Attention Deficit Hyperactivity Disorder and Juvenile Delinquency: An Education and Training Program for Law Enforcement

Approved: Dr. Sabina L. Burton Date: July 2010

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AN EDUCAITON AND TRAINING PROGRAM FOR LAW ENFORCMENT

A Seminar Paper

Presented to

The Graduate Faculty

University of Wisconsin – Platteville

In Partial Fulfillment

Of the Requirement for the Degree

Master of Science in Criminal Justice

By

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Year of Graduation – 2010

Acknowledgments

I want to thank my wife Annette. Without her support and guidance graduate school would not have been a reality. I also want to thank my children for putting up with all the time that graduate school has taken away from the family. My wife and family have endured several long years of balancing full time work and school and it has finally come to fruition with this culminating project.

Special thanks to Dr. Sabina Burton who provided guidance and encouragement throughout this seminar research paper. I also want to thank all my past instructors and advisors who have taught me so much and gave me the added knowledge and skills to be a better practitioner.

Abstract

ATTTENTION DEFICIT HYPERACTIVTY DISORDER AND JUVENILE DELINQUENCY: AN EDUCAITON AND TRAINING PROGRAM FOR LAW ENFORCMENT

Brian A. Mikula

Under the supervision of Dr. Sabina L. Burton

Research has found a positive correlation between juveniles who suffer from ADHD and delinquent behavior. ADHD can lead to impulsive, non-thinking behavior that often overwhelms a juvenile's sense of self control. Early treatment and interventions can minimize the negative effects of ADHD. Helping the ADHD juvenile learn coping strategies will lead to a better long term outcome. One strategy to help with intervention is through the law enforcement community. Local police and sheriff's departments need policies and procedures that call for the development of mandatory training and specifically tailored field responses to juveniles with ADHD. Even though law enforcement officers receive training throughout their careers, information on ADHD and mental illness is usually not given enough time and attention. Juveniles with ADHD will be better served by proactive policing, greater attention to in-service training addressing mental illness, improved risk assessment and management in the juvenile justice system, and better coordination between law enforcement and mental health agencies. A law enforcement community working collaboratively with juvenile justice and mental health will be able to identify some barriers that currently exist in getting ADHD treatment for juveniles and create new partnerships for the future.

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SECTION I: INTRODUCTION

Statement of the Problem

As many as 5% of all children experience symptoms and behaviors of attention deficit hyperactivity disorder (ADHD). Some children are diagnosed and there is a focus on addressing the symptoms and the causes of this condition. But many children go undiagnosed and do not receive early treatment for this condition. Research will show that there is causal relationship between children who suffer from ADHD and juvenile delinquency. Children with ADHD who receive early intervention and treatment are less likely to become delinquent.

Studies by Goldstein, 1997, Moffitt, 1990, Calhoun, Glaser, & Bartolomucci, 2001 have shown that there is a direct correlation between juveniles that suffer from attention deficit hyperactivity disorder (ADHD) and the propensity for these youth to end up in the juvenile justice system. Youth who suffer from ADHD show a significant increase in impulsive, non-thinking behavior and often act in the heat of a moment when their sense of immediate need overwhelm their capacity for self-control (Goldstein, 1997). It is this type of behavior that can lead to a juvenile making an impulse decision to commit a delinquent act and if caught can result in an interaction with law enforcement and the juvenile justice system. Specifically Goldstein (1997) found that youth with ADHD are more likely than non ADHD youth to engage in activities that lead to school suspensions (14% to 2%), have more negative contacts with law enforcement (19% to 3%) and are more likely to be admitted into a juvenile justice facility (5% to 1%). Given these alarming facts it is critical to try to understand how ADHD impacts youth, and even more so what can be done to provide early intervention to help these juveniles avoid making delinquent choices.

Law enforcement officers participate in required basic training when they enter the law enforcement field through an approved sponsored academy. In addition agencies provide training and in-service on an annual and on-going basis to current staff. Due to the nature of the law enforcement industry training time is very limited since officers must cover shift work 24 hours a day/ seven days a week/ three hundred and sixty five days a year. There are many critical issues that require police training and there is an inadequate amount of time that is devoted to responding to juveniles and individuals with ADHD and mental illness.

This research will analyze how law enforcement agencies can better meet the needs of juveniles who are prone to impulsive delinquent behavior that can be attributed to ADHD. The hypothesis this of study is that if law enforcement officers received specialized training in identifying and responding to juveniles with ADHD then recidivism can be reduced not only in juvenile delinquent behaviors, but also later in life as adult offenders.

While juvenile delinquency is not on the rise as a result of ADHD, the correlation between the two is significant. A recent study conducted at Yale University by Fletcher (2009) found that children with ADHD were twice as likely to commit theft later in life and had a 50% higher incidence of selling drugs when compared to children without ADHD. Fletcher (2009) also suggests that children that exhibit ADHD symptoms should be viewed as an at-risk group and maintains that the key to preventing criminal behavior is through early intervention. At the 21st International Attention Deficit/Hyperactivity Disorder Conference in Cincinnati Ohio two police officers, Phil Anderton and Stephen Brown, from the United Kingdom provided data from several British studies of children with ADHD that showed that undetected, untreated ADHD puts youth at high risk for arrest, repeat offense, and incarceration (Grantham, on-line exclusive

no date given). While working in law enforcement Anderton (2007) found that about 25% of youth that participated in a regional crime prevention study did not respond to traditional interventions. These were youth who had a high incidence of the symptoms and behaviors associated with ADHD. They found that one of the keys to crime prevention is early identification and intervention for ADHD. When ADHD was identified and treated youth were less likely to elicit the impulsive behaviors and were more likely to achieve social acceptance from their peers.

The police/offender encounter is one that has many unforeseen variables. If a law enforcement officer has background knowledge on mental and developmental health conditions they will have better skills to use during a citizen interaction. The way the officer first approaches the individual greatly influences the remainder of the interaction (Watson & Angell, 2007). One way to improve the outcome of these interactions is to teach the law enforcement officer some basic interaction skills with a person suffering from mental illness. Some department have formed Crisis Intervention Teams (CIT) to provide law enforcement officers with additional skills to de-escalate situations when they encounter individuals appearing to be a person suffering from mental illness and being in crisis (Hill, Quill, & Ellis, 2004). This does not mean that the police officer needs to become a mental health worker, but by providing them with background and skills they can intervene in more effective ways during these encounters.

Purpose of the Study

The purpose of this paper is to demonstrate the causal relationship between ADHD and juvenile delinquency and to provide recommendations for a training module that will educate law enforcement officers on the impact of ADHD on juveniles and delinquency. If an officer can be more knowledgeable about ADHD then they can have a better understanding of the

impact the disease has on juveniles who suffer from this condition. This background training can also aid in the de-escalation of the encounter and may reduce the need to use force when handling troubled youth. If a juvenile does not have a prior diagnosis of ADHD, knowledge on the officer's part can guide them to make referrals to mental health professionals who will be able to evaluate the juvenile and diagnosis any mental illnesses that the youth may have. Early intervention can help these juveniles get the treatment that they need that will help them avoid making delinquent decisions.

Significance of the Study

Prior research (Goldstein, 1997, Moffitt, 1990, Calhoun, Glaser, & Bartolomucci, 2001) has found that there is a positive correlation between juveniles who suffer from ADHD and delinquent behavior. It is not the ADHD that causes the delinquent behavior, but it is the juveniles' impulsive non-thinking behavior that may interfere with their ability for self-control. It is important that children with ADHD receive early interventions because these interventions have been found to lessen the likelihood of interactions with law enforcement as they reach adolescents. The worse the symptoms of ADHD get, the more likely they will resort to criminal behavior or self-destructive. In order to minimizing the negative effects of ADHD among juveniles it is of great importance to provide early treatment such as interventions from medical/mental health professionals, parental support, and school and community involvement. The better connected these children are the more likely they are to be successful as they reach adolescents.

The procedural justice theory (Watson & Angell, 2007) provides a structure for looking at the interactions between law enforcement officers and those persons who suffer from a mental illness. A person's reaction to an authority figure, such as a member of law enforcement, may be

dependent on whether or not they perceive the interaction as being fair. The first few minutes of the encounter between the individual and member of law enforcement can determine how the rest of the interaction will go (Watson & Angell, 2007). Prior research (Watson & Angell, 2007; Jurkanin, Hoover & Sergevnin, 2007) has demonstrated that improving the law enforcement response to persons with mental illness will increase the likelihood of a more positive outcome.

Research (Anderton, 2007) suggests that current law enforcement training that specializes in dealing with ADHD delinquents is either nonexistent or insufficient. In the UK there are new models of police training that include ADHD training throughout the criminal justice system (Anderton, 2007). The benefit of this is that following an arrest an individual with, or suspected of having, ADHD or other mental health impairments can be fast-tracked to assessment and intervention. Anderton (2007) suggests that learning about ADHD will provide law enforcement officers an explanation and a better understanding of some of the behaviors that they encounter. The training currently being used in the UK has given the officers strategies to use when interacting with young people with ADHD. This type of training needs to be expanded to include all law enforcement agencies that respond to juvenile delinquent behaviors. Police officers, especially those on patrol, need more training to help identify mental illness and ADHD in juveniles that they encounter. Since some forms of mental illness mimic a person under the influence of drugs or alcohol it can be very difficult to determine the true underlying reasons for the delinquent behavior. Often the police officer will detain the juvenile and transport them to the juvenile reception facility where they can be more thoroughly screened by a mental health professional. While it is difficult to provide specific training that will enable patrol officers to respond correctly in the many differing situations that they will encounter, Anderton (2007) argues that specialized training should be provided for officers on ADHD. Juveniles with

ADHD do not necessarily belong in the criminal justice system and may have more success if they are treated by the medical/counseling profession. Educating officers in recognizing that they are dealing with a medical issue may help to divert the juvenile to the proper program.

Assumptions and Definitions

Attention deficit/hyperactivity disorder (ADHD) is a neurobiological condition that involves problems with inattention, hyperactivity and impulsivity at a level that is not developmentally consistent with the child's age (US Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs 2006). ADHD was often thought to be a disorder of attention, but it is recognized as "a function of developmental failure in the brain circuitry that monitors inhibition and self-control" (US Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, 2006, p. 1). ADHD can be divided into two main categories; poor attention, and hyperactivity-impulsivity. The American Psychiatric Association in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (2000) identifies three different types of the disorder; those who are predominantly inattentive, predominantly hyperactive-impulsive, and a combination of both types.

The characteristic and behaviors associated with ADHD impact children in many ways. The most common environment where ADHD is noticed is at school. According to the US Department of Education (2006) children experiencing the hyperactivity will appear fidgety, are often on the go, talk a lot, and may leave their seat and appear to be driven by a motor. Children that display impulsivity may have challenges participating in tasks that require them to take turns, may blurt out answers, and go from one task to another without finishing the first.

