

**Attention Deficit/Hyperactivity Disorder**

**And**

**Juvenile Crime**

By

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## Outline

- I. Introduction
  - A. ADHD and related conduct disorders are used as excuses for acting out and committing crimes
- II. ADHD and Mental Health Disorders
  - A. Definition of ADHD
- III. ADHD in the Classroom
- IV. ADHD Girls
- V. ADHD and Juvenile Crime
- VI. Policy Recommendations
- VII. Possibilities for Future Research
- VIII. Conclusions
- IX. Appendices
- X. References

## Abstract

The research method chosen for this thesis is secondary data research.

Secondary data is the best choice for sociological projects because of the availability of databases and studies. Another reason for secondary data research is the ever-increasing longitudinal research being conducted.

Secondary data research is conducive to time constraints and little to no funding.

This writer has selected to use secondary research conducted by the psychiatric community as well as criminal justice data on juvenile crime

This writer used multiple sources for this project. There is much available about conduct disorders in children and adolescents. Many studies have been conducted in the mental health community regarding Attention Deficit Hyperactivity Disorder, Bipolar and Oppositional Defiant Disorder.

The goal of this writer is to prove these diagnoses have no correlation to criminal activity and anti-social behavior..

## **I. Introduction**

Attention Deficit Hyperactivity Disorder (ADHD) became a buzzword in schools in the 1980's to explain why some children acted out in class, were failing, disruptive and seemingly defiant. Prior to the 1980s and the age of political correctness a child exhibiting these behaviors were labeled as a class clown, trouble maker or a failure. Attention Deficit Hyperactivity Disorder graduated from the classroom, where it was a learning disability, to the outside world as an excuse for committing crimes. ADHD has been blamed for children committing very adult crimes. Is ADHD a learning disability or a very real mental health disorder that can contribute to a child turning to crime?

Many of today's youth and their parents are using this "learning disability" to explain away the child's criminal offenses. This writer spent seven years as a Child Protective Investigator and a Juvenile Probation Office with the State of Florida. In that time this writer frequently heard ADHD used as the fallback or excuse for being expelled from school, domestic violence against one's parents or burglarizing a neighbor's home. As a result, this writer

believes ADHD, ODD (Oppositional Defiant Disorder) and all the other alphabet soup hung on our children is just a poor excuse for the parent who can not control his/her middle school aged child or an underpaid, overstressed teacher with an over crowded classroom. This study will attempt to prove or disprove that theory.

## II. ADHD – Mental Health Disorder

The diagnosis of Attention Deficit Hyperactivity Disorder is defined by the DSM-IV as:

A. Either (1) or (2):

- a) Six or more of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Inattention:

- (a) often fails to give close attention to details or makes careless mistakes in schoolwork, work or other activities
- (b) often has difficulty sustaining attention in tasks of 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 task 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, tools)
- (h) is often easily distracted by extraneous stimuli
- (i) is often forgetful in daily activities

Six (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level

#### Hyperactivity

- (a) often fidgets with hands or feet or squirms in seat
- (b) Often leaves seat in classrooms or in other situations in which remaining seated is expected
- (c) Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
- (d) Often has difficulty playing or engaging in leisure activities quietly
- (e) Is often “on the go” or acts as if “driven by a motor”
- (f) Often talks excessively.

#### Impulsivity

- (g) Often blurts out answers before questions have been completed

(Conduct Unbecoming, Hyperactivity, ADD Behavior Disorders by Elizabeth Russell Connelly, 1999)

Diagnosing Attention Deficit/Hyperactivity Disorder can be difficult because it common for many people to have some of symptoms to some degree such as difficulty paying attention or being easily distracted. Some of the ADHD symptoms can manifest themselves as anxiety or depression. Recent epidemiological statistics report approximately four percent of the population within the United States has ADHD. Symptoms of ADHD have been seen in children at seven years old or younger. There are three variations in which this disorder is diagnosed:

One - Attention Deficit/Hyperactive Disorder, Combined Type: when both criteria for A1 and A2 are met for the past 6 months.

Two – Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: when criterion A1 is met but Criterion A2 is not met for the past 6 months.

