Attention Deficit Hyperactivity Disorder (ADHD) is a controversial condition that is closely tied to culture, environment and lifestyle and yet is heavily medicated with side effect ridden pharmaceuticals. Below we take a look at anthropological underpinnings and solutions to ADHD that take a more conservative approach.

ADHD in England

Recently, Ken Jacobson at the University of Massachusetts conducted a groundbreaking study showing that Attention Deficit Hyperactivity Disorder (ADHD) may be a culturally defined disorder rather than a medical one. Jacobson studied a group of 53 English 10 and 11-year-olds to determine why the English diagnose ADHD much less frequently than their counterparts in America. He found that English children defined as normal in England exhibit the symptoms of ADHD as it is defined in America. However, English students are rarely diagnosed with the disorder or treated with the drug Ritalin. He suggests that there is no biological basis for dividing children into groups like “learning disabled,” “gifted,” and “abnormal” because these are socially constructed terms that vary across cultures. According to Jacobson, less than 1 percent of English children are diagnosed as having anything similar to ADHD while approximately 5 percent of American children are labeled as having ADHD. He finds this is because the English accept hyperactive behavior at certain times in certain places as normal in children more readily than Americans. Currently Jacobson is conducting a similar study with 10- and 11-year-olds in a town near Amherst, Massachusetts.

Multiple Intelligences

Another researcher examining the cultural construction of ADHD is Thomas Armstrong http://www.thomasarmstrong.com/ who notes that the tests that have been used to determine if someone has ADHD are either artificially objective and remote from the lives of real children (in one test, a child is asked to press a button every time he sees a 1 followed by a 9 on a computer screen), or hopelessly subjective (many rating scales ask parents and teachers to score a child’s behavior on a scale from 1 to 5: these scores depend upon the subjective attitudes more than the actual behaviors of the children involved). Armstrong notes that ADHD is a popular diagnosis because it serves as a neat way to explain away the complexities of modern life in America. Over the past few decades, our sense of community has declined and mass media has created a “short-attention-span culture,” and stress levels have skyrocketed.

Armstrong notes that ADHD even shows racist origins as another way to label ethnic minorities as somehow defective. Studies show that today special-education classes are often disproportionately filled with minority students. And Armstrong notes that historically the disorder of ADHD was first created in 1851 when a Louisiana physician Samuel A. Cartwright published a paper in the New Orleans Medical and Surgical Journal wherein he described a new medical disorder he had recently identified. He called it drapetomania (from drapeto, meaning “to flee,” and mania, an obsession), and used it to describe a condition he felt was prevalent in runaway slaves. Attention-deficit disorder has recently been re-named attention deficit hyperactivity disorder and in fact, the syndrome has changed names at least 25 times in the past 120 years. At one point it was even called minimal brain syndrome. Social critic Ivan Illich once wrote that each civilization defines its own diseases be they genetic, criminal, sinful, or even virtuous and treatments be they torture, hospitalization, execution, exile, or even financial aid. Armstrong also attributes the formation of ADHD to the importance of the Protestant work ethic and the need to somehow classify unruly children. Early founding philosophers such as Hobbes emphasized the importance of attaining positions of wealth and power through the rational and efficient use of time and energy, willingness to control distracting impulses, and to delay gratification in the service of productivity, and thriftiness and ambition. Deviance from this worldview is defined as distractibility, impulsiveness, and lack of motivation, the same traits frequently used to describe children suffering from ADHD according to Armstrong.

In contrast to the limited view of childhood and adult development defined by ADHD, Armstrong advocates for the theory of multiple intelligences (Gardner 2000), a concept that takes a more multi-cultural approach to human learning and cognition. This theory defines human intelligence in a much broader fashion than the standard currently defined by the IQ test. The various types of intelligence includes linguistic intelligence, logical-mathematical intelligence, spatial intelligence, bodily-kinesthetic intelligence, musical intelligence, interpersonal intelligence, intra-personal intelligence, and naturalist intelligence. The founder of this concept, Dr. Gardner, says that our schools and culture focus most of our attention on linguistic and logical-mathematical intelligence. We esteem the highly articulate or logical people of our culture. Unfortunately, children without skills in these areas end up being labeled learning disabled, ADHD or simply underachievers.