Children with inattention have difficulty attending to detail in directions, maintaining attention for a whole task, and misplacing items. According to the National Institute of Mental Health (NIHM, 2000) almost one third of all children with ADHD have learning disabilities. Children also show symptoms of ADHD in their social skills. Those children who are hyperactive or impulsive may show aggressive behavior while those with inattention may be withdrawn. The child's inability to control their own behavior may then lead to social isolation and the child's self esteem may suffer (Barkley, 1990).

Conklin (2007) defines juvenile delinquency as people who violate the law but are not legal adults (age 18 in many states). "The designation juvenile delinquent is also applied to those who commit status offenses, acts such as underage drinking, running away from home, or truancy, which are violations only because those who engage in them are below the age of majority" (Conklin, 2007, p. 5). Juvenile offenders are typically tried in juvenile courts though depending on the seriousness of the crime may be waived into adult court.

The Wisconsin Statutes have a whole chapter that is devoted specifically to the juvenile justice code, Chapter 938. The chapter states in part:

> It is the intent of the legislature to promote a juvenile justice system capable of dealing with the problem of juvenile delinquency, a system which will protect the community, impose accountability for violations of law and equip juvenile offenders with competencies to live responsibly and productively. To effectuate this intent, the legislature declares the following to be equally important purposes of this chapter:
>
> (a) To protect citizens from juvenile crime.
>
> (b) To hold each juvenile offender directly accountable for his or her acts.
>
> (c) To provide an individualized assessment of each alleged and adjudicated delinquent juvenile, in order to prevent further delinquent behavior through the development of competency in the juvenile offender, so that he or she is more capable of living productively and responsibly in the community.

(d) To provide due process through which each juvenile offender and all other interested parties are assured fair hearings, during which constitutional and other legal rights are recognized and enforced.

(e) To divert juveniles from the juvenile justice system through early intervention as warranted, when consistent with the protection of the public.

(f) To respond to a juvenile offenders needs for care and treatment, consistent with the prevention of delinquency, each juvenile's best interest and protection of the public, by allowing the court to utilize the most effective dispositional option.

(g) To ensure that victims and witnesses of acts committed by juveniles that result in proceedings under this chapter are, consistent with this chapter and the Wisconsin constitution, afforded the same rights as victims and witnesses of crimes committed by

adults, and are treated with dignity, respect, courtesy, and sensitivity throughout those proceedings. (Wisconsin Statutes, Chapter 938.01(2))

Even more specifically section 938.19 of the Wisconsin Statutes outline the criteria for taking a juvenile into custody. These reasons include a warrant, a court order, committing or committed an act that violates state or federal law, runaway, the juvenile is suffering from an illness or an injury or is in immediate danger in their current surroundings, violation of a civil law or local ordinance, and for truancy. In addition Section 938.20(5) states that:

"If the juvenile is believed to have a mental illness or developmental disability or to be drug dependent and exhibits conduct that constitutes a substantial probability of physical harm to the juvenile or to others, or a very substantial probability of physical impairment or injury to the juvenile exists due to the impaired judgment of the juvenile and if the standards of s. 51.15 (emergency detention) are met, the person taking the juvenile into physical custody, the intake worker, or other appropriate person shall proceed under s. 51.15" (WI. Statutes)

As can be demonstrated by these few excerpts from the Wisconsin Statutes a police officer must follow a detailed and explicit process when taking a juvenile into custody and if there is a belief that the juvenile is suffering from a mental illness then they have the right for emergency detention. The difficult challenge for the officer is that they must use their discretion and judgment to determine if there is a mental illness, such as ADHD, and if that condition is severe enough to present a risk to the juvenile or others.

According to the U.S. Department of Justice in 2008 there were 1,320,998 juveniles under the age of 18 arrested. In 2008 juveniles were arrested for 284,235 property crimes and 56,658 violent crimes. Of the juveniles arrested approximately 66% are referred to juvenile court jurisdiction, 10% are referred to adult court, 22% are handled within the department and released, and 2% get referred to other agencies. According to the Wisconsin Office of Justice in 2008, Wisconsin law enforcement made 1,658 juvenile arrests for violent crime (murder, forcible rape, robbery and aggravated assault), 20,598 juvenile arrests for property crime, 4,646 juvenile arrests for drug crime, 43,164 juvenile society crime (weapons, prostitution, sex crimes, gambling, driving while intoxicated, alcohol, disorderly conduct, vagrancy, curfew, and loitering, and runaways) arrests, and 30,678 juvenile arrests for crimes classified as other. As the statistics demonstrate juvenile crime and arrests is a significant portion of the overall arrests that are made by police officers.

In 1993 the Bureau of Justice Statistics surveyed over 12,000 county and municipal agencies and found that on average that department required 640 hours of training, 425 classroom hours, and 215 field hours for new recruits (Haberfeld, 2002). While the amount of hours officers receives varies across jurisdiction some specific agency examples provide the relatively few hours devoted to juveniles and persons with disabilities and mental illness. Gaines and Kappeler (2008), outline in detail the 599 training hours that officers receive as part of the California Basic Academy Requirements. Of these hours only six hours are spent on the juvenile justice laws and another six hours are spent learning about persons with disabilities. The Northern Virginia Police Departments Regional Academy includes 768 hours of training and of that 1 hour is spent on communicating with developmentally disabled persons and another 3 hours on mental illness cases (Haberfeld, 2002). The Washington State Criminal Justice

Commission requires officers to attend the Basic Law Enforcement Academy that consists of 716 total hours of training with only 5 hours devoted to mental illness and zero hours devoted specifically to juveniles (BLEA, 2010). As these examples demonstrate this minimal level of training is not enough to prepare an officer to understand the specifics associated with juveniles and mental illness.

Methods of Approach

Information obtained for this research paper will be based on secondary sources. The main method of research study will be a thorough review and analysis of secondary data from prior research studies on ADHD and juvenile delinquency. Based on the analysis of the secondary data conclusions and recommendations will be developed to assist the law enforcement community in identifying strategies to increase awareness and intervention. Additional research will be done on some training programs (Miller, 2008; Anderton, 2007; Jurkanin, Hoover & Sergevnin, 2007) that currently exist for law enforcement professionals on understanding and working with ADHD. A training module will be suggested to increase an officer's understanding of ADHD and provide suggestions for how to deal with juveniles that suffer from ADHD.

Contribution to the Field

This research project will be both informative and educational for law enforcement officers that encounter and work with juveniles. The findings and recommendations will be shared with the Dane County Sheriff's Office community deputies, the juvenile detention intake personnel, county social services personnel, the local alternative high school principal, and juvenile court personnel. A proposal will be submitted to the Chief Deputy of the Dane County

Sheriff's Office demonstrating the need for ADHD training for our officers as part of our annual in-service on ADHD. In addition to basic information the intent is to provide strategies to help officers identify this mental illness and have protocols in place to create the fast track that it is needed for mental health intervention. Time spent proactively providing information and training opportunities for law enforcement personnel prior to an encounter with a juvenile offender who suffers from ADHD will provide tools that the officer can deploy in a reactive situation and can even work towards a more compliant and manageable encounter.

SECTION II: LITERATURE REVIEW

This section is divided into six main subsections. The first subsection summarizes information and research on ADHD and juveniles. The second subsection contains studies that link ADHD as a risk factor for juvenile delinquency. The third examines the role that gender can have on ADHD, risk factors and juvenile delinquency. The fourth is an overview of the current treatment options that are being used for juveniles diagnosed with ADHD. The fifth section reviews different police strategies that are currently being used to help police deal with juveniles with ADHD. The sixth and last section researches current training methodology being used in law enforcement agencies related to ADHD.

ADHD and Juveniles

Attention deficit/hyperactivity disorder affects as many as five percent of all students and boys are three times more likely than girls to have ADHD (National Dissemination Center for Children with Disabilities, 2004). According to the DSM-IV a child with ADHD must have either six or more symptoms of inattention or six or more symptoms of hyperactivity-impulsivity that have: 1) lasted more than six months; 2) are to a degree that is maladaptive and inconsistent with the age appropriate developmental level; 3) some of these symptoms existed before the age of seven; 4) some impairments are visible in two or more settings; 5) there is clear evidence of clinically significant impairment in social, academic, or occupational functions; and 6) the symptoms are not better accounted for by another mental disorder (American Psychiatric Association, 2000).

According to research by Sam Goldstein (1997) the behaviors of juveniles affected by ADHD are the most common chronic childhood behavioral disorders and the largest source of

referrals to child mental health centers. In 1993 there were nearly 2 million children and adolescents diagnosed or being treated for ADHD. The specific behaviors that Goldstein (1997) comments on in his research arise from the impulsive non-thinking behavior associated with ADHD. Often individuals with ADHD know what to do, but in the heat of a moment their sense for immediate need overtakes their limited capacity for self control, and they act without thinking. As the severity of symptoms of ADHD increase in adolescents so does the number of problems these youth struggle with such as aggression and deviant behavior. Goldstein (1997) cites the following findings:

> "By young adulthood, this population has more academic problems and is more oppositional and delinquent than peer groups. Compared to other young adults, they engage in activities that result in more school suspensions (14% vs. 2%), have more adversarial contacts with law enforcement agencies (19:3), and are more likely to be admitted into juvenile justice facilities (5:1). Researchers increasingly identify the development of aggressive behavior during childhood and adolescences as the connecting bond between ADHD, substance abuse, and the criminal behavior" (page 2).

Vitiello and Sherrill (2007) find that ADHD not only has a negative impact on school performance as can be seen in poor relationship between the student and the teacher, poor peer relationships, disruptive classroom behaviors, and lower academic achievement, but also raises risks for more dismal outcomes such as grade retention, school dropouts, substance use, and legal problems. "Epidemiological research has documented that a large portion of mental health services for youths is provided by agencies and in settings, such as schools and juvenile justice facilities, that are not primarily designed to provide mental health services" (Vitiello & Sherrill, 2007, p.2). It is important for mental health professionals, school personnel, and law enforcement agencies to work together to provide interventions for juveniles and help them get connected to treatment options.

Wasserman, Ko, and McReynolds (2004) assess the mental health status of youth in the juvenile justice system and find they are at a greater risk for mental health problems. They establish that these problems not only may have contributed to their criminal behavior, but may interfere with their ability to rehabilitate. The study concludes that youth may not be getting treatment for mental health problems before entering the juvenile justice system and even once in the system they still may not be getting treatment. "The Police Design Team (1994) find that approximately 50 percent of the juvenile detainees in Virginia show mental health problems of a moderate severity or higher and that 8.5 percent show 'severe' problems, but that only 15 percent of the detainees who exhibited mental health problems were receiving mental health services while in custody" (Wasserman et al., 2004, p. 2). This Juvenile Justice Bulletin points out that it is critical that youth who enter the juvenile justice system are assessed for mental health problems and suggest the use of multiple measures such as structured interview, direct observation, mental status examination, interview with parents or guardians, and obtaining a family psychiatric and psychosocial history. Children that exhibit ADHD symptoms should be regarded as an at-risk group (Fletcher, 2009). Once a youth is diagnosed with having a mental health impairment treatment should be provided.