Three – Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: when criterion A2 is met by criterion A1 is not met for the past 6 months

Conduct Disorders become evident early on even before a child enters school. So where in this definition did ADHD become a reason for committing crimes? ADHD falls under the scope of “conduct disorders” which also include Oppositional Defiant Disorder (ODD) and Bipolar Disorder. The three can occur together or separately. These disorders are not benign. Each is often socially disruptive and/or distressing and each can have a significant negative impact on a child. The DSM-IV states a conduct disorder is a repetitive and persistent pattern of behavior. Donald Lynam states ADHD are more likely to suffer from conduct disorders and as they mature these children can fall prey to a serious form of conduct disorder he



calls “fledgling psychopaths”. Children psychopathy has been proven to be the best predictor of increased anti-social behavior in adolescence. This shows up especially in boys who are hyperactive, impulsive and suffer from attention deficits. The American Psychiatric Association defines disruptive behavior as “recurrent pattern of negativistic, defiant, disobedient and hostile behavior lasting at least six months.

The Great Smoky Mountains Study of youth focused on the relationship between developing psychiatric disorders and the need and use of mental health services. This involved 11,758 children aged 9, 11 and 13 years of age from an 11 county area of the southeastern United States. These children were screened for psychiatric symptoms. The most common diagnoses were anxiety disorders (5.7% +/-1.0%); conduct disorders (3.3% +/-0.6%), oppositional defiant disorder (2.7% +/-0.4%) and hyperactivity (1.9% +/-0.4%). Interviews were conducted four times, annually, with 9 to 16 year olds from the Great Smoky Mountains Study. The results confirmed previous studies revealing that a majority of youth who had enough ADHD symptoms was reported to have first exhibited the symptoms prior to age seven. The early onset of these symptoms were associated with worse

clinical outcomes in this children with the combined subtype of ADHD but not youths with the inattentive subtype. M.T. Willoughby, P.J. Curran, E.J. Costello and A. Angold of the Department of Psychology at the University of North Carolina, state that regardless of the age of onset children who have elevated levels of ADHD symptoms are at an increased risk for negative outcomes and may require intervention.

### III. **ADHD in the Classroom**

Many children exhibiting impulsive behavior, inattention and hyperactivity are not identified as having a potential conduct disorder until they enter school. These symptoms are most evident in the classroom because they interfere with learning. The ADD/ADHD child seems immature with behavior resembling a younger child. Teachers are not expected to make the final diagnosis however they can make the recommendations for further testing. Even prior to the formal identification of the student's problem specialized teaching strategies can work. If the teacher suspects one of their students is exhibiting symptoms of ADHD or ADD it is helpful to keep a diary of the noting how much work the student completes, how often the child leaves his or her seat and documenting each disturbance and the activity the student was supposed to be doing. This will help later when the parents have been notified and the child is tested. Attention Deficit Hyperactivity Disorder has been labeled a learning disabilities leading to failing grades, low self esteem and by middle school status offenses. These status offenses can escalate into crime. Dr. Russell Barkely, director of

Child and Adult ADD Clinics, University of Massachusetts found that 21% of teens with ADHD skip school, 35% are at risk of dropping out and 45% of being suspended. A correlation has been shown between a children's cognitive ability at school, general intelligence quotient and verbal ability with delinquency.

There are other factors to be considered when a child is seemingly exhibiting symptoms of ADD/ADHD. These factors include child abuse, drug abuse, and prolonged deprivation, disorganized or limited home or school environments as well as other developmental problems and psychological disorders. Teachers should present their observations to their school's special education staff, school guidance counselor and/or school psychologist to learn if there are these circumstances to explain the child's behavior. The teacher should also meet with the parents to discuss the child's behavior and compare it with behavior the child may be exhibiting at home. The information gathered from these conferences could give some insight to other potential factors.

Children with ADD/ADHD respond better in a structured classroom. A classroom where the expectations and rules are clearly communicated and

the tasks are carefully designed for manageability and clarity. The teacher can break down the assignments into smaller, less complex units. Positive reinforcement needs to be built in when the students finish each task.

ADD/ADHD children respond well to rewards for good behavior.

Rewarding encourages students to work towards to acceptable behavior.

