Simon and Schuster, 2001.

Hodges, Charles D. Hodges, M. D. *Good Mood Bad Mood: Help and Hope for Depression and Bipolar Disorder*. Wapwallopen, Pennsylvania: Shepherd Press, 2012.

Levine, Bruce. *Commonsense Rebellion: Taking Back Your Life from Drugs, Shrinks, Corporations, and a World Gone Crazy*. New York, NY: Bloomsbury Academic, 2003.

Valenstien, Elliot S. *Blaming the Brain: The Truth about Drugs and Mental Health*. New York, NY: The Free Press, 2002.

Welch, Edward T. *Blame It on the Brain? Distinguishing Chemical Imbalances, Brain Disorders, and Disobedience*. Phillipsburg, New Jersey: Presbyterian and Reformed Publishing, 1998.

Journals

Biedermann Joseph Biedermann et. al., "Further Evidence for Family-Genetic Risk Factors in Attention Deficit Hyperactivity Disorder," *Archives of General Psychiatry* 49 (1992): 728-38.

Carey, William, "National Institutes of Health Consensus Development Conference Statement: Diagnosis and Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD)," *Journal of the American Academy of Child and Adolescent Psychiatry*, 39 no. 2 (2000): 182-93.

_____, "Is ADHD a Valid Disorder?" *National Institutes of Health Consensus Development Conference on Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder* (November 1998): 33.

DEA Background Paper on Methylphenidate, Drug Enforcement Administration, US Department of Justice, Drug and Chemical Evaluation Section, Office of Diversion Control, 8.

Edelbrock, C., et. al., "A Twin Study of Competence and Problem Behavior in Childhood and Early Adolescence," *Journal of Child Psychology and Psychiatry* 36 (1995): 775-86.

Gillis, J. J., et. al., "Attention-Deficit Disorder in Reading Disabled Twins: Evidence for a Genetic Etiology," *Journal of Abnormal Child Psychology* 20 (1992): 303-15.

- Goodman, Robert and Jim Stevenson, "A Twin Study of Hyperactivity—II. The Aetiological Role of Genes, Family Relationships and Perinatal Adversity," *Journal of Child Psychology and Psychiatry* 30 no. 5 (1989): 691-709.
- Pauls, D. L., "Genetic Factors in the Expression of Attention-Deficit Hyperactivity Disorder," *Journal of Child and Adolescent Pharmacology* 1 (1991): 353-60.
- Sherman, D. K., W. G. Iacono, and M. K. McGue, "Attention-Deficit Hyperactivity Disorder Dimensions: A Twin Study of Inattention and Impulsivity-Hyperactivity," *Journal of the American Academy of Child and Adolescent Psychiatry* 36 no. 6 (1997): 745-53.
- Stubbe, Dorothy E. and W. John Thomas, "A Survey of Early-Career Child and Adolescent Psychiatrists: Professional Activities and Perceptions," *Journal of the American Academy of Child and Adolescent Psychiatry* 41, no. 2 (February 2002): 123-30.
- Wasserman, Richard C. et. al., "Identification of Attentional and Hyperactivity Problems in Primary Care: A Report From Pediatric Research in Office Settings and the Ambulatory Sentinel Practice Network." *Pediatrics* 103 (March 1999): e38.

Internet

- Carver, Joseph M., *The "Chemical Imbalance" in Mental Health Problems*, <http://www.drjoecarver.com/clients/49355/File/Chemical%20Imbalance.html> (accessed March 9, 2014).
- Centers for Disease Control and Prevention, "Attention-Deficit/Hyperactivity Disorder: Key Findings: Trends in the Parent-Report of Health Care Provider-Diagnosis and Medication Treatment for ADHD: United States, 2003—2011" www.cdc.gov/ncbddd/adhd/features/key-findings-adhd72013.html (accessed March 8, 2014).
- Galves, Albert and David D. Walker, *Debunking the Science Behind ADHD as a "Brain Disorder,"* <http://www.academyanalyticarts.org/galvesealker.htm> (accessed March 11, 2014).
- David Kaiser, *Commentary: Against Biologic Psychiatry*, <http://www.psychiatrytimes.com/articles/commentary-against-biologic-psychiatry> (accessed March 11, 2014).
- National Institute of Mental Health, "The Numbers Count: Mental Disorder in America," <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml#ADHD> (accessed March 8, 2014).

- Pederson, Tracy, *Chemical Imbalance Is Probably Not Behind ADHD*,
<http://psychcentral.com/news/2013/11/02/chemical-imbalance-is-probably-not-behind-adhd/61512.html> (accessed March 10, 2014).
- Rosenbert, Robin S., "Abnormal Is the New Normal: Why Will Half of the U.S. Population Have a Diagnosable Mental Disorder?"
http://www.slate.com/articles/health_and_science/medical_examiner/2013/04/diagnostic_and_statistical_manual_fifth_edition_why_will_half_the_u_s_population.html (accessed March 8, 2014).
- Saul, Richard, "Doctor: ADHD Does Not Exist," March 14, 2014,
<http://time.com/25370/doctor-adhd-does-not-exist/> (accessed March 15, 2014).
- Smith, Rebecca, "ADHD Sufferers Have Lower Brain Chemicals: People with Attention Deficit Disorder Have Lower Levels of a Chemicals in the Brain Needed to Experience the Sensations of Reward and Motivation, Research Has Shown,"
<http://www.telegraph.co.uk/health/healthnews/6156719/ADHD-sufferers-have-lower-brain-chemicals.html> (accessed March 10, 2014).

Reference Works

- Swanson, James. *Dictionary of Biblical Languages with Semantic Domains: Greek (New Testament)*. Oak Harbor: Logos Research Systems, Inc., 1997.
- Fred Baughman, Final Statement of the Panel of the National Institutes of Health Consensus Conference on ADHD, delivered, November 18, 1998.