ADHD as a Risk Factor for Juvenile Delinquency

Wasserman et al. (2004) explains that youth in the juvenile justice system are at a higher risk for mental health problems which not only contribute to their delinquent behavior, but often interfere with rehabilitation. The United States Surgeon General finds that between 30% – 40% of boys and 15% - 30% of girls commit a serious delinquent offense by the age of 17 (McWhirter et al., 2007). Grisso (2008) states that symptoms of mental disorders in youth can increase their risk for impulsive and aggressive behaviors, which often brings these juveniles to the attention of

the juvenile justice system. In addition, Grisso (2008) finds that when there is more than one mental disorder present, called co-morbidity, such as ADHD and conduct disorder (CD) the likelihood of chronic and repeated offending during adolescence increases.

Goldstein (1997) finds that by itself ADHD was not a significant risk factor for criminal behavior, but individuals who have shown symptoms of ADHD since childhood and displayed antisocial tendencies as adolescents have a significantly higher rate of run-ins with law enforcement. "The severity of ADHD symptoms in adolescence and adulthood apparently coincides with an increase of problems related to aggression and conduct. Thus, the worse the individual's ADHD symptoms get, the more likely that the individual might progress to criminal behavior" (Goldstein, 1997, p. 2). Early diagnosis and interventions before the onset of anti-social behaviors can be the best comprehensive long term approach to reducing future law enforcement contacts (Goldstein, 1997, Keith, 1995). Keith (1995) argues that by diagnosing and treating juveniles with ADHD at a young age reductions can be made in the number of crimes that juveniles with ADHD commit and future costs to the criminal justice system can be reduced. Once contact is made with law enforcement these juveniles should also be referred to the appropriate institutions for professional mental health diagnosis and treatment.

The US Department of Justice sponsored a study on the causes and correlations of juvenile delinquency that consisted of more than 4,000 youth over a five year period (Keith, 1995). The researchers identify three separate developmental pathways that can lead to delinquency. The first pathway is the "Authority Conflict Pathway" where stubborn behavior and defiance can lead to authority avoidance, truancy, staying out late, and/or running away. The next pathway is the "Covert Pathway" that can be characterized by lying, shoplifting,

property damage, vandalism, and/or fire starting. The last pathway is the "Overt Pathway" where juveniles may exhibit aggression, bullying, fighting, and violence (Keith, 1995).

According to Fletcher (2009) and Goldstein (1997) juveniles with ADHD are more likely to engage in criminal activity such as burglary, theft and drug dealing as they get older. Recent studies completed at Yale University find that "children with ADHD were twice as likely to commit theft later in life and had a 50 percent higher incidence of selling drugs" (Fletcher, 2009). These findings suggest that juveniles with ADHD should be viewed as an at-risk group. According to Fletcher (2009) it is estimated that crime where ADHD is a factor cost society between two and four billion dollars annually.

In a study from Germany, Blocher, Henkel, Retz, Retz-Junginger, Thome, & Rosler (2002), find that there is a higher prevalence of ADHD seen in sexual delinquents. They find that 27.6% of the delinquents convicted of sexual crimes suffered from ADHD compared to only 7.8% of the non-delinquent control subjects. In addition that "the criminal activity of the sexual delinquents with histories of childhood ADHD started an average of 10 years earlier than that of those without histories of ADHD" (Crime Times, 2002). They conclude that the presence of ADHD symptoms might be an important vulnerability factor for sexual delinquency, especially when it carries over into adulthood.

Dalteg and Levander (1998) suggest that it is ADHD in children with early problem onset that is particularly predictive of future delinquency. In addition they find that ADHD seems to be more related to the volume of crime rather than the specific type of crime. "Hyperactivity appears to be one index of a specific kind of vulnerability, which markedly affects prognosis, either as an epiphenomenon, or, more likely, by playing an active role in the criminogenic

mechanisms" (Dalteg & Levander, 1998, p. 53). Their findings suggest that since hyperactivity is such a strongly negative factor for juvenile delinquents that it should be specifically treated through biological treatment agents.

Gender, ADHD and Delinquency

ADHD is prevalent and is observable in about five out of every 100 children. Boys are three times more likely than girls to have ADHD (National Dissemination Center for Children with Disabilities, 2004). Fletcher (2009) estimates that between two to ten percent of school children in the United States have ADHD, but that it is far more common in males than females and that higher incidence can be seen in close relatives suggesting a genetic origin. Goldstein's (1997) research shows that that the male to female ratio for juveniles with ADHD is about 6 to 1. Most studies cited in the literature focus specifically on males and ADHD.

Terrie Moffitt of the University of Wisconsin - Madison conducted a longitudinal study of 435 boys who were placed in one of four groups at the age of 13 based on a diagnosed of ADHD and a self report of delinquent behavior. The finding show that the boys who were diagnosed with ADHD and reported delinquent behavior had more family adversity, lower verbal intelligence and reading scores, and had higher anti-social behavior that persisted into adolescents. This aligns with behavior of at-risk youth who are more likely to struggle with critical school competencies, coping abilities, and control (McWhirter et al., 2007). "The ADD + delinquent group is especially interesting to criminologists because there is some evidence that this group may be at relatively greater risk for persistent serious criminal offending" (Moffitt, 1990, p. 894). The research finds that the ADD + delinquency group had their behavior

deteriorate over the years which points in the direction of the need for early intervention. Specifically:

> "The most striking increase in the antisocial behavior of ADD + delinquent boys occurred between the ages of 5 and 7, when they attained a mean antisocial rating that was not reached by the other delinquent boys until 6 years later. School entry and reading failures coincided temporally with this exacerbation of antisocial behavior. These data suggest that the problem behavior of this group, despite being generally persistent, is responsive to experience. The data also reveal a key point of vulnerability that could be a target for preventative intervention: reading readiness" (Moffitt, 1990, p. 906).

A study of incarcerated youth in the Netherlands by Vreugdenhil, Doreleijers, Vermeiren, Wouters & Van Den Brink (2004) shows that 90% of the study sample (N = 204) of incarcerated boys ages 12 – 18 reported at least one psychiatric disorder. Eight percent of the boys met the criteria for ADHD compared to only 1% of non-incarcerated boys in the same age range. "High levels of co morbidity were observed, with 67% meeting criteria for at least two of the following disorders categories: internalizing disorder, DBD (disruptive behavior disorder), ADHD, SUD (substance use disorder), and psychotic symptoms" (Vreugdenhil et al., 2004, p.100). This percentage of incarcerated youth with a psychiatric disorder was significant considering that 22% of the same demographic general population suffers from these conditions.

Lee and Hinshaw (2004) find in their study that adolescent boys with ADHD were significantly more noncompliant, showed higher rates of overt aggression, showed higher rates of covert anti-social behavior, and were not regarded as highly by their peers than a comparable group of typically developing boys. Five years later this same group was rated as being more significantly delinquent than their counterparts. However the results of this study show that ADHD cannot be used as a sole predictor of a propensity toward juvenile delinquency because ADHD was not predictive of juvenile delinquency once the key indicators of overt and covert anti-social behavior and noncompliance were statistically controlled. The findings report that

"ADHD is clearly associated with externalizing behavior and with peer rejection; once these correlates were controlled, ADHD status no longer predicted to adolescent delinquency severity" (Lee & Hinshaw, 2004, p. 712). The findings suggest that childhood noncompliance in boys ages 6 to 12 and covert anti-social behavior may contribute to the development of delinquency in adolescence. In general high risk youth struggle with lack of control, the ability to make competent decisions, and have the self control necessary to delay gratification (McWhirter et al., 2007). Lee and Hinshaw (2004) conclude that further studies need to be done to determine if individual dimensions of ADHD could be a predictor of delinquency.

A longitudinal study conducted by Mannuzza, Klein, Konig & Giampino (1989) followed a group of 103 males in New York State that had been diagnosed with ADHD, between the ages of 6 – 12. They conducted follow up interviews with these individuals when they reached the ages of 16 – 23 and compared their arrest records with a control group of 100 men without ADHD in the same age range. Mannuzza et al. finds that a significantly higher percentage of the males with ADHD had been arrested at a rate of 39% vs. 20%, convicted of a crime 28% vs. 11% and incarcerated 9% vs. 1%. Juveniles who begin delinquent activities early are more at risk for becoming chronic offenders (McWhirter et al., 2007).

Treatment Options for Juvenile ADHD

There are several treatment options that exist for children that have been diagnosed with ADHD. Effective strategies include behavioral interventions, pharmacological interventions, and multimodal methods. Behavioral approaches have the goal of modifying the physical or social environment with the goal of changing the behavior exhibited by the child. These behaviors can be used by parents or guardians, mental health professionals, and school personnel. Behavioral

approaches are designed to use a model of direct teaching and reinforce positive behaviors and provide consequences for negative behaviors. For behavior therapy to be successful it must be maintained across settings and this can be challenging. Pharmacological approaches are one of the most common forms of treatment of ADHD, but are the most controversial. "Pharmacological treatment includes the use of psycho stimulants, antidepressants, anti-anxiety medications, antipsychotics, and mood altering stabilizers" (U.S. Department of Education, 2006 Offices of Special Education and Rehabilitative Services, Office of Special Education Programs). Multimodal approaches use a combined approach of medication and behavioral interventions. Regardless of the treatment options it is important to have a child specific plan that includes the methods and goals of the treatment and a way to monitor the results with plans for follow-up. It is also important to include input from parents, children, and school personnel.

Research conducted by the National Institute of Mental Health (NIMH) on multimodal treatment of children with ADHD finds that "Two forms of treatment – carefully administered medication alone or in conjunction with an intensive behavioral treatment program, including therapeutic summer camp, parent training, and teacher consultation/classroom management – were significantly more effective in reducing the symptoms of ADHD than either behavioral treatment alone or routine community care (Stern, May 2001, p. 2). Rayner, Kelly and Graham (2005) find that drug treatment, usually methylphenidate, is more successful than behavior management and standard community care.

Grisso (2008) calls for a community response to best meet the needs of youth in the juvenile justice systems that suffer from underlying mental health disorders. While the juvenile justice system certainly has the obligation to provide services while the delinquents are under detention, there is a greater need for a collaborative community based approach when the

delinquents are released back to the community setting. Grisso (2008) argues that while certain treatments can reduce symptoms of mental disorders and that interventions can reduce delinquency that the involvement of community based interventions that exist in their everyday social interactions in the community are the most successful. This shared accountability must include the integration of services across child mental health, child protective services, school and educational settings, and the juvenile justice agencies (Grisso, 2008). The role of the juvenile justice system will vary depending on the stage of processing. During the arrest stage the law enforcement officers should immediately take the juveniles to be evaluated to determine if there is an underlying mental disorder. Some youth may be better served in a secure detention facility and some can be released back to the community under a monitoring program that includes community coordination.