#### **IV. ADHD Girls**

Boys suffering from ADHD are easy to spot and are much more likely to be referred for an evaluation. Most of the screening tools available now are aimed towards boys. The rate of children referred for evaluations continues to be approximately four or five boys for each girl. Because of this many ADHD girls go undiagnosed. The symptoms displayed by girls appear differently from boys. Girls are typically less rebellious, less defiant and generally less “difficult” than their male counterparts.

Attention Deficit Hyperactivity Disorder girls fall into three (3) possible types. Hyperactive girls are frequently called “tomboys”. They are physically active, drawn to more risk taking and are less attracted to more “girly” activities. These girls will try to be more cooperative at home and may work harder to please their teachers. Parents and teachers may see these girls as undisciplined and not academically inclined. A second type of ADHD girl is a “day dreamer”. These girls are forgetful and disorganized.

They appear to become easily overwhelmed and operate at a slower pace.

These girls are perceived to be less bright than they actually are. The last type of ADHD girls is a combination of hyperactive and inattentive. These girls are hyper-talkative, silly, excitable and over emotional. When these girls enter their teens they may compensate for poor academics by becoming hyper-social, willing to take risks and become sexually active at early ages.

The ADHD girl who is highly intelligent is the most difficult to spot. These girls are able to hold it together academically until they enter middle or even high school. When the schoolwork begins to get more demanding their problems with concentration, organization and follow through are more likely to show up. If left unchecked and undiagnosed girls with ADHD pay the price of appearing ditzy, spacey and/or non-academic. These girls fall behind academically and come to believe themselves quitters. Parents and teachers dismiss these girls and the girls begin to deny their own abilities.

The things that send girls down a criminal path are believed different than those for boys. Some studies show a mild to moderate depression in girls may put them at greater risk for delinquency and anti-social behavior. Their treatment needs are different than boys as well. Girls with co-occurring disorders may become involved in high-risk sexual behavior, have more

complicated health conditions and have histories of exposure to physical and sexual violence.

In Cook County, Illinois a study was conducted using juvenile detainees by demographic subgroups, sex, race/ethnicity and age. The researchers randomly selected a stratified sample of 1,829 African American, non-Hispanic, white and Hispanic youth. The sample included 1172 males, 657 females, aged 10-18 years. The study found that significantly more females (56.5%) than males (45.39%) met the criteria for two more disorders including major depressive, dysthymic, manic, psychotic, panic, separation anxiety, overanxious, generalized anxiety, obsessive-compulsive, ADHD, conduct, ODD, alcohol, marijuana and other substances. Nearly 14% of the females over 11% males had both a major disorder and a substance use disorder. The conclusion of this study is comorbid psychiatric disorders are major health problems among detained youth.



## V. **ADHD and Juvenile Crime**

Juvenile delinquency is a legal term whose definition varies from state to state. The term is used to describe minors whose behaviors have been adjudicated as illegal by a juvenile court. The term delinquency typically refers to behavior that would be criminal if committed by an adult. The legal system terms behavior that is illegal if committed by a minor, such as running away, a status offense or unruly behavior. These behaviors might be called “antisocial behaviors” by the educational and mental health fields and the children or youths who exhibit repeated episodes of such behaviors might be diagnosed as suffering from a “conduct disorder.” Qualifying antisocial behaviors include starting fights, bullying or physical cruelty to others or animals, the use of weapons, theft, rape, arson, chronic truancy, running away or lying, burglary and vandalism.

Teens with Attention Deficit Hyperactivity Disorder and its related Conduct Disorders exhibit behaviors that include aggression to others and animals, property destruction, deceitfulness or theft and status offense (i.e. truancy

and running away). Hence, the correlation to crime. Bipolar adolescents are impulsive, hypersexual and willing to indulge in extremely risky behaviors. These conditions lead the bipolar teen to engage in reckless driving and substance abuse, which certainly merits the attention of law enforcement. Some would argue that normal teens also drive recklessly and experiment with illegal substances. The difference here is that the bipolar teen is more likely to become addicted. Alcohol and drugs are not recreational and “something everyone does” to the bipolar teenager.

Teenagers with ADHD are three to four times more likely to have a motor vehicle accident and they are more likely to be involved in one or more accidents they themselves have caused. The ADHD teenager has a higher probability rate of receiving multiple speeding tickets and having his or her driver’s license suspended.

