Learning Disabilities and Attention Deficit Disorder: A New Approach for the Criminal Justice System  
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Introduction

As a judge, I was continually confronted with offenders whose behavior was unexpected and surprising. This was observed not only during their criminal activity but during their travel through the criminal process. This behavior did not appear to be intentional, but rather an inappropriate response to the circumstances that existed at the time. Furthermore, this behavior reminded me of the behavior of my two children who had been diagnosed with learning disabilities (LD) and attention deficit disorder (ADD). This collision of my personal and professional lives began a journey into the fascinating and complex world of neurobiology and its impact on the criminal justice system.

In this paper, I will discuss these disorders, their impact on the criminal justice system, their resulting costs to society and why new measures must be taken to address these issues appropriately.

A System Failure

The criminal justice system in the United States has failed in its primary goal of reducing criminal behavior. Whether a government has based its theory of punishment on retribution, rehabilitation, incapacitation or deterrence, the statistics clearly reflect a lack of success. The number of inmates in federal, state and local prison or jail facilities has climbed from 1,203,572 in 1995 to 1,305,253 in 2000, a 28% increase, compared to a population increase of 13.17% from

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1 I would like to thank Kimberly Streit, my research assistant, for her contributions in many areas to this paper.  
2 For the purpose of this paper, ADHD, ADD with hyperactivity, will be included in the term attention deficit disorder (ADD).
1990 to 2000.\textsuperscript{3} The cost of incarcerating offenders in state prisons has risen from 11.7 billion dollars (2001 constant dollars) in 1986 to 29.5 billion dollars in 2001, a 150\% increase.\textsuperscript{5} The number of jails and prison facilities has grown from 1,464 in 1995 to 1,668 in 2000, a 14\% increase.\textsuperscript{6} Yet in the United States, public officials call for longer jail sentences as the answer to the public’s cry for protection. Our rush to imprison people only gives us the opportunity to continue our course of failing to find workable answers. Albert Einstein’s belief that the definition of insanity is continuing to do the same thing over and over while hoping for a different result could best explain the current state of the system.

**Neurological Disorders**

Our current system of punishment is costly and mostly ineffective. In an effort to reverse this trend, I suggest we examine the neurological disorders, attention deficit disorder and learning disabilities, that have remained for the most part ignored by the criminal justice system and certainly by political leaders. These disorders, which are rooted in each individual’s neurological makeup, are not controlled by one’s will, motivation or morality. It is interesting to note that most theories of criminal punishment are designed to change behavior. It is assumed that individuals have that capability. If, in fact, that is not true, it is easy to understand why our incarceration rates continue to rise despite our best efforts.

The disorders I wish to discuss are sometimes called the hidden disabilities since they are not easily observable. Unlike a learning disability, a physical disability can be seen, understood and accommodated. Even though many people can observe the symptoms of ADD and LD, few

\textsuperscript{6} BJS, “Census of State and Federal Correctional Facilities, 2002”.
understand that they are neurological conditions. The effects on the individual are also difficult for many individuals to comprehend.

People can understand that a glitch in a computer or its software will cause innumerable problems. Therefore, it is ironic when a wiring glitch occurs in a person’s neurological makeup, people condemn it as failure of character rather than biology.

**Attention Deficit Disorder**

ADD is essentially a malfunctioning of a person’s neurological system. Most individuals who have ADD are of average or above average intelligence.\(^7\) Recent advancement in brain imaging has begun to focus on the causes of ADD.\(^8\) While what causes ADD is unclear, it is believed to be either inherited or from an outside event.\(^9\) The diagnostic criteria to determine if ADD is present are contained in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).\(^10\) It is difficult to properly diagnose ADD because it is often hidden by co-occurring disorders or other life problems.\(^11\) While originally thought to be found only in children and adolescents, research now tells us it lasts into adulthood.\(^12\)

Even though ADD is appropriately viewed as an inability to maintain attention, it is more easily understood by realizing that someone with ADD pays attention to everything. Most of us

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11 Edward M. Hallowell and John J. Ratey, *Driven to Distraction: Recognizing and Coping with Attention Deficit Disorder from Childhood through Adulthood*.
have the natural neurological ability to filter out everyday distractions which could interrupt our focus. Someone with ADD does not possess that simple function. That glitch in their neurological development causes them lifelong problems.