The theory of multiple intelligences also has implications for adult learning and development. Many adults find themselves in jobs that do not make optimal use of their most highly developed intelligences. One excellent resource is the Johnson O’Connor Human Engineering Laboratory in Boston, which is an excellent resource for adults seeking to better understand their unique aptitudes and match them to a career. When adults are stuck in a career that does not make use of their aptitudes they experience stress that can lead to disease.
ADHD & American Culture

Rewards Deficiency Syndrome

Other researchers on ADHD take an evolutionary approach to the disorder. Originally proposed by Thom Hartmann (http://www.thomhartmann.com) the evolutionary model of ADHD is now being supported by researchers at the University of California, Irvine, who have concluded that a gene variation associated with Attention-Deficit Hyperactivity Disorder (ADHD) first appeared 10,000 to 40,000 years ago and may have been an advantage to the early humans who had it. In an article published in the January 8, 2002 edition of the Proceedings of the National Academy of Sciences Dr. Robert K. Moyzis and other researchers speculate that early humans with ADHD traits such as novelty-seeking, increased aggression and perseverance were more likely to survive. These traits have been associated with the DRD4 7R gene. Up to half of ADHD individuals have this same variant gene, according to Moyzis, one of the authors of the study. Today, many of these same traits are deemed inappropriate in the typical classroom setting and hence diagnosed as ADHD. Like their early ancestors, today’s ADHD children are more active and often more aggressive than their peers. These children are always looking for something new to capture their attention. Once they find something interesting, such as a video game, they “lock on” and focus intently on the task. They are often unable to shift their focus to something new. Researchers speculate that a “survival of the fittest” scenario may have contributed to an even-increasing number of people with ADHD. For example, being more aggressive, inquisitive, and willing to take risks meant a higher probability for mate selection and perhaps multiple sex partners, spreading the gene and its associated ADHD behaviors through the population. Primitive hunters with this gene would have been more successful and would have been better providers for their families and tribes. These and other factors may explain why the gene is so prevalent now. Like Armstrong, Hartmann notes that in light of these findings, we must also revisit the way we approach ADHD treatment in adults, moving from a broken/pathology/therapy model to a skill-set/opportunity/coaching model, noting that Thomas Edison, Ben Franklin and others inventors, inventors, and rebels of history would probably be diagnosed as having ADHD if they were alive today. This also demonstrates the need for us to revisit the way our schools and classrooms are organized, so ADHD children are no longer wounded by the experience of growing up in public school.

Similarly, according to a fascinating new theory from evolutionary medicine called the “rewards deficiency syndrome” some people, due to genetic defects, do not produce sufficient neurotransmitters, particularly dopamine, in response to pleasure drives for eating, love and reproduction. As a result they seek dopamine release and sensations of pleasure via junk foods and drugs such as sugar, alcohol, cocaine, methamphetamine, heroin, nicotine, marijuana, and by compulsive activities such as gambling, eating, sex, and risk taking behaviors. Other researchers support this theory, noting low levels of serotonin are linked to ADHD and are associated with increased aggression in humans and other animals.

Following the rewards deficiency syndrome theory and the fact that stimulant medications act primarily by altering levels of dopamine, numerous genetic studies of ADHD have looked at defects in genes that control dopamine receptors. One allele of the dopamine D2 receptor gene is associated with alcoholism, drug abuse, smoking, obesity, compulsive gambling, and several personality traits. Other researchers support these findings, suggesting that defects in dopamine receptors genes are implicated in ADHD.

Driven to Distraction

A final take on ADHD, promoted by high tech magazines such as Wired, accepts it as the natural outcome of our wired economy. The disorder is said to produce “brilliant” and creative entrepreneurs who are well adapted to the information age and are skilled “multi-taskers.” The ADHD personality fits right into life in the information age and people with ADHD are just “scanning” their environment like an efficient machine. They start books but don’t finish them and require constant reminders, clicking and surfing their way thru life, showing up late and going off on long tangents in conversations or interrupting others. But when something finally does get their attention they enter a highly focused state and stay up all night in an explosion of productivity. They don’t lack attention as much as control over it and often must turn to self-employment and forgo relationships as a result of the disorder. Some researchers suggest people with ADHD have slow brain processing speeds and thus perceive time as moving more quickly and have difficulty processing the glut of new information all around them.