In the past 20 years the ADHD diagnosis has gone from being seen as a learning disability to an affirmative defense for criminal activity. ADHD has been viewed by many in the criminal justice community as a condition of “bad parenting”. Attention Deficit/Hyperactivity Disorder is a persistent set of problems that follows a child into adolescence interfering with

academic achievement and low motivation with high rates of socially inappropriate behavior. Otto, Greenstein, Johnson and Friedman (1992) studied emotional disturbance among youth in juvenile justice facilities. Their data was not sufficient to make specific estimates that the rate for conduct disorder was expectedly higher than that of the general population.

D. P. Farrington (1991), R. Loeber, T. J. Dishion (1983), R. E. Tremblay, R. O. Pihl, F. Victaro and P. L. Dobkin (1994) conducted longitudinal studies on children younger than 15 with aggression and persistent disruptive behavior. These children had not as yet become embroiled in delinquent acts. The research conducted found the behaviors these children exhibited put them at a higher risk for becoming juvenile delinquents. The Study Group on Serious and Violent Juvenile Offenders (Loeber and Farrington, 1998) found evidence that hyperactivity/inattention relates to early onset of conduct disorders and influences the later risk of serious and chronic offending. Loeber and Farrington also found hyperactivity/inattention without disruptive behavior problems are unlikely to lead to serious conduct problems and serious delinquency. The longitudinal studies conducted found that one quarter to one half of these children are at risk of becoming

child delinquents. These same children tend to have multiple problems in a diversity of areas including ADHD.

Loeber and others conducted research on three samples of the Pittsburgh Youth Study. This study shows three pathways of male disruptive/delinquent child behavior, remembering of course that most of the studies and the screening instruments are geared toward boys.

- Pathway One – The Overt Pathway is the pathway that begins with mild aggression followed by physical fighting and escalating to violence.

- Pathway Two– The Covert Pathway. Prior to 15 years of age with a sequence of minor covert behavior such as retail theft is followed by property crimes e.g. arson or vandalism leading to moderate to serious forms of delinquency

- Pathway Three – The Authority Conflict Pathway, begins prior to age 12 with the child exhibiting stubborn behavior, defiance and authority avoidance such as truancy and running away. This pathway is associated with status offenses.

The study found boys with an early onset of disruptive/delinquent behaviors are more likely to progress to the highest level of a pathway.

The 1997 Uniform Crime Report (UCR) reported law enforcement estimates of 253,000 arrests of children under the age of 13. The UCR reports of these arrests 10% were status offenses and of those 17% or approximately 4,300 were under the age of 10. These very young offenders were more likely to have been charged with violent crimes, weapons offenses or drug violations and were less likely to have been charged with property crimes.

Moffitt (1997) defined the differences between course-persistent and adolescence-limited offenders. Life course-persistent offenders have early entry of antisocial behavior. These children exhibit more serious and violent delinquent behaviors and their criminal careers continue into adulthood. Adolescence-limited offenders on the other hand delay their entry into crime, exhibit less serious forms of delinquent behaviors and are more likely to grow out of it when they become adults.

Life course-persistent offenders are the product of problematic behavior and parents who have difficulty coping with the challenge their child presents. These children are a challenge to their parents because they are hard to manage and the parents lack the psychological and physical resources to cope.

The Cambridge Study in Delinquent Development found that conduct problems at ages eight and 10 predicted juvenile convictions and juvenile self-reported delinquency independently of hyperactivity-impulsivity attention deficit. The National Longitudinal Study of Children and Youth shows the obvious findings for hyperactivity is the high prevalence rate of the symptoms. Boys between ages 4 and 7 show the highest prevalence rates at 68.3% for the symptom “can’t sit still, restless or hyperactive”. The low prevalence rate of 30.4% for the symptom “can’t concentrate, can’t pay attention for long” is exhibited in girls from eight to 11. For all the symptoms the higher prevalence rates are exhibited in boys rather than girls. These prevalence rates do decrease slightly as the child ages. However, the exception is for boys with the symptoms “can’t concentrate, can’t pay attention for long” and “is impulsive, acts without thinking”. The prevalence rates go from 44.9% to 48.3% and 58.0% to 59.34% respectively. The correlation of these prevalence rates to juvenile crime is with the symptoms of physical aggression. These rates vary from 31.2% for “gets into many fights” to a low 3.3% for “threatening people”. The highest rate is for boys between 4 and 7 years of age. The lowest is for girls of the same age range.