Police Strategies for Intervention with Juvenile Delinquents with ADHD

Research studies (Goldstein, 1997; Mannuzza et al., 1989; Lee & Hinshaw, 2004; Vreugdenhil et al., 2004; Moffitt, 1990; Blocher et al., 2002; Fletcher, 2009; Wasserman et al, 2004; Keith, 1995; Rayner et al., 2005; Dalteg & Levander, 1998; Grisso, 2008; Anderton, 2007) indicate that juveniles with ADHD come in contact with the criminal justice system more frequently than do members of the general population. As a result of these increased interactions it makes sense that law enforcement officers and the criminal justice community can benefit from an understanding of this medical condition. One challenge for law enforcement officers is that often persons who break the law will act irrationally and their impulsive behaviors may compel them to lie, speak their minds, or say anything to get off the hook. In addition officers need to be prepared for impulsive and unpredictable responses to commands and requests for information (Goldstein, 1997). Goldstein suggests that officers may want to consider the

following questions during an interrogation as affirmative responses to these questions suggests that there may be underlying symptoms of ADHD:

- Do you have difficulty paying attention during conversations, classes, at work, etc., and find that your mind drifts off easily?
- Do you feel excessively stressed or overwhelmed?
- Do you become sidetracked easily, leave tasks unfinished, or disrupt tasks in progress to switch to other matter?
- Do you become frustrated easily? Do you procrastinate?
- Do you forget to complete things that you intended to do?
- Is your work inconsistent and your performance erratic? Do you have sudden outbursts of anger?
- Do you easily misunderstand directions? (Goldstein, 1997, p.3).

Keith (1995) suggests that the model of community policing, which is built on a philosophy of creating a partnership between the police and community to work together on crime prevention, can be a successful strategy for early intervention for juveniles with ADHD. This approach needs to include a collaborative effort between the schools, health care professionals, and the criminal justice system. Keith suggests that the police in conjunction with social service agencies and the juvenile courts should mandate an evaluation of all juvenile offenders. If the juvenile is diagnosed with ADHD then additional intervention strategies should be employed at the community level to attempt to prevent further instances of delinquency.

Police in Lancashire England found a crime link between ADHD and juveniles getting in trouble with the law (Jackson, 2005). In an effort to combat this problem, the police in East Lancashire have launched a new program to help children who are deemed vulnerable and at-risk for getting involved in crime. The program started by Phil Anderton, Lancashire's community safety inspector and Steve Brown a crime reduction sergeant called Developmental Disorders – Achieving Potential (DDAP) is an attempt to reduce offending and re-offending by juveniles with ADHD and similar conditions (Rix, 2004). The DDAP brings together a cross section of

community providers to work together to combat the challenges and issues faced by this population of youth. Most of the contact that juveniles have with the police is conflict based and this program is trying to change that (Jackson, 2005). Anderton states "Instead of tackling kids with ADHD (directly) and getting in their faces – a typical police response, we are approaching the problems around it" (Rix, 2004, p.1). Anderton offers the following advice to police officers regarding ADHD:

> "Firstly, you must undertake all normal and reasonable steps to safeguard your own safety as in any confrontation with a member of the public. Use the conflict resolution model to determine your approach. Remember, the person with ADHD may be confrontational, but may not be intentionally physically threatening. Verbal communication skills will probably calm the individual" (Anderton, 2007, p. 75-76).

The literature review did not yield additional studies that specifically cited juvenile ADHD and police strategies for intervention. However, there was literature available that discusses the more general topic of a law enforcement officer's response to individuals with mental illness. This information will also be discussed in this section.

Ruiz and Miller (2004) explore the issue of policing the mentally ill by conducting a self report survey of a cross section of Pennsylvania police departments on the nature of the handling of calls for service involving individuals with mental illness. Officers report that they are given the task of responding to calls for individuals with mental illness; however, they have not been given the necessary training to manage this responsibility and that most police departments lack written policies and procedures for handling these types of calls (Ruiz & Miller, 2004). Gaines and Kappeler, (2008) report that only 53.2% of police officers felt they were qualified to handle individuals with mentally illness. Ruiz and Miller (2004) cite five main catalysts that can create a volatile situation between an officer and a mentally ill person: fear on the part of the person with the mental illness; reluctance of the person in crisis to willingly cooperate or comply with

the officer; fear of the police uniform; lack of understanding and empathy by the police officer of the person with the mental illness; and fear that police officers may have when dealing with an individual with mental illness. Ruiz and Miller (2004) suggest five main strategies that can decrease the tension between the police and persons with mental illness:

> (a) Changing misperceptions about people with mental illness; (b) implementing adequate training; (c) developing clear policies and procedures; (d) ongoing communication between police, the medical community, and social service providers; and (e) speeding up the process for obtaining involuntary commitment decisions (p. 369-370).

Ruiz and Miller (2004) acknowledge that the greatest perceived challenge will be revising the training and education that police officers receive because a short session on mental illness will not adequately prepare law enforcement officers to recognize serious mental illness or provide the necessary guidance on how to handle mentally ill people.

An article by Lamb, Weinberger and Gross (2004) provides perspective into mentally ill persons in the criminal justice system. It will be extrapolated that the circumstances described for adults can be inferred to be consistent with that of juveniles and the juvenile justice system. According to Lamb et al. (2004) as a result of deinstitutionalization of the mentally ill, law enforcement agencies find themselves involved in the management of persons who are experiencing psychiatric crisis. Cordner (as cited in Gaines and Kappeler, 2008) "reports that seven percent of police contacts in jurisdictions with 100,000 or more people involve the mentally ill" (p. 266). The reasoning for police intervention is twofold, first the power of police to protect the safety and welfare of the community, and second the protection for citizens with disabilities that cannot care for themselves. The challenge police face when they are called to a situation involving mental illness is to make a determination of how to proceed. They can recognize the need for treatment of mental illness and connect the person with treatment

resources, or they can determine that the person's illegal activity is the main concern and the person is arrested. In essence the police officer is the gatekeeper to determine if a person will enter the mental health system or the criminal justice system. Unfortunately, due to limited resources, often the police may have challenges getting a rapid response from mental health professionals. Often it is a faster and easier route to intervention if the officer takes the person into custody and then makes the referral to mental health professionals because they will be able to handle the situation in a more systematic and predictable way (Lamb, et al., 2004). Another factor that comes into play with an officer making a decision to arrest is that the officer does not have specific training to evaluate a person for mental illness, and what may look like mental illness to someone trained in that field, can look like a person under the influence of drugs or alcohol to a police officer (Lamb, et al., 2004).

Dr. Laurence Miller (2008) in a four part series on dealing with mentally ill citizens on patrol provided specialized training for law enforcement officers that includes information on symptoms, syndromes, and disorders that officers are likely to encounter. Miller (2008) also provided practical strategies that officers can use that can help to create a balance between respecting an individual's rights, enforces the law, and helps to maintain social order within the community. Miller (2008) stated:

> "General inappropriateness of behavior may be a sign of mental illness, although it may also be due to intoxication or even just youthful exuberance. Individuals with mental disorders tend to have their cognitive and behavioral gyroscopes set to extremes, characterized by either inflexibility and rigidity, or impulsivity and unpredictability. Emotions may range from elated to depressed, calm to panicked, and there may be an unnatural changeability of mood that is inconsistent with the circumstances. Attention, concentration, and memory may be impaired, either due to an organic brain syndrome or heightened distractibility from the anxiety of the internal dialog" (Miller, 2008, part 1, page 2).

When arriving at a call the first priority of the officer needs to be to assess the physical health and safety of the subject and any others who may be present at the scene, to make sure that there is no sense of immediate danger to themselves or others, and be cautious when first approaching the subject. Good communication strategies can be employed to help deescalate the situation. Teplin (1988) finds that police tend to use informal dispositions such as calming the person down or taking them home in 72% of the cases, making an arrest in 17% of cases and using a civil commitment in 12% of the cases (as cited in Gaines and Kappeler, 2008). The officer should also provide reasonable assurances to the individual that they are there to make things better, not worse (Miller, 2008).

ADHD subjects may commit crimes as a result of their impulsivity and heightened emotional activity, or they may have such a strong desire to be liked that they may be easily set up by others. Subjects with ADHD can be challenging to interview because they appear distracted and preoccupied and it can appear that they are disregarding what the officer is saying (Miller, 2008). This is a typical manifestation of ADHD since it is a difficultly of focusing on what is actually being said. Miller (2008) states that officers should keep questions clear, simple, and direct, while repeating as often as may be necessary. Calming techniques can also be employed to help with sudden outbursts and agitation.

As noted above a specific challenge to a law enforcement officer's response to persons with mental illness is often the way that they are trained to confront a challenge may actually lead to escalation. Police officers need to be given the appropriate training to help them identify that individuals may be acting strangely due to mental illness rather than an intent to do harm to the officer or the public (Katz & Bonham, 2009). The person may be confused and not understanding the situation or the direction that are given by the police officer and this may be

interpreted by the officer as aggressive or threatening. The officer may then (unintentionally) overreact and that can lead to escalation of the situation and increase the risk to the individual, the officer, or an innocent bystander (Katz & Bonham, 2009).

Many law enforcement agencies are using crisis intervention teams (CIT) to provide officers with the skills and strategies that they can use to successfully deescalate situations involving individuals with mental illness who are in crisis (Hill, Quill & Ellis, 2004). "The CIT consists of a group of police officers who are trained to respond to calls involving any person who is acting in a manner that might suggest that he or she is mentally ill. CIT's are designed to reduce the likelihood of tragic or other negative outcomes that sometimes occur when police encounter mentally ill suspects or offenders" (Katz & Bonham, 2009, p. 2). ADHD is an example of a condition that can lead to a crisis behavior when an individual experiences a temporary breakdown in their decision making abilities. The first CIT was established in 1988 in Memphis Tennessee after a tragic shooting by a law enforcement officer of a person with a serious mental illness (National Alliance on Mental Illness, NAMI, undated). This situation was the catalyst for collaboration between the Memphis Police, the Memphis Chapter of the National Alliance on Mental Illness, the University of Tennessee Medical School and the University of Memphis to improve police training and procedures in response to persons with mental illness (NAMI, Undated). According to NAMI the "Memphis Model" has now been adopted by hundreds of communities in more than 35 states and has even been implemented statewide in Ohio, Georgia, Florida, Utah, and Kentucky. In this model the police dispatcher will deploy a CIT officer when a call involves a person with a potential mental illness. The CIT officer will assess the situation, determine the level of risk involved, and intervene is a way that encourages the best outcome and ensures safety (Katz & Bonham, 2009). Instead of an arrest, the

responsible officer may divert the case to a medical facility. Evaluations of the Memphis CIT Model find the following key results:

- A positive effect on officer perceptions related to crisis interventions with the mentally ill
- A decreased repose time to the targeted incidents of more than 5 minutes
- A minimum use of arrest, 2 percent compared with 20 percent, which was the national average for similar types of calls
- A much greater use of health care referrals
- A major decrease in officer injuries
- A reduced need for a Tactics Apprehension and Containment Team and hostage negotiation responses (Dupont and Cochran, 2002 as cited by Katz & Bonham, 2009, p. 3).