The outward symptoms of ADD are very visible. However, is difficult to group these symptoms together as part of a neurological malfunction unless you have been exposed to the diagnosis. It is easy to understand why an individual with multiple sclerosis or amyotrophic lateral sclerosis cannot do what others can. In that instance, we take appropriate medical and social action to assist the person. However, when a neurological problem is hidden, we assign other reasons for a person’s actions. In the criminal justice system, we assign blame and punishment.

There are certain symptoms that are associated with ADD. CHADD (Children and Adults with Attention-Deficit/Hyperactivity Disorder), the most prominent advocacy organization for the ADD population, summarizes the DSM-IV symptoms as they would apply to adults. ADD adults have problems with regulating their behavior and self-control. For example, they talk excessively, blurt out answers, interrupt others, leave seating abruptly, fidget, get distracted easily, and have problems listening.

ADD symptoms also make employment difficult. These individuals have a poor working memory, are forgetful of even daily tasks, make careless mistakes, ignore detail, lose things necessary to complete tasks, and forget instructions. ADD adults tend to avoid projects that require sustained mental effort. They have greater than normal variability in their work performance, and struggle with organizing tasks and activities.

They cannot sustain attention in leisure activities in addition to their easily disrupted attention span at work. Outside work, these adults struggle with regulation of emotion,
motivation, and arousal. They have mood swings, anxiety, depression, low self-esteem, and relationship problems. They are easily bored, impatient, and feel constantly “on the go”. Despite such energy, they are chronically late because of poor time management.

Adults with ADD suffer not only from symptoms that hurt them at work or in relationships, but that can also hurt them physically. Physical harm results from the ADD tendency to partake in risky behaviors, like sky-diving, extreme driving, or trying dangerous stunts. ADD adults can also harm their bodies by being more likely to get caught in the trap of substance abuse.\footnote{13}

In an International Consensus Statement on ADHD, eighty-seven noted physicians and scientists from around the world stated: “. . . there is no question among the worlds leading clinical researchers that ADHD involves a serious deficiency in a set of psychological abilities and that these deficiencies pose serious harm to most individuals possessing this disorder . . . And there is no doubt that ADHD leads to impairments in major life activities, including social relations, education, family functioning, occupational functioning, self sufficiency, and adherence to social rules, norms, and laws.”\footnote{14} One does not need to reflect long on how these difficulties can clash with the criminal justice system. In fact, studies have shown this population is more likely than average to enter the system and remain there longer.\footnote{15}

Given the potential effects, it is important to determine the prevalence of this disorder. While estimates vary, it can be reasonably presumed that 3%-7% of the general population has
ADD. It is estimated that 4% of adults have the disorder. The U.S. Surgeon General estimates that 3%-5% of school age children have ADD. The Center for Disease Control estimates that 1.6 million children have ADD. The number of adults who retain ADD in adulthood is estimated at 49%-67%.

Of specific concern to the criminal justice system is the connection between ADD and substance abuse. The results are mixed on whether such a relationship exists. It has been reported that children with ADD are 1.7 more times likely to abuse drugs earlier than non-ADD children. The Federal Bureau of Investigation believed that this was of such concern that it published in its *Law Enforcement Bulletin* an article by Sam Goldstein which discussed the implications of ADD on the criminal justice system. In an effort to impress the importance of these implications upon the law enforcement community, he cited studies indicating that 10%-20% of adults with ADD had an addictive disorder as an adolescent. Goldstein also noted that an ADD individual is seven times more likely to develop either a drug abuse problem or an antisocial personality by the time they reach adulthood than someone who does not have ADD. Furthermore, alcohol is abused by one-third of adults with ADD, and 40% of opiate and cocaine

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17 Ibid.
20 Russell A. Barkley and others, *Journal of Abnormal Psychology* 111.
abusers meet the diagnostic criteria for ADD.\textsuperscript{25} To stress again the importance of understanding this issue, he cited a study that found 39% of individuals with ADD compared to 20% of non-ADD individuals had been arrested. The percentages were also greater for those convicted of a crime (28% to 11%), and incarcerated (9% to 1%).\textsuperscript{26} Based on these studies, one can conclude that ADD has a major effect on the criminal justice system.