Mental health services and treatment typically do not identify delinquent status but do describe, instead, youth seeking treatment by diagnosis. Delinquent behavior is usually preceded by non-delinquent conduct problems but is not officially identified as delinquency until detected by the justice system. The DSM IV defines Conduct Disorder symptoms as aggression toward others and animals, property destruction, deceitfulness or theft and serious rules violations. Many of these translate into illegal acts and when detected result in the “delinquent” label. The Center for Mental Health Services (CMHS) conducted a national evaluation over a four-year period. The findings of this study was that among 25,000 youth with serious emotional disorders served by the Children’s Services Program correctional institutions provided 11% of the referrals. Duchnowski, Hall, Kutash and Friedman examined a sample of 144 youth with serious emotional disorders in a model community program found 22% were on probation and 23% had been through residential treatment in the juvenile justice system. Coccozza reviewed nine previous studies and found that conduct disorder prevalence rates ranged from 10% to 91% for youth in the juvenile justice system and the rates were even higher for incarcerated youth than for those in the community. In 1996 Richards assessed the first 100 youth in New Zealand

juvenile detentions who had been referred for psychiatric services and found that 59.5% of the sample had a primary diagnosis of conduct disorder.

Patterson, Reid and Dishion (1992) proposed the Coercion Theory. The Coercion Theory is a development model of delinquent and anti-social behaviors. The model strongly supports the view that despite the presence of other risk factors such as poverty or single parent homes, parenting skills, adult supervision and positive adult role models mediate the development of delinquent behavior. The Coercion Theory has three stages:

-Stage One - the parent is challenged by his/her child's difficult behavior and does not know how to deal constructively with the misbehavior. There is negative feedback from the parent to the child and the discipline is often inconsistent

-Stage Two – the child takes his/her negative behavior to school and into other social environments. Now, his/her peers, due to the oppositional and aversive behaviors reject the child. The child has difficulty completing schoolwork and thus is labeled by teachers as a “problem child”.

-Stage Three – due to little and sporadic supervision and rejection at home and at school the child gravitates to other children with like issues/behaviors. Through this interaction with the deviant peer group the child learns anti-



social skills such as stealing. The child begins to engage in high-risk behaviors like substance abuse. This is the stage when the child is labeled as anti-social or delinquent.

The juvenile justice system has the same problem the mental health system experiences. They over rely on deep-end solutions and placement of the wrong youth in long term residential care. Many of our seriously emotionally disturbed youth are in state-run juvenile facilities. Many of these facilities are ill equipped and inappropriate to meet the needs of these youth. Several studies, which have been conducted, have found the 80% or more of these incarcerated/committed youth have been diagnosed with conduct disorders.

Individuals with Attention Deficit Hyperactivity Disorder are not “border-line” criminals. Conduct Disorder and anti-social personality disorder constructs are important because they help one to understand that criminal activities are often one part of a larger network of behaviors. ADHD has been more strongly related to physical aggression and covert behavior than to delinquency. ADHD can play a key role in a boy’s progression to diverse behavior. Longitudinal studies have found that boys with ADHD only are

not at risk of developing serious delinquency. ADHD leads to serious forms of externalizing problems only if associated with minor behavior problems such as physical fighting.

Deborah Shelton, Ph.D., R.N. with the Massachusetts Juvenile Justice Advisory Council studied children with emotional disorders in Maryland juvenile justice facilities in 1998. Her study estimated, nationwide, between 60 and 70% of youth in juvenile justice facilities suffer from emotional disorders including ADHD. Shelton states that the incarceration of these children is alarming and speaks to the failure of community services.

Studies have shown that approximately half of all teens receiving mental health services and a substance use disorder and as many of 75 to 80% receiving in patient substance abuse treatment have a co-existing mental disorder. Studies have, also, found an association between conduct disorder, ADHD and substance abuse. The presence of ADHD worsens the individual's prognosis of the substance use and ADHD increasing the likelihood of continuing into adulthood.