The Dane County Sheriff's Office has a specific policy and procedure for dealing with individuals taken into custody that are suspected of having mental or emotional distress or by mentally ill. Deputies are directed to watch for specific behaviors including: depression; extreme agitation; anxiety; withdrawal; confusion; manic behavior; unduly suspicious through patterns; unusual or bizarre streams of thought; delusions or hallucinations; and complaints of physical symptoms that have no basis in reality (DCSO). Jail staff can then notify the mental health worker on call who will complete an assessment of the individual and provide suggestions for care of the prisoner. However patrol officers in the field do not have the level of access to the mental health worker and sometimes the best way to get that level of intervention is through an arrest and transportation to the jail.

Training Models for Law Enforcement on ADHD

Law enforcement officers are not mental health professionals, however, they do need some specialized skills to deal most effectively with individuals who suffer from ADHD and other forms of mental illness. According to Peck (2007) every law enforcement officer standards and training commission's requirements mandate a specified level of knowledge in mental health

issues for law enforcement officers. Some agencies provide more training than others and even bring in mental health professionals; however, this connection was most likely to occur in large urban counties where mental health authorities were eager to partner with the law enforcement community (Peck, 2007).

There is clearly an emphasis on the importance of providing mental health training to law enforcement officers as a proactive means to prepare them for encounters with individuals with mental illness. However, there does not appear to be any standard or minimum hour requirement and/or the scope of the training that has been identified. According to Jurkanin and Sergevnin (2007) as early as the 1960s attempts were made to include training on how to deal with mentally ill persons originally intended as a tool to change the attitudes of the law enforcement officers toward the mentally ill. "Training programs focusing on mentally dysfunctional members of the community have been primarily identified as cultural-awareness and sensitivity courses" (Jurkanin & Sergevnin, 2007, p. 115). In the early 1980s police departments started exploring the Crisis Team Approach and began to emphasize the importance of training all officers on mental illness. Since the late 1990s there has been a significant increase in the types of programs, and training modules that have been developed to address the issues of mental health awareness in law enforcement (Jurkanin & Sergevnin, 2007). In a survey conducted by Vermette, Pinals, and Applebaum (2005) as cited by Jurkanin and Serevnin (2007) over 90% of police officers responded that training about interacting with people in mental health crisis was fairly or very important and that 68% preferred this type of training annually.

There are four approaches to provide officers with training: recruit training, in-service training, roll call training, and specialized training. During the initial training that new police recruits attend they are introduced to the challenges of dealing with individuals with mental

illness. However, the length of training varied from state to state and the average was only 4.3 hours of mental health training (Jurkanin & Sergevnin, 2007). Field officer training attempted to bridge the gap between the academy training and the actual police setting (Gaines & Kappeler, 2008). Jurkanin & Sergevnin (2007) suggest that highly effective training methods should include simulations, role playing, video scenarios, group discussions, policy and procedure reviews, and analysis of case studies. Most agencies required some form of annual in-service training for law enforcement officers designed to provide veteran officers with new skills or to up-date them on changes in law, criminal, departmental, or general police procedures (Gaines & Kappeler, 2008). The training topics for this varied across agencies and are based on the perceived needs for the agencies. According to Jurkanin & Sergevnin, (2007) sometimes mental health training is included in in-service segments such as in the use of force, variant behavior, cultural diversity, and special populations. Roll call training is often done as a briefing at the beginning of a shift, and provided the opportunity to review any potential challenging situations encountered and to reinforce the officer's responses and outcomes. Specialized training is typically an advanced level of training that is provided to officers who are selected to participate in a special team that focuses on dealing with persons with mental illness. Jurkanin & Sergevnin, (2007) found that specialized training addressing an officer's response to mentally ill people in crisis is typically done in a 40 hour block of time and is based on the Memphis Crisis Intervention Team model. There are two approaches to mental health training for law enforcement personnel: a law enforcement based approach designed primarily for awareness such as recruit training, roll call training and in-service training; and mental health specialized training which is typically intervention training and university based training. Whatever the

model or models used the goal for training is to provide awareness, eradicate prejudice, and promote safety for officers and the mentally ill.

Some specific agency and training programs will be discussed in more detail to demonstrate the importance, or lack of importance that is currently found in the training models being used across varying jurisdictions. This analysis is by no means inclusive of all types of training opportunities that exist, but is meant to provide a snapshot approach of how different agencies have tackled this necessary training requirement. Emphasis will be placed on training for individuals with mental illness and for juveniles. Even though there is extensive research (Goldstein, 1997; Mannuzza et al., 1989; Lee & Hinshaw, 2004; Vreugdenhil et al., 2004; Moffitt, 1990; Blocher et al., 2002; Fletcher, 2009; Wasserman et al, 2004; Keith, 1995; Rayner et al., 2005; Dalteg & Levander, 1998; Grisso, 2008; Anderton, 2007) that describe the correlation between ADHD and juvenile delinquency there is only one model found that actually incorporates these two segments into specific training on ADHD juveniles.

The United States Government Accountability Office (2007) requested a survey of federal civilian law enforcement mandatory basic training and identified 76 unique mandatory basic training programs across the 105 federal civilian law enforcement agencies surveyed. The four basic training programs that were most commonly required were the criminal investigator training program, the inspector general investigator training program, the uniformed police training program and the land management police training program and the single largest provided for law enforcement training was the Federal Law Enforcement Training Center (FLETC) (GAO, 2007). In addition training for law enforcement officers is also provided by state and local agencies, partnerships with colleges and technical training programs, and commercial vendors.

In 1993 the Bureau of Justice Statistics surveyed over 12,000 county and municipal agencies and found that on average that departments require 640 hours of training, 425 classroom hours, and 215 field hours for new recruits (Haberfeld, 2002). The California Basic Academy require 599 training hours for law enforcement officers and of these hours only six hours are spent on juvenile justice laws and another six hours are spent learning about persons with disabilities (Gaines and Kappeler, 2008). The Northern Virginia Police Departments Regional Academy include 768 hours of training and of that one hour is spent on communicating with developmentally disabled persons and another three hours on mental illness cases (Haberfeld, 2002). The Washington State Criminal Justice Commission require officers to attend the Basic Law Enforcement Academy that consists of 716 total hours of training with only five hours devoted to mental illness and zero hours devoted specifically to juveniles (BLEA, 2010).

In Lancashire England the police training models include a segment on ADHD and juvenile offenders (Anderton, 2007). In addition there is specialized training that is being conducted to provide officers with supplemental training opportunities. The Lancashire Constabulary held a special event for officers and staff to learn more about mental health issues. This event was called "Defining Diversity" and was designed to raise awareness and an understanding of mental health issues and ADHD (Lancashire Constabulary). One training resource is *The Tipping Point - What professionals should recognize as the social impact of ADHD* by Dr. Phil Anderton. This book introduces ADHD to the officers, looks at the links between ADHD and crime and includes strategies for police officers regarding ADHD.

In Galveston Texas they looked at an interesting and different approach for responding to persons with mental illness. "The Galveston solution was to train regular deputies in mental health care and make them employees/officers of the mental health authority who could function

more effectively with mentally ill citizens" (Peck, 2007, p. 47). The reasoning for this decision was that if deputies existed in both the law enforcement and mental health systems they could bridge the gap and create cohesiveness between the mental health and law enforcement communities.

The Memphis CIT model was created after a critical shooting incident of a mentally ill African American in 1987 (Peck, 2007). The Memphis model requires that 15-20 percent of sworn patrol officers be trained in CIT in order to be able to provide a 24 hour a day response (Katz & Bonham, 2009). The CIT officers receive at least 40 hours of special training that is provided in conjunction with mental health providers, family advocates, and mental health consumer groups, includes the following topics:

1. How to recognize and understand the signs and symptoms of mental illness
2. A primer on psychotropic medications
3. Communication and de-escalation skills designed to reduce the chances of tragic outcomes in encounters with the mentally ill, and
4. Detailed information about available resources in the community (Katz & Bonham, 2009, p. 3).

Included within this 40 hour training program is learning first hand from consumers and family members about their experiences with mental illness and law enforcement, and even includes role playing scenarios for the officers (NAMI, undated). NAMI reports that the "Memphis Model" has been adopted by hundreds of communities in more than 35 different states and has been implemented on a state wide basis in Ohio, Georgia, Florida, Utah, and Kentucky.

The Montgomery County CIT model was modeled after the Memphis Model and has been adopted by many East Coast law enforcement agencies (Hill, Quill & Ellis, 2004). The program includes training components that are divided into basic, advance, and less-than lethal training, the CIT officer component, and the CIT coordination component (Hill et al., 2004).

The "basic training comprises a 40-hour block of instruction wherein the officers receive both classroom and hands-on instruction" (Hill et al., 2004, p. 20). One unique segment of the role playing involved the officer wearing a set of headphones and then listening to distressing voices for one hour while being required to perform various daily life tasks. This exercise is a major turning point in the training and becomes an epiphany for officers as they can then understand and empathize with those who have mental illness that include hearing voices inside their head (Hill et al., 2004). The training program also requires the officers to visit a nearby Maryland hospital and engage in group discussions with patients who have had both positive and negative interactions with law enforcement officers when they were in crisis. The advanced CIT training provides officer with continuous information and knowledge to further enhance their skills. The less-than lethal training includes patrol tactical plans for dealing with individuals in crisis.

Other agencies have started with the Memphis Model and then include added enhancements to the 40 hour block of instruction. In Portland additional training is provided on specific childhood mental disorders (such as ADHD). There is also a segment on cultural competency that specifically links how different cultures might affect a person with mental illness (Jurkanin & Sergevnin, 2007). The Portland Model also requires that a minimum of six hours be spent on role playing. Seattle Washington incorporates a virtual reality program that actually simulates the symptoms of schizophrenia (Jurkanin & Sergevnin, 2007). The California Basic Academy requirements include activities where trainees practice or apply police procedures in a training situation (Gaines and Kappeler, 2008).

Illinois held a three day summit in 2003 that included law enforcement and mental health professionals to develop a training program for officers. According to Jurkanin and Sergevnin (2007) they identify four levels of training for development:

> Level 1: The development and implementation of "Train-the-Trainer Summits" for certified trainers and appropriate mental health staff who will conduct the police-mental health section of the basic course for police and correctional academies statewide.
> Level 2: The development and implementation of "Train-the-Supervisor Summits" for police chiefs and sheriffs.
> Level 3: Improved and expanded recruit (pre-service/academy) training.
> Level 4: Provide in-service training via roll call training. (p. 130-131).