A neurological inability to conform to society’s laws is a recipe for disaster. The individual with ADD lives in a world he does not understand while being judged by people who do not understand him.

**Learning Disabilities**

Like attention deficit disorder, learning disabilities are neurological disorders which come in many forms. These disorders affect the brain’s ability to store, retrieve, process or communicate information. The different types of disorders include:

1. Dyslexia - affects language processing
2. Dyscalculia - affects math skills
3. Dyspraxia - affects fine motor skills
4. Dysgraphia - affects written expression
5. Visual Processing Disorder - affects the ability to interpret visual information
6. Auditory Processing Disorder - affects the ability to interpret auditory information
7. Nonverbal Learning Disabilities

Nonverbal learning disabilities are difficult for many to understand. These disabilities result in impaired intellectual functions, executive functions, memory functions, language functions, visual spatial abilities, sensory-perceptual and motor functioning. These impairments

\textsuperscript{26} S. Mannuzza and others, *Archives of General Psychiatry* 46, quoted in Goldstein 1997, 65.
develop into issues of educational and academic performance, social performance, social judgment and problem solving, maintaining relationships, adaptability and emotional problems.\textsuperscript{27} The National Center for Learning Disabilities has pertinent information available on nonverbal learning disorders and the other learning disabilities.\textsuperscript{28}

It is not difficult to imagine how each of these disorders can negatively affect one’s ability to avoid the sanctions of the criminal justice system. Compounding this problem, many individuals either do not know that they have a disorder or may be embarrassed to admit they have one. In any event, their disorder may create unfavorable situations which result in unintended consequences. To illustrate, take these examples. Trouble reading will affect an offender’s ability to understand the charges against them, their rights and any requirements imposed by a court or probation officer. Someone with dyscalculia may have difficulty understanding any financial obligations he may have in the system. Dyspraxia may cause the offender difficulty completing any written requirements placed on him by the court, probation or treatment agency. Dysgraphia, unlike the physical effort of writing, focuses on one’s ability to express themselves. This can negatively affect an offender’s ability to explain an incident to his attorney, or to respond to questions from the court or probation. A visual processing problem is of special concern since we all give visual cues to each other. If one cannot understand these silent cues, misunderstandings can arise. This can lead to disagreements which can escalate to criminal behavior. Someone with an auditory processing disorder will be affected in each of his contacts with the different participants in the criminal justice system. If one cannot properly


\textsuperscript{28} For more information, see Fact Sheets of The National Center for Learning Disabilities, http://www.ncld.org/LDInfoZone/InfoZone_FactSheetIndex.cfm.
interpret the commands given to them, the potential to either enter the system or be unable to exit the system is increased dramatically.

In order to determine whether these disorders deserve our attention, we must explore how prevalent they are. It is generally believed that 5%-15% of the general population has learning disabilities.\(^\text{29}\) The U.S. Department of Education found that 12.2 percent of American students in the 1993-94 school year were designated as having disabilities. Over half of these students had learning disabilities.\(^\text{30}\) Students with learning disabilities drop out of high school at a higher rate, 27% compared to 11%, than the general population.\(^\text{31}\)

The estimates of learning disabilities in juvenile correctional facilities vary from 20%-60%.\(^\text{32}\) The prevalence of learning disabilities in juveniles has been understood and documented for some time. Even though these disorders remain with the individuals as they grow into adulthood, it is difficult to ascertain the percentage of inmates who have LD since states do not routinely capture this information.

High prevalence rates are not the only alarming issue. The situation becomes more complex when learning disorders co-exist with other conditions. Thirty percent of individuals diagnosed with LD are also diagnosed with ADD.\(^\text{33}\) Other disorders also coexist with ADD. The most common are disruptive behavior disorders, mood disorders and anxiety disorders.\(^\text{34}\)


\(^{33}\) Goldstein 1997, 65.