Research on delinquency shows three key findings: a small group of chronic offenders is responsible for committing the majority of serious juvenile

offenses; there are two groups of youthful offenders distinguished by when their anti-social behavior begins and youth who began committing crimes early tend not to specialize in any one anti-social act. Gerald Patterson and colleagues at the Oregon Social Learning Center proposed and developed supportive evidence that parenting behavior can lead to anti-social behavior in children. In addition they found evidence that a good relationship between parent and child can have a substantial effect against development of anti-social behavior.

Low scores on measures of children's cognitive ability in school achievement, general intelligence quotient and verbal ability are associated with delinquency. In spite of some disagreement most evidence suggests that cognitive deficits lead to antisocial behavior and not vice versa. A longitudinal study conducted in Hawaii on 837 children found that age-appropriate language development at two and 10 years of age protected high-risk kids from later delinquency. In New Zealand a longitudinal study of 1,037 children indicated that IQ deficits tended to precede the development of serious antisocial behavior. The study also found that the effects of low IQ on behavior were independent of the effects of such factors as low socioeconomic status, ethnicity, academic attainment and motivation.

## **VI. Policy Recommendations**

Services including prevention, early identification and intervention, assessment, outpatient treatment, home-based services, family support groups, day treatment, crisis services and inpatient hospitalization can both prevent children from committing delinquent acts and from re-offending. Early testing beginning in day care when a toddler begins to exhibit the symptoms of ADHD the child's future in school to become a positive experience rather than confrontational. In addition the parents would have an early start learning behavior modification, parenting skills as well as coping skills to deal with the challenges of an ADHD child. Early testing would bring referrals for counseling and if necessary medication. If the child shows a later onset of ADHD symptoms than he/she needs to be tested and if found to meet the criteria for one ADHD or one of other conduct disorders than counseling and behavior modification can be introduced even before medication.

The schools need to retain the services of a psychologist/psychiatrist to conduct the testing and assign a correct diagnosis. Once the correct

diagnosis is in place the family needs to be referred to a behavioral analyst and counseling for not just the child but the parents as well. The school and/or the school psychologist need to maintain contact with the family to be certain they have followed through with the counseling and to monitor the progress. There is the challenge that the family will not follow through and the school does not have the authority to force the services. However, in Florida if the problem escalates where the child is performing poorly, consistently missing school or is disruptive to the point of multiple suspensions the school can refer the family and the child to Children in Need of Services/Families in Need of Services (CINS/FINS). CINS/FINS will refer the family for court ordered intervention.

When the youth is arrested and if the youth appears during preliminary screening to have a disorder, referrals for services need to be made for the family. A targeted case manager would be assigned to assist the family with setting up the services and following through with the services. The targeted case manager would do team staffings with the services and petition the court if needed to make certain the family and youth complies.

In the State of Florida a youth is screened at the time of arrest by use of the MAYSI which makes inquiries about emotions and substance abuse. The information from the form leads to suggestions to the parents to seek counseling and substance abuse treatment for their child. In extreme cases the child can be referred for targeted case management.

These policy suggestions will be difficult to implement due to financial considerations. Schools and many social service agencies depend on government funding. In Florida that funding is limited. Even when a child has been arrested multiple times, is doing poorly in school, is disruptive at in the classroom and at home targeted case management is still limited. The State of Florida instituted the Intensive Delinquency Diversion Services. This program assigns a case manager to a child but only after that child has committed a crime. The program is limited to the compliance of the youth and the family. Non-compliance usually means the child is referred for prosecution and will probably end up on Probation or in extreme cases committed to a delinquency program. The program does not have the highest success rate.

## **VII. Possibilities for Future Research**

Studies have been conducted in the past with young children who exhibit early onset of ADHD behavior. These types of studies need to be started in the daycares with toddlers. These same children then should be followed into the first three or four years in school when the symptoms can escalate. Children in third and fourth grade are committing crimes that go beyond retail theft.

Research conducted with girls is long over due. Girls have been over looked because of their symptoms manifesting themselves differently than in boys. Many of the screening instruments being used today are composed to assess the mental health issues and substance use by boys with minimal attention to girls. Further research and studies of ADHD could result in appropriate screening instruments to help assess the needs of these girls.