The concept behind the train-the-trainer summits was to help law enforcement agencies develop training curriculum and courses to meet their departmental needs. The intended outcomes for these summits would be to develop a trainer's manual that included role playing scenarios on mental health issues; an officer's guide that included basic information and tools on how to deal with the mentally ill; and supplemental video tapes for the instructor to use during the training. Police instructors who primarily use lectures also need to improve their delivery methods and use other training methodology (Gaines and Kappeler, 2008). The reason for the summit for the police chiefs and sheriffs was to make sure that the leadership of the agencies had the skills, tools, and tactics to deescalate situations that involved individuals with mental illness or developmental disabilities and would give them more confidence as supervisors when responding to these situations. The recruit training expands from four to eight hours the techniques for the identification of mental illness, drug and alcohol abuse, and responding to situations involving violent behavior. The roll call training in the Illinois Model provides opportunities for reviewing problem situations that officers have encountered and included interaction with members of the mental health community to increase interaction between the agencies (Jurkanin & Sergevnin, 2007). Police training needs to develop officer's skills in critical thinking and needs to be more interactive focusing on problem solving (Gaines & Kappeler, 2008).

Community policing has expanded over the last several decades in attempts to foster better relationships between the police and the community (Gaines & Kappeler, 2008). There have been expanded community police training programs and modules implemented by Regional Community Police Institutes (RCPI) that incorporate this model of policing. The goal of these additional training programs is to better educate the officer on building relationships with the community and on working together in the community to reduce crime. In Los Angeles, California there are 104 hours devoted to community policing and 16 of these focus on youth crime (Haberfeld, 2002). St. Petersburg, Florida includes 180 hours with 16 hours devoted to managing encounters with the mentally ill (Haberfeld, 2002).

The Dane County Sheriff's Office in Wisconsin sends recruits through the Madison Area Technical College (MATC) Academy. The Wisconsin Department of Justice, through the Law Enforcement Standards Board has adopted and approved a standard curriculum that required the completion of 60 college credit hours and 400-520 hours of basic officer training. Students can enter the program in one of three ways: sponsorship and enrollment in the mandatory training after being hired by an agency, completing the 60 college credit hours and then attending a 13 week training academy as a civilian, or by completing an associate's degree in criminal justice with an embedded advanced standing core. The Wisconsin Law Enforcement Training and Standards requires a total of 520 hours completion in the course competencies. Juvenile law is covered in unit II and is 8 hours long. This segment includes laws and procedures that affect juveniles, including when they need to be taken into custody. The four main competencies include: the juvenile justice system; the handling of cases of children in need of protection or services; the handling of cases of juveniles in need of protection or services or alleged to be delinquent; and constitutional law issues relevant to juveniles there is no mention of ADHD.

Crisis management is covered in unit IV and is 16 hours long. This segment includes the principles, guidelines and techniques for law enforcement response to persons with possible mental disorders, alcohol or drug problems, dementia disorders, and/or developmental disabilities. The specific learning objectives include the following: identifying the three basic categories of emotionally-disturbed persons; identification of behavioral indicators that a person may have a mental disorder; recommended guidelines to use when responding to a person who may have a mental disorder; crisis intervention techniques; and the decision making process taken to manage a person in crisis included emergency detention (WIDOJ, 2010). There is no specific mention of ADHD included in these learning objectives.

The city of Madison Police Department's academy is six months long and is 880 hours not including the field training component (City of Madison Police Department). According to Lieutenant Thomas Woodmansee (personnel communication, 6-10-2010) in the Personnel/Training Division there are several segments that include information on juvenile contacts including juvenile law, interviewing techniques for juveniles, child protective services, child maltreatment and abuse and neglect (City of Madison Police Department). The city of Madison also includes an eight hour segment on mental health and another block of time on cognitive disabilities, but does not include any specific information on ADHD (Woodmansee, personnel communication, 6-10-2010)

Overall the literature review demonstrates the correlation and potential causation between ADHD and the propensity for impulsive behavior that can lead to juvenile delinquency. Unfortunately, the literature review also demonstrates that law enforcement officers are not provided with the necessary training and background information on specific mental illnesses,

such as ADHD, that can assist them when they are performing the essential functions of their assignments.

SECTION III: THEORETICAL FRAMEWORK

Several criminal theories can be applied to the generic problems of juvenile delinquency, and a few even link into the more specific problems of juvenile delinquency among youth with ADHD. The ones to be discussed here include biological and psychological theories, self control or general control theory, the general strain theory, and the procedural justice theory. Arguments can be made that juveniles, and especially juveniles with ADHD commit delinquent acts based on any one of these theories, or it may be a combination of several.

Biological and Psychological Theories

According to a the National Dissemination Center for Children with Disabilities (NICHCY, 2004) disability fact sheet, researchers who study the brain are coming closer to understanding what may cause ADHD. It is believed that some people with ADHD lack the necessary amount of neurotransmitters to adequately control behavior. ADHD can contribute to a juvenile's propensity to commit delinquent behavior as a result of a youth's inability to control their inattention, hyperactivity, and impulsivity. According to Yaralian and Raine (2001), psycho physiological and neuropsychological patterns provide wide ranging data about the biological nature of antisocial and aggressive behavior. Scientists have also uncovered various biological abnormalities that when combined with environmental and social conditions may predispose a person to criminal activities. Negative psychosocial factors that can intensify brain dysfunction may cause a sequence of harmful events (e.g., cognitive deficits, school failure, unemployment, crime) or be a factor in the lack of behavioral inhibition that results in violent outcomes (Yaralian & Raine, 2001). Cullen and Agnew (2006) also suggest that there may be a genetic component to those traits contributing to crime and these traits may also arise from biological ills

of a non-genetic nature, such as head injury, exposure to certain toxic substances, and some types of birth complications. Various biological markers such as skin conductivity activity, heart rate, and electroencephalogram activity can be found to be different among those who commit criminal activities and those who do not. It is also critical that these biological components be taken into account when trying to prevent delinquent behavior from occurring. Yaralian and Raine state that:

> "Efforts to integrate biological findings into prevention policies may involve directly altering one's biological functioning. … The use of biofeedback training and psychotropic medication may increase arousal to optimal levels. Several investigators have examined the efficacy of psychotropic medication in treating symptoms of attention-deficit hyperactive disorder (ADHD) and comorbid (co-existing) conduct disorder in children. These studies seem to suggest that psychopharmacological interventions for ADHD may enhance effective treatment of behavior problems, including conduct disorder" (p. 69).

Cullen and Agnew (2006), in the editor's comments prior to David Rowe's section on biological characteristics and criminal disposition, note that studies suggest that there are genetic factors and "biological harms" that may increase the chance that an individual may develop traits that can lead to crime. Two of these identified are impulsivity and sensation seeking, both symptoms found in juveniles who have been diagnosed with ADHD. The prefrontal cortex of the brain is the section of the brain that is involved in planning a sequence of actions and in anticipating the future. Trauma to this area can impact a person's judgment and thought process. According to Rowe (2006):

> "Deficits in the prefrontal cortex may reduce the executive function – that is, the ability to plan and to reflect on one's actions. Impaired executive function implies impulsivity and disorganized behavior, a focus on the present rather than on the future" (p. 68).

Conklin (2007) discusses how modern biological approaches in the study of crime propose that there are significant differences that exist among individuals in terms of their

biological strengths and weaknesses. Weaknesses in certain areas are vulnerabilities or risk factors that may contribute to a person responding to stressful environmental conditions with antisocial behavior. Biological factors and individual characteristics influence how individuals respond to their environment and can increase the likelihood of crime (Cullen & Agnew, 2006). Studies have been conducted on identical twins and have found that inherited factors influence criminal behavior. Conklin (2007) states that gender also contributes to the crime rate:

> "The fact that male and female crime rates differ to varying degrees from one society to another suggests that much of the sex difference in crime rates is due to social and cultural factors, but the fact that men commit more crime than women in all societies suggests that some of the differences could be the result of biological differences between the sexes" (p. 113).

Conklin (2007) also cites evidence that brain dysfunction and neurological defects are more common among violent criminals as compared to the general public. In *Unraveling Juvenile Delinquency* by Sheldon and Eleanor Glueck (as reprinted in Cullen & Agnew's Criminological Theory, 2006) they cite their study of 500 institutionalized delinquent boys in Massachusetts and conclude that delinquency results from the interplay between physique, temperamental, intellectual, and socio-cultural factors. Many violent criminals are found to have impaired self control which has been linked to frontal and temporal lobe defects. According to Conklin (2007) there is an increasing consensus that the origins of ADHD are biological, with genetic predisposition, brain damage and dysfunction, and neurological immaturity being cited as contributing causes. Moffitt (2006) argues that persistent antisocial behavior is a product of an individual's traits that come from the neuropsychological functions and the social environment. Moffitt finds that there are verbal and executive neurological deficits in youth that exhibit anti-social behavior that can then lead to the propensity for delinquent acts. It seems that

it is reasonable to conclude from the literature that ADHD is a biological disorder and that individuals may have a genetic predisposition to criminal behavior.

Self Control Theory or General Control Theory of Crime

Theories that only focus on personality or biological traits ignore the environment and community that influences a youth's daily activities (Shaw & McKay, 2006). Self control is a person's ability to exercise restraint over his or her actions. Control theories are a sociological explanation of crime that contend that a lack of self control is a primary source of criminal behavior. Specifically self control theory moves the locus of control inside the individual and crime is not ingrained in social experiences but in individual differences that develop early in life and impact throughout the life course (Cullen & Agnew, 2006). Gottfredson and Hirschi (2001) describe people lacking self control as impulsive, insensitive, physical (as opposed to mental), risk taking, short sighted, and nonverbal are more likely to engage in criminal conduct because they do not think through the negative consequences before they act. Gottfredson and Hirschi's self control theory is a relatively young theory having been developed only in 1990 and is based on the idea that behavior is governed by its consequences. Conklin (2007) states that Gottfredson and Hirschi deduce that criminals are low in self-control because of the very nature of crime itself since it provides immediate gratification, is exciting and risky, and requires no special motivation, preparation, skill, or specialization. The general control theory also speculates that ineffective parenting can trigger low self control in children which can then lead to delinquent conduct. In a study by Unnever, Cullen and Pratt (2003) it was found that low self control was indeed a strong predictor of delinquency and arrests, that parental monitoring reduces delinquency without affecting self control and that the effects of ADHD on delinquency were largely as a result of low self control. While low self control is linked to the propensity to

commit crime, other factors such as situational influences must be taken into account. "ADHD is a condition that does not cosign youths to delinquent behavior. Rather it likely exposes them to risk factors – such as low self control – that may foster delinquency in the absence of appropriate intervention" (Unnever, Cullen & Pratt, 2003, p. 496).