\(^{34}\) Children and Adults with Attention-Deficit/Hyperactivity Disorder, “AD/HD and Co-Existing Disorders–Fact Sheet #5,” http://www.chadd.org/fs/fs5.htm.
ADD/LD and Crime

The previously cited statistics are indicative as to how wide spread this problem is in the criminal justice system. We must examine why these populations are involved in the criminal justice system to a greater degree than the general population. Individuals with ADD and LD suffer not just from the disorder but also from effects of having such a disorder. While having dyslexia results in reading difficulties, there are a variety of associated problems that may accompany this disorder. For example, not being able to read as easily as others causes great frustration and even humiliation when these failings are observed and commented on by teachers and peers. Not being able to focus consistently will label you as a troublemaker, stupid or lazy. Not being able to process sets you apart negatively from your peers. The resulting feelings of frustration, anger and anxiety begin early in life and continue through adulthood. It is the rare individual with ADD or LD who can maintain positive self esteem through the developmental years.

It is estimated that 50%-80% of children with ADD suffer peer problems and social failures. Their neurological inability to regulate their emotions results in outbursts, overreaction, impulsiveness, impatience and limited self expression.35 The symptoms, resulting from one’s neurological system, set up the individual for entry into, and difficulty exiting, the criminal justice system.

The fact that a criminal offender may suffer from these disorders is not an excuse, legal or otherwise, for their behavior. It is, however, a reason for their actions that must be understood and, if appropriate, accommodated. This understanding at all levels of the criminal justice system can have an enormous impact on society. Being aware of these issues will assist an

officer from having a contact with a citizen escalate into a potentially dangerous situation. It will result in fewer arrests and court appearances for the officer and allow him additional time on the street. This is an important cost savings for the department. With fewer arrests, court congestion will decrease. Understanding by judges will result in less or lowered jail time. When an individual comes before the court, judges can insure that the individual truly understands what is happening to him. Research has given judges scientific reasons to try alternative methods of sentencing. Probation officers can take appropriate actions to gain compliance with court restrictions if they understand an individual’s deficits. This results in less time in jail and fewer court hearings. Prison officials can develop programs within their facilities to educate inmates on their condition and provide assistance in overcoming them. That simple action alone will reduce recidivism.

What Can Be Done

For society, this problem is essentially a failure of the education system to properly evaluate, accommodate and educate the student population afflicted with these disorders. Until teachers and staff are properly educated, sufficient funds are appropriated and the political will exists to change our education system, the criminal justice system will bear the costs and effects of this failure. In other words, until society front loads appropriate funds for education, the criminal justice system will continue to demand large percentages of the public’s tax dollars.

Now, however, the criminal justice system must address this issue on its own. In 1987, I became aware of these issues. When I observed defendants evidencing symptoms of ADD and LD, I initiated a short term study to determine if this actually was a serious problem in the court system. The results indicated that 37% of convicted offenders needed an in-depth evaluation for ADD/LD. When I discovered no programs existed that would provide appropriate services for
this population, I worked with the Learning Disabilities Association of Washington to develop and implement a program in my court.

The program has reduced recidivism by 43%. This figure has remained relatively constant over a fifteen-year period. This program has been described by Dr. Edward M. Hallowell as: “The most innovative program in the criminal justice system . . .”

This program consists of two hours a night once a week for fourteen weeks. The curriculum is designed to educate the offenders about their disability and to practice coping strategies. The purpose is to provide an “individualized” approach in teaching anger management, problem solving, decision making and social skills. The curriculum includes: structured and repetitive learning strategies and skill practice, specific social skill instruction, anger management, problem solving and conflict resolution methods, peer pressure, building self-esteem, making smart choices, attitude, learning to monitor and control stress and information on understanding and living with learning disabilities and/or ADD. This project was initially funded by donations. After observing its success, the county government then inserted funding into the court’s budget. Furthermore, in 1994 the county appropriated in excess of $600,000 to adapt this program to juveniles and provide funding for six years. Subsequent funding was established at $115,000 per year through 2004. This program has also been operated successfully in the county jail.

Is this program the panacea for problems of ADD and learning disabilities? No, it is not, but it does provide a clear example that there are means to address this population in new and different ways. For example, in the mental health hospitals of Napa, California, this program

39 King County Contract No. D35953D.
was adopted and expanded with additional segments on mental health and substance abuse. Subsequently, their program was implemented statewide.

Even innovative programs that are well designed and effective will fail without a consistent and ongoing education program for all members of the criminal justice system. Those include police officers, police department administrators, prosecutors, defense attorneys, court staff, probation staff, judges, prison officials, correction officers, treatment professionals and legislators. Each is affected by this population in their own way. Each can make their job safer and easier to perform if they understand the nature and effect of these disorders on the criminal offender.