Nutrition studies have suggested the eating habits of children can heighten the symptoms of ADHD. How hypoglycemia relates to ADHD should be

explored. Does the lowering of blood sugar have any bearing on a child's behavior and moods? In my work as a juvenile probation officer I spoke with a young boy of nine or 10 years old who had been expelled from public school because of behavior outbursts and was placed in a special school. The parents took the child to their pediatrician and the child was found to be hypoglycemic. The parents put the child into a different school instructing the teacher to give the child a snack when his behavior deteriorated. The teacher confirmed to the parents around 10:00 a.m. the child would lose focus and begin to act out, the teacher gave him crackers and he calmed down. Prior to this diagnosis the previous schools had labeled the child ADHD and suggested medication. Before labeling a child ADHD the parents should be allowed to find out if there is an organic reason the child acts out.



## **VIII. Conclusions**

My research has proven my theory wrong. Attention Deficit/Hyperactivity Disorder and the related conduct disorders can in fact influence a child or teenager's choice to commit crimes. I interviewed literally hundreds of youth from 7 to 17 years of age. I listened to others stand in a courtroom and explain to the Judge how they were ADHD or ODD and that is why they struck their teacher or burglarized their neighbor's home. During those interviews I was so certain what these juvenile offenders and even their parents were saying was just a "crock". I told many of these same children that ADHD was just a learning disability that makes it harder for them to complete their schoolwork; it was not an excuse for inappropriate behavior. The studies I have read and the articles tell a very different story. From an early age these children have difficulty with impulse control and the parents learn early on to avoid the confrontation just give Johnny what he wants. The child learns what it takes to "win" and takes that to school. Teachers have overcrowded classrooms and are not in the position to work one on one with a difficult child so the child is labeled, medicated and in too many

circumstances subsequently kicked out of school. Unfortunately our school systems and parents are ill equipped to deal with these children. They get a little older and the behavior that got them labeled in elementary school is now escalating to crime. Dr. Stanley Akers of the University of Akron states the possible reason for the diagnosis of ADHD and ADD is due to the availability of a treatment. Rather than an in-depth cognitive intervention the child is put on a medication and the problem is solved. I believe as a society we have done a disservice to these children by labeling them from the first outburst rather than working with them and their parents to overcome the disorder and channel the frustration and energy in a positive way. The feelings of frustration and the continued emphasis that they are failures becomes part of who they are so from that first fight at school to the first vandalism or burglary these kids reinforce what their teachers and parents have been saying since elementary school "he or she can't help it because he or she is ADHD". Now all ADHD children are not necessarily criminals in training but the ones who by-pass the criminal path clearly have the support of enlightened parents and teachers. They have been diagnosed properly and are receiving counseling, behavior modification and if necessary medication. These are the lucky ones.

This is not the case. The research available has not demonstrated that ADHD is a matter of undesirable social learning and it is inappropriate to lay the responsibility for the creation of ADHD on parents and teachers. The studies, statistics and research speak for itself. Attention Deficit/Hyperactivity Disorder and juvenile crime is tied together.

## **Appendices**

## Patterns of Care Study: Justice System Contacts by Conduct Disorder

### Status

Nature of Contact	No Conduct Disorder Symptoms (n=205)	One or More Conduct Disorder Symptoms (n=139)	Conduct Disorder Diagnosis (n=93)
Arrested, picked up or warned by police	4.6	17.3	23.7***
Number of police contacts			
None	95.6	82.7	76.3
One	2.0	10.0	9.7
Two	1.5	6.5	6.5
Three or more	1.0	0.7	7.5
Reason for contacts			
Difficult Behavior a	3.4	5.8	8.6
Violent Behavior b	0.5	1.4	3.2
Property Offenses c	0.5	5.8	9.7***
Alcohol/Drug Offenses d	0.0	0.7	1.1
Other behavioral reason	0.5	4.3	5.4*
Outcome for youths with police contacts			
Warning or no further action	77.8	79.2	86.4
Probation	11.1	12.3	0.0
Court, detention, and probation	0.0	4.2	0.0
Detention and			

sent to hospital or treatment facility	11.1	0.0	0.0
Court and sent to hospital or treatment facility	0.00	4.2	4.8
Sent to hospital or treatment facility	0.00	0.00	9.1
Mean age at first police contact (years)	9.6 (SD=1.5)	9.2 (SD=1.9)	8.2 (SD=2.1)

\*p<.05; \*\*\*p<.001

- a. Includes contacts related to truancy, curfew, violations, running away, disobeying parents (e.g. out of control, ungovernable, incorrigible) and disorderly conduct
- b. Includes contacts related to aggravated assault, other assault and possession of illegal firearms.
- c. Includes contacts related to burglary, breaking and entering, larceny/theft, arson and vandalism.
- d. Includes contacts related to possession of alcohol or drugs.