Conventional Diagnosis

Despite or because of, the cultural construction of ADHD, it is being diagnosed at increasingly high rates. According to the American Psychiatric Association’s Diagnostic & Statistical Manual-IV-TR, 3-7% of children currently suffer from ADHD, with boys outnumbering girls 3 to 1. In addition, a recent study finds that 1 to 6% of adults meet formal diagnostic criteria for ADHD. Many children who have been sexually abused show symptoms that can often be confused with ADHD. For example, one study found that physical or sexual maltreatment and post-traumatic stress disorder (PTSD) (hyperarousal/hypervigilance) symptoms overlapped with those of ADHD. ADHD is also frequently confused with bi-polar disorder. Other bizarre and confusing diagnostic features of ADHD include too much smiling or too large a smile, visual attention loss, fidgeting, poor reading skills, disorganization, and frequent interruption.

Conventional Treatments

Conventional treatments for ADHD include powerful stimulant medications such as Ritalin (methylphenidate) and Dexedrine (dextroamphetamine). These seem to work by suppressing all spontaneous behavior, and chimp on these drugs cease any self-generated behavior while in humans, play, socializing and exploration all decline. Unfortunately, stimulant drugs come with some severe side effects including insomnia, anxiety, social withdrawal, fatigue, passivity, emotional flatness, depression, headaches, facial tics, stereotypical behavior, and obsessive-compulsive behavior, growth impairment, increased blood pressure, and liver damage in some cases. Antidepressants, sedatives, and mood stabilizers are then prescribed to control emotional disturbances caused by initial stimulant medication. Drug addiction is also a problem since these treatments act in a similar manner to many recreational drugs. For example, nicotine promotes the release of dopamine and has been shown to improve attention in adults with ADHD. Non-stimulant drugs which may be safe and more effective are under development such as ABT-418, a nicotine analogue.
Anthropological Treatment
An anthropological approach to ADHD is a bit more radical and involves "unplugging" the patient from the source of the disorder: the cultural matrix that triggers and maintains and defines them as diseased. Meditation, retreats to wilderness areas, wild foods, herbs and exercise are all prescribed. Small group interaction and natural cycles of day and night are also required.

It is key to eliminate non-adaptive foods (foods which human agriculture has genetically modified most extensively recently and thus have become most foreign to our physiology) including wheat, sugar, oranges, soy, milk, corn, food dyes and other artificial additives, and eggs. Sugar causes reactive hypoglycemia and rapidly raises adrenaline. Children with ADHD show abnormal cortisol patterns which often occur in people with problems metabolizing carbohydrates.

Modern foods are notoriously low in certain compounds which are considered to be important for avoiding ADHD. Essential fatty acids are a good example and some researchers go so far as to claim that ADHD might be EFA deficiency in disguise since blood levels of EFAs (AA and DHA) were lower than usual in people with ADHD. ADHD, dyslexia, dyspraxia and autism are now considered "phospholipid disorders" since phospholipids are so important in these conditions.

Wild foods, most acceptably herbs in the current US healthcare system, are loaded with compounds often later isolated as drugs that act powerfully in the human body in ways that no domesticated food can. Current research on ethnobotanicals for ADHD and other neurological disorders is focusing on their action against what is termed 'hypercoagulation' in which excess coagulation of the blood leads to hypoxia or low oxygen and death in tissues. Effective herbs are curcumin (turmeric extract), ginger, ginseng, and ginkgo. Stress reducing herbs like passion flower, valerian or lemon balm are recommended. Algae is sometimes used for its detoxifying effect since ADHD is attributed to exposure to heavy metals, petrochemicals and other toxins by some researchers. Symptoms of heavy metal and chemical poisoning are similar to those of ADHD. Since ADHD is also attributed to elevated thyroid hormone, certain herbs that lower thyroid levels are sometimes used. There is hardly time to review all the natural products used for this disorder here so please see the excellent compilation of protocols available on the Life Extension Foundation website http://www.lef.org

Faraone, Stephen 2001 The Genetics of ADHD. Psychiatric Grand Rounds, University of Massachusetts Medical School (April, 2001)

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