A few entities have come to this realization and have made efforts to move forward. At the request of the Washington State Supreme Court and the National Council of Juvenile and Family Court Judges, I have provided training to judges to help them understand these issues. Training judges, however, is not the total answer. Unfortunately, judges may not have sufficient time with an offender to realize that these disorders may exist. In King County, I institutionalized the process of evaluating every person placed on probation for learning disabilities and ADD. This was not a complete medical evaluation, but rather an accurate screening document that could easily be administered.

The court, as a condition of sentence, imposed a requirement of alcohol and drug treatment when appropriate for offenders. One of my concerns, however, was the effectiveness of treatment for those individuals who were diagnosed with ADD or learning disabilities. If these individuals were in need of special education services while in school and still had trouble

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40 California Department of Mental Health, letter to the author, January 9, 2006. Further information on their program can be obtained from Margaret Lalich, M.S., M.Ed, CCC/SLP Napa State Hospital, 2100 Napa Valllejo Highway, Napa, California, 94558.

41 An example of an appropriate educational tool is found in the “Fat City” video. Understanding Learning Disabilities: How Difficult Can This Be? The F.A.T. City Workshop, VHS (1989; PBS Video, 1996).
completing school successfully, why should we expect them to be successful in treatment? In order to succeed, you must be able to read, hear presented material and be able to express yourself in a group situation. Since I was skeptical that this population would be successful in their treatment, I initiated a project to develop a specialized treatment modality for these individuals. This has been completed and now a manual exists describing how this treatment can be accomplished. Too many judges are referring defendants to treatment secure in the belief that they have taken appropriate and progressive steps to alleviate a defendant’s alcoholism or drug addiction. However, they have merely assured that an ADD/LD individual will fail because the offender’s inability to learn has not been accommodated. Only after we have taken the necessary steps to treat people according to their ability to learn will the criminal justice system be successful.

Conclusion

There are several potential problem areas to be overcome to effectively address the issues discussed here. First and foremost is the need to convince those in the criminal justice system that a hidden disability exists and adversely affects their work. Only by consistent education can this goal be achieved.

Second, the economic benefit must be understood. The costs savings that can be attained by treating this as a neurological problem rather than a character issue is enormous. It may be easier to understand this if viewed in terms of expenditures rather than savings. If we fail to act, how many more police officers need to be hired, trained and paid to protect us? How many more prisons must we build as we continue to incarcerate these individuals? How much tax revenue do we lose when these individuals are in jail and not working? It has been my experience that

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42 CSAT grant no. 270-99-7070
43 Copies can be obtained from the LDA of WA.
policy makers may understand the needs of individuals, but with shrinking budgets those needs drop in their list of priorities. However, policy makers listen closely when it can be shown that tax dollars can be saved and maximized.

Third, many members of the criminal justice system feel overwhelmed by their workload. It may be difficult for them to see the benefit of addressing this issue. Our greatest difficulty was with our probation officers who felt this was one more unnecessary addition to their work requirements. We reduced their involvement by limiting their responsibilities to having a defendant fill out a screening document.

As a judge, it is frustrating to observe America’s courts become home to a revolving door of criminal behavior. It is equally frustrating to see public policy respond with an instinctive reaction to increases in crime by incarcerating more people for longer periods of time. Unfortunately, we continue to try to overcome this problem by using the same methods which have proven unsuccessful. Yet, we are still shocked that people do not react as we expect. Until we realize that people with ADD or learning disabilities are not wired like us, that their neurological system is different, we will not understand why our efforts continue to fail.

This issue is essentially a tale of statistics. We know the prevalence rates of ADD and LD in our schools and criminal justice system. The cost to incarcerate and the number who are incarcerated have been established. The number who re-offend can be detailed. Physicians and researchers have documented how ADD and LD affect individuals. While science has advanced forward, the theories of punishment remain locked in the past. Louis Pasteur theorized that micro-organisms caused illness. Society then quit bleeding patients and found new medicines to keep people free of illness. We know these unseen neurological disorders exist. The question remains – when are we going to quit bleeding the patient?
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