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“Child Delinquents, Development, Intervention and Service Needs: by Rolf Loeber and David P. Farrington, 2001

**Percentage Distributions of Specific Conduct Disorder Symptoms in the  
Great Smoky Mountains Study of Youth and the Patterns of Care Study**

DSM-IV Conduct Disorder Symptom	Conduct Symptoms: Greater Smoky Mountains Study of Youth (n=744)	Conduct Symptoms: Patterns of Care Study (n=140)	Conduct Disorder Diagnosis: Patterns of Care Study (n=93)
Bullies	4.8	15.0	75.3
Fights	31.3	8.6	37.6
Uses Weapons	8.6	5.7	38.7
Is cruel toward people	0.2	8.6	38.7
Is cruel toward animals	13.7	7.9	29.0
Steals (w/confrontation)	0.9	2.9	2.2
Engages in forced sex	0.4	--	2.2
Sets fires	29.0	--	6.5
Damages Property	14.8	22.9	68.8
Breaks & Enters	3.3	0.7	2.2
Lies (weekly)	41.5	10.7	45.2
Steals (w/out confrontation)	4.5	46.4	62.4
Stays out late	18.0	2.9	11.8

Runs away	0.1	--	2.2
Is truant from school	7.7	1.4	3.2

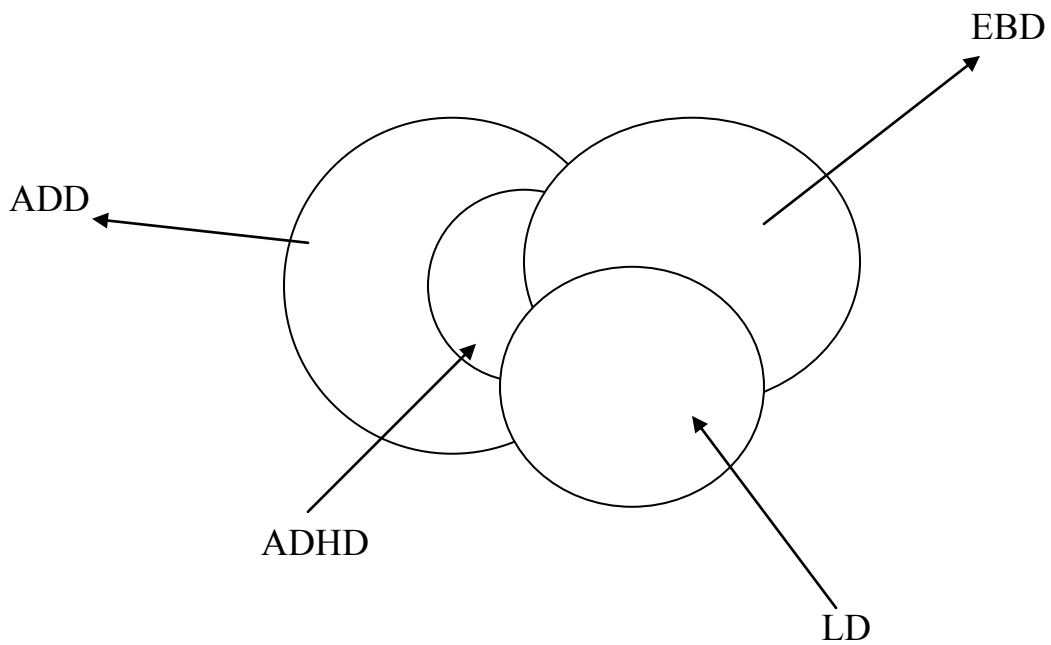
“Child Delinquents, Development, Intervention and Service Needs”

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Hypothetical Relationships among the Populations Having Attention Deficit Disorder (ADD), Attention Deficit/Hyperactivity Disorder (ADHD), Emotional or Behavioral Disorders and Learning Disabilities



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