General Strain Theory

Robert Agnew proposed a general strain theory to crime that expanded the work of Merton's theory that crime was rooted in the social systems rather than based on the makeup of individuals. General strain theory states that people commit crimes because they experience strain or stressors and that crime is a way to reduce or escape from the strain. Froggio (2007) states that blocked opportunities to attain successful goals generate a pressure that can lead to criminality. Agnew proposes that "a general strain theory should focus on at least three measures of strain: '(1) the actual or anticipated failure to achieve positively valued goals, (2) the actual or anticipated removal of positively valued stimuli, and (3) the actual or anticipated presentation of negative stimuli' (Conklin, 2007, p. 159). It is important to consider the magnitude, clustering, timing, and duration of strain causing events. Agnew (2006) states that several factors contribute to whether a juvenile will cope with strain in a delinquent or non-delinquent manner such as temperament, intelligence, interpersonal skills, self efficacy, association with delinquent peers, and conventional social support. Conklin (2007) states that when strain is perceived as unfair and high in significance, and is associated with a low level or social control, it is most likely to lead to crime and delinquency because it produces pressure to cope by breaking the law.

Some strains are more likely to lead to delinquent behavior than other strains. General strain theory focuses on the negative relationships and argues that adolescents are pressured into delinquency by a negative effect, especially anger (Froggio, 2007). Agnew (2006) predicts the following strains are most likely to cause juvenile crime: parental rejection; supervision or discipline that is erratic, ineffective and/or harsh; child abuse and neglect; negative secondary school experiences; abusive peer relationships; failure to achieve selected goals. Johnson and Kercher (2007) explored the relationship between ADHD, strain and criminal behavior in college students. The findings suggested that ADHD symptoms conditioned the effect of strain on crime and that individuals with ADHD may be less able to legitimately cope with strain when compared to peers without ADHD. Research has found that "strain is more likely to generate delinquent behavior among juveniles who are high in negative emotionality and low in constraint, perhaps because those with such personality traits are more likely to experience intense emotional reactions to strain, less able to engage in noncriminal coping, less aware of and concerned with the costs of crime, and more disposed to criminal coping" (Conklin, 2007, p. 160).

Procedural Justice Theory

The procedural justice theory (Watson & Angell, 2007) provides a structure for looking at the interactions between law enforcement officers and those persons who suffer from a mental illness. A person's reaction to an authority figure, such as a member of law enforcement, may be dependent on whether or not they perceive the interaction as being fair. The first few minutes of the encounter between the individual and member of law enforcement can determine how the rest of the interaction will go, including whether they will cooperate or resist authority (Watson & Angell, 2007). Individuals are concerned with fairness when they encounter authority figures

and are more satisfied with the outcomes if they perceive they were treated fairly (Herian, 2009). Prior research (Watson & Angell, 2007; Jurkanin, Hoover & Sergevnin, 2007) has demonstrated that modifying the law enforcement response to adjust for sensory or processing deficiencies of persons with mental illness will increase the likelihood of a more positive outcome.

In procedural justice theory it is important that the person feel that they have been given a voice, being treated with dignity, and trust that the authority figure is concerned about their well being (Watson & Angell, 2007). Reisig (2009) conducted research on Jamaican high school students and found a positive correlation between perceived police legitimacy and the youth's willingness to cooperate with the police. Individuals who perceive they are being treated fairly are more likely to obey police directives. Reisig (2009) concludes that "in combination, the association between procedural justice judgments and the two key outcomes – police legitimacy and cooperation with the police – provide empirical support for the argument that just police processing produces tangible benefits that can help improve police-citizen relationships (p. 57). Violations of procedural justice will result in feelings of injustice and can impact the quantitative responses in terms of the intensity of the reactions and qualitatively in terms of the nature of the reactions (Tornblom & Vermunt, 2007). Watson & Angell (2007) conclude that it is necessary to provide procedural justice training to law enforcement officers because officers that encounter individuals with mental illness must understand the importance of fair treatment and how it will impact the police-citizen interaction.

SECTION IV: RECCOMENDATIONS

Programs for ADHD Treatment in Juveniles

As Grisso (2008) states there are four separate, but connected public systems that respond to youth offenders with mental health disorders: education, child protection, juvenile justice, and mental health. In order to best meet the needs of children who suffer from ADHD these four systems need to come together and work collectively to mitigate the propensity for youth with ADHD to become juvenile delinquents. There are several different recommended treatment options for juveniles with ADHD that include interventions from mental health professionals, parent, school and community interventions, and criminal justice system interventions. Each of them will be addressed in this section.

Mental Health Interventions

Pharmacological Treatment

One of the most common approaches is to treat ADHD with medication. It is recommended that juveniles with ADHD begin a pharmacological treatment program under the supervision of a psychiatrist. There are many different types of medications used to treat ADHD including psycho-stimulants, antidepressants, anti-anxiety medications, antipsychotics, and mood stabilizers (NIHM, 2000). According to U.S. Department of Education, Offices of Special Education and Rehabilitative Services, Office of Special Education Programs, (2006, September), the most common medications used are stimulants. They have been found to be effective with 75 – 90 percent of children with ADHD. The other types of medications have been used with those who do not respond to the stimulant class of medications or who have coexisting disorders. It is believed that these psycho-stimulants affect the portion of the brain that is

responsible for producing neurotransmitters. “Neurotransmitters are responsible for helping people attend to important aspects of their environment. The appropriate medication stimulates the brain to produce extra neurotransmitters, thus increasing the child’s capacity to pay attention, control impulses, and reduce hyperactivity” (US Department of Education, Office of Special Education & Rehabilitative Services, Office of Special Education Programs, 2006, p.11).

Behavioral Treatment

Behavioral approaches are typically specific interventions that are designed to provide structure and reinforce appropriate behavior. This is another critical piece to helping a juvenile control their impulsive ADHD behaviors. According to the American Academy of Pediatrics (AAP) (2001) types of behavioral approaches include training for parents and teachers in child management skills, systematic contingency management (such as time outs, positive reinforcement), clinical behavioral therapy, and cognitive-behavioral treatment (such as self monitoring, verbal self-instruction, problem solving strategies, self reinforcement). The AAP states that for behavior therapy to be effective it must be implemented and maintained consistently across all settings which can be challenging.

Multimodal Treatment

Multimodal treatment is the combination of two or more treatment options. A common multimodal approach for ADHD is medication and behavioral treatment. This is the treatment combination that has been the most successful for juveniles with ADHD and it is the one that is recommended. A study by Stern (2001) assessed the effectiveness of various treatment procedures for youth diagnosed with ADHD and its impact on juvenile delinquency. Treatment

options assessed included medication only; behavior treatment only; a combination of medication and behavior treatment; and routine community care (this was the control group).

> "The study results indicate that two forms of treatment – carefully administered medication alone or in conjunction with an intensive behavioral treatment program, including a therapeutic summer camp, parent training, and teacher consultation/classroom management – were significantly more effective in reducing the symptoms of ADHD than either behavioral treatment alone or routine community care" (Stern, 2001, p.2).

Parents reported greater satisfaction with treatment quality and the children's progress when they received the combination of medication and behavior treatments. Children were also more likely to stay in a treatment program with the same combination.

The AAP (2001) have provided the following recommendations for the treatment of children with ADHD: Primary care physicians should establish a treatment program with ADHD as a chronic condition; target outcomes should be created in conjunction with input from parents, doctors, the child, and school personnel; doctors should recommend stimulant medication and/or behavior therapy; and clinicians should follow-up regularly and adjust the treatment plan as needed.

Parental, School and Community Interventions

Early intervention and treatment for ADHD children will help shape their behaviors once they reach adolescents. Moffitt (1990) found that that family environment and parental control impact the likelihood of a child with ADHD to become delinquent, "differences in family environment make the difference in prognosis" (p. 906). Gottfredson and Hirschi (2001) suggest several recommendations for the reduction of crime: One of these is to restrict the unsupervised activities of juveniles because crime requires both the impulsive juvenile, but also the opportunity to commit the deviant act. By limiting teenagers access to guns, cars, alcohol, drugs,

unattended houses, and each other they will be less likely to offend because the opportunity will not exist. Programs that can reduce delinquent behavior would include curfews, truancy prevention programs, school uniforms, and license restrictions. They also stress providing support programs that provide early education and effective child care.

Teachers and other school personnel are in a position to help students with ADHD. Teachers can help by working to improve the student's school success. The US Department of Education suggests that teachers structure the student's environment to accommodate his/her special needs. They encourage teachers to provide the ADHD students with additional positive feedback and build supportive relationships. Teachers may need to apply alternative learning strategies to help keep the ADHD student engaged. Vitiello and Sherrill (2007) suggest that schools also need to partner collaboratively with mental health specialists. Another strategy suggested by Protheroe (2004) is to help students improve their social skills and practice appropriate positive social behaviors helping them feel more accepted by their peers. Schools can help support the parents/guardians of the students and be empathetic in interacting with the parents.

Grisso (2008) states that a community system of care that coordinates services from child mental health, child protection, the school setting, and the juvenile justice agencies is the best response to delinquent youth who suffer from mental health disorders. Often the juveniles who exhibit the delinquent behaviors are getting services across the agencies, but there is a lack of coordination. The easiest way to improve the services provided to these youth is to simply have a coordinated effort across the various agencies. This also maximizes the scare public funded resources. The juvenile justice system should screen and identify youth with mental health disorders and divert those who can be treated in the community back to the community setting.

Even after youth are adjudicated delinquent the courts must determine the placement that is most appropriate for managing their rehabilitation. Some youth will need to be detained in a secure correctional facility, but most can be returned to the community provided that there is a formal program in place to make sure they will be getting the required interventions. For this to be most effective there needs to be a blending of the mental health professionals, the school settings, and juvenile justice system through social service agencies. If resources and programming can be coordinated the juveniles will have the best chance for a successful rehabilitation.

Criminal Justice Response

Grisso (2008) states that the juvenile justice system has three purposes: to protect the youth that are detained in custody; to protect the community at large; and to proactively engage in intervention programs that are designed to reduce the likelihood of crime. It is important for law enforcement to try and gain information about any mental diagnosis that offenders may have. This can help them determine if there is a physical reason for the behaviors that offenders are exhibiting. Once a juvenile enters the juvenile justice system the courts have the opportunity to refer these youth to mental health professionals for diagnosis and treatment. If the juveniles are detained in juvenile facilities part of their detention plan needs to include interventions from mental health professionals. These interventions can include treatment with medication and/or behavioral interventions, but a combination of the two is recommended. It may be the first time that a juvenile gets medical treatment.

Goldstein (1997) reports that adolescents and adults diagnosed with ADHD interact with members of the criminal justice system more frequently than do other members of the general population. Once a juvenile delinquent afflicted with ADHD is adjudicated and put in the care

of the juvenile justice system the state now has the authority to impose rehabilitative or long term mental health intervention. While the juvenile justice system may not be the best place to treat delinquent juveniles who suffer from ADHD, it is a place to start. The key is to make sure that complete assessments are done on juveniles when they enter the detention facility and that there is a coordination of care with the mental health community.

Law Enforcement Response and Training Programs

Law enforcement officials very frequently encounter juveniles afflicted with ADHD or another mental illness. It is important for the law enforcement officer to recognize potential signs and symptoms of ADHD and other disorders so that they can respond in a manner that will lead to the best outcome to the situation. It is essential for agencies to have policies and procedures in place that will improve their responses to these situations.

Recommendations will be made for agency policies and procedures for responding to juveniles with ADHD and in broader terms individuals with mental illness. Secondly recommendations will be made for protocols for officers when they do respond to an encounter where there is a mentally ill person. Last, recommendations will be made for components and modules that need to be included in curriculum for law enforcement training programs.

Policies and Procedures

According to Reuland (2007), the Police Executive Research Forum (PERF) developed recommendations under the auspices of the Criminal Justice Mental Health Consensus Project designed to give law enforcement agencies a framework to follow when creating strategies for change. The first policy recommendation is the growth of community policing that reinforces the collaborative partnerships between the government, community and law enforcement

agencies. The model needs to engage community support for collaborative problem solving. One strategy would be to have a liaison that can help keep the law enforcement agency on track and to provide a bridge between the communities stakeholders and the law enforcement agency (Reuland, 2007). A second policy recommendation is to make it mandatory to include training for responses to juveniles with ADHD and individuals with mental health issues. One of the best and most cost effective ways to provide this training is through the use of the communities' own mental health professionals. Program evaluation must be conducted at regular intervals to assess the effectiveness of the training programs and make changes as needed to enhance the training opportunities. The last policy recommendation is to have law enforcement response protocols for officers when they respond to youth with ADHD or individuals with mental illness.

The goal of the coordinated approach is to improve the outcomes and services provided to persons with mental illness during a law enforcement encounter. This can be done through community partnerships, enhanced skills for sworn and civilian personnel, improved responses to reduce the likelihood of injuries to officers of the person with mental illness, and coordinated access to mental health services (Reuland, 2007). By instituting these policy recommendations a secondary goal is to reduce the number of juveniles with ADHD that are being detained in juvenile detention facilities and help them get the appropriate interventions in a community setting, and also to de-stigmatize the perception of youth with mental illness.

Law Enforcement Field Responses

The Consensus Project Report makes several recommendations to help officers effectively assess situations involving an individual with a mental illness to reduce future contacts with law enforcement and to ensure on-scene safety (Reuland, 2007). The first step for

an agency that is developing protocols is to look at what other agencies have in place, especially those that have had success. Stakeholders from the mental health community should be included in the development of protocols for field responses. Some programs worth looking at would be the Crisis Intervention Teams (CIT), agencies that use mental health professionals to co-respond or officers who are dually trained as mental health professionals, and agencies that require advanced training in mental illness for law enforcement officers.

Since the first request for assistance usually comes through a central police dispatcher these individuals need tools in place, e.g. a set of questions to ask, to help them evaluate the calls for assistance to determine if mental illness could be a factor. Once an officer reaches the scene there needs to be protocols for an on-scene assessment to determine if the incident is caused or aggravated by psychological factors. Offices need to be able to stabilize the scene and use de-escalation techniques that are appropriate for individuals with mental illness. The responders will benefit from the skills and ability to assess if signs or symptoms indicate that mental illness may be a contributing factor. Law enforcement officer also need to have protocols in place to call in members of the mental health community for certain situations, such as an emergency detention.

According to Jennings and Hudak (2005) law enforcement field responses should include methods for officers to gather as much information as possible from dispatch before arriving on the scene. When they arrive they should scan the environment and check for weapons. Officers must try and be discreet and avoid attracting a lot of attention that could create escalation. The law enforcement officer should be calm and portray a take charge attitude, but at the same time not get in the offenders face creating emotional escalation. Distractions or other upsetting influences ought to be removed from the scene. Law enforcement officers must also try to

gather as much information as they can from witnesses, family members, and friends that might be helpful in completing their initial assessment.

A final recommendation for field responses would be to have a flow chart that can be matched with different scenarios encountered that provides decisions and potential resolutions and outcomes to a variety of situations. There needs to be designated area hospitals or mental health facilities that can be used for individuals that require immediate psychiatric evaluation and even detainment. There should be formalized agreements in place between the local law enforcement and the mental health agencies. In addition specially trained mental health personnel need to be available to respond to incidents as needed. Lastly it would be beneficial to have information provided to individuals and family members to help them understand the criminal justice proceedings and what they can expect as a result of this encounter (Reuland, 2007).

Training Programs

Training takes place across multiple settings; first there is the academy training that a new recruit completes, next there is field officer training, then is on-going in-service training, and last specialized training. It is recommended that techniques on how to deal with juveniles with ADHD be incorporated across all four types of training. According to Chappell, Lanza-Kaduce & Johnston (2005) training must include: contextualized learning where new information is connected to existing knowledge and is based on real-life situations; key topic integration across the curriculum (also known as threading); scenario completion; and debriefing after scenarios to solidify learning. Training should be a shared commitment and when looking at modules related to juveniles with ADHD and there needs to be integration with child

protective services and the mental health community. It is also recommended that a training committee or task force be established to look at current training methods and modules and then have the authority to make suggestions for further training enhancements. Training should not be simply pulled together and thrown at officers. It needs to include a defined audience, training objectives, time lines for completion, the role of each participating agency, and evaluation criteria for future program development (Jurkanin & Sergevnin, 2007). The following are recommended training objectives:

1. Enhance awareness and basic understanding of juveniles with ADHD and individuals with mental illness and to provide law enforcement officers with skills to respond and manage situations involving these individuals.
2. To make sure that the law enforcement response to juveniles with ADHD and mentally ill individuals is done in a manner that respects the rights and dignity of the individuals.
3. To provide the necessary skills that will minimize the risk of harm or injury and increase safety to the individual in crisis, the law enforcement officers themselves, and the broader community.
4. To provide appropriate connections to mental health and community resources for individuals and families that deal with juvenile ADHD and mental illness.

Overall the focus of these objectives is to improve the knowledge and skills and develop specific abilities of the officers to be better equipped to handle situations.

Training for officers needs to be built on the fact that ADHD and mental illness itself are not crimes, but diseases that require specialized attention and care. Many times the most favorable outcome is not an arrest, but making sure that the juvenile gets treatment and mental

health interventions. It is recommended that training programs include the following components:

1. Officers learn from mental health professionals how to recognize symptoms of ADHD and other mental illnesses – evaluation and assessment skills.
2. Officers are given the skills on how to respond to juveniles with ADHD and others experiencing those symptoms – intervention and problem solving skills.
3. An understanding of the types of treatment and medication used for ADHD.
4. Connections made with the juvenile justice system, child protective services, and the mental health system – team work tools and approaches.
5. Communication skills for working with the community, family, and other agencies who are involved through coordination of services.
6. Modeling after the Memphis CIT model to include a 40 hour training program for all law enforcement officers that include basic information on ADHD and mental illness and includes: learning first hand from individuals with the illness and family members about their past experiences with law enforcement; verbal de-escalation training; and role play scenarios.
7. Specialized training should also be provided to a select group of volunteer officers to become more knowledgeable and skilled in handling calls for service that involve juveniles with ADHD and the mentally ill. This should include time spent working side by side with members of the mental health community learning more about these conditions and best practices for interventions. These officers can then be dispatched specifically when there is a call where mental illness is identified.

It is essential to get buy-in from members of the law enforcement community and an understanding about why this proactive training is necessary. In addition, training partnerships must be established and built collaboratively across community and mental health agencies.

SECTION V: SUMMARY AND CONNCLUSIONS

Research has found that there is a positive correlation between juveniles who suffer from ADHD and delinquent behavior. It is not the ADHD that causes the delinquent behavior, but it is the juveniles' impulsive non-thinking behavior that may interfere with their ability for self-control. It is important that children with ADHD receive early interventions because these interventions have been found to lessen the likelihood of interactions with law enforcement as they reach adolescents. The worse the symptoms of ADHD get, the more likely they will behave in a way that gets them in conflict with the law. The best approach to minimizing the negative effects of ADHD among juveniles is for them to get early treatment that can include interventions from medical/mental health professionals, parental support, and school and community involvement. The better connected these children are the more likely they are to be successful as they reach adolescents.

Since ADHD is a biological disorder one effective intervention is medications which will increase the child's capacity to pay attention, control impulses, and reduce hyperactivity. Behavioral interventions have found to be successful in working with ADHD provided they are consistent among settings. A combination of medication and behavior treatment in a multimodal approach is the best intervention model for juveniles with ADHD. This combination usually requires a lower dosing of medication while teaches the child coping techniques. The self control theory supports the need for children with low self control to be given strategies to help them contain their urges and learn more self control, thereby decreasing their impulsive and risk taking behavior. If we can reduce the strain that the ADHD adolescent feels by controlling their anti-social behaviors, ensuring positive secondary school experiences, and improving their peer relationships we can help them to respond more constructively to stressful situations. It is

necessary to provide procedural justice training to law enforcement officers to teach them the importance of fair treatment perception by the mentally ill and how their response will impact the police-citizen interaction. Practicing problem solving by helping the ADHD juvenile learn coping techniques instead of just incident management that more likely we will see a positive outcome in the long run.

There is still a great amount of research that should be done on ways to mitigate the negative effects of ADHD on youth and keep them from succumbing to delinquent acts. It is important to conduct studies on a longitudinal basis that allow the researchers to assess the effects of early intervention. If a juvenile does commit a delinquent act, and it results in a referral to the juvenile justice system, they should be evaluated for a potential mental health disorder, such as ADHD, and receive treatment from trained mental health professionals if warranted. In ADHD cases it is important to provide interventions as early as possible and through multiple sources such as the family, schools, community, social services, and mental health providers. The investment of therapy early on in the child may save on the negative effects of incarceration in the long term.

Law enforcement agencies need to work collectively with the mental health professionals to create a coordinated response for juveniles with ADHD. This will include the creation of policies and procedures for agencies on mandatory training and field responses to juveniles with ADHD. Police officers, especially those on patrol, the community officers, and the police liaison officers, need more training to help them identify mental and developmental illness in juveniles that they encounter. Properly trained law enforcement officers can provide a specialized response that will de-escalate situations and lead to better situational results. Law enforcement

officers should be aware of the various mental health resources that are available and in some instances could even be the catalyst to help the parents get their child the needed interventions.

Progress in better responses to juveniles with ADHD will occur when there is improved proactive law enforcement training, greater attention to mental illness in-service training, improved risk assessment and management in the juvenile justice system, and better coordination between law enforcement and mental health agencies. Training must be a concerted effort that has buy in from all key stakeholders and is done in a systematic way over time. There are many successful training programs around the country and agencies should not try and re-invent training, but model their own programs after ones with known success. Programs such as crime intervention teams (CIT) will help keep juveniles with ADHD out of juvenile detention facilities and get them into community based treatment programs. Program evaluation needs to be completed regularly to determine if goals and outcomes are being met. Training curriculum must be fluid and change as new and better response interventions become available. Overall the challenge of responding to youth with ADHD can be enhanced when the law enforcement community works collaboratively with juvenile justice and mental health to identify the barriers that currently exist and to create new partnerships for the future.

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