

Youth Defendants with ADHD and the Criminal Justice System: A Qualitative Analysis of Court Decisions

Orly Calderon

Social Work Department, Long Island University, Brookville, NY 11548, USA

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Abstract

The literature suggests that more than 60% of young offenders in the USA and internationally are screened positive for Attention Deficit Hyperactivity Disorder (ADHD). However, little scholarly attention is given to the role a defendant's diagnosis of ADHD plays in court proceedings and decisions. The current exploratory qualitative study involves thematic content analysis focused on twelve court decisions dated from 2000-2011, from various jurisdictions, involving young defendants with ADHD. The findings suggest courts' interpretation and treatment of the defendant's ADHD diagnosis varies across cases, jurisdictions, and phases of the legal procedure. Evidence regarding the diagnosis was not sufficient, in itself, for the courts to make decisions that incorporate consideration of the disorder's impact on the defendant's functioning or treatment needs. When experts testify about the impact of ADHD on a case-relevant behavior or aspect of the defendant's functioning, the court is more likely to take the disorder into consideration in its decision than when experts' testimony simply states that the defendant is diagnosed with the disorder. Courts' considerations for the defendant's diagnosis of ADHD were reflected mainly in decisions to adjudicate the defendant as a youth and in sentencing decisions. The findings suggest a need for greater collaboration and communication among professionals in the criminal justice and mental health systems, in order to better understand the role of ADHD in relationship to the various phases of the adjudicative process and to better serve the needs and rights of young defendants with ADHD.

Keywords: Young defendants; ADHD; expert testimony; adjudication; qualitative content analysis

Introduction

During the last few decades the relationship between Attention Deficit Hyperactivity Disorder (ADHD) and delinquent or criminal behavior has been the focus of much clinical and empirical research (Eme, 2008; Gordon & Moore, 2005; Gudjonsson & Young, 2006; Young, Adamou, Bolea, Gudjonsson, Muller, Pitts, Thome, & Asherson, 2011). Data suggest that ADHD is a significant predictor of antisocial and delinquent behavior (Gordon & Moore, 2005; Young et al, 2011). Young et al. (2011) note that data from international studies, including the USA, suggest that more than 60% of young offenders screen positive for ADHD. Eme (2013) reports that between 16-19% of incarcerated youth are diagnosed with ADHD. However, little scholarly attention has been paid to the role a defendant's diagnosis of ADHD plays in court proceedings and decisions (Gudjonsson & Young, 2006; Gordon & Moore, 2005).

The term "mental illness" in its legal context usually includes psychotic disorders or mental retardation (Packer, 2009). But the criminal justice system pays little attention to other disorders, such as ADHD, which may also significantly impair the individual's ability to appreciate the wrongfulness of his actions, interfere with competent participation in the adjudication process, or require treatment options to be considered in the case's outcome (Gudjonsson & Young, 2006). Consequently, no clear doctrine, either legal or clinical, exists in the adjudication of young defendants with ADHD diagnosis. Gudjonsson & Young (2006) argue that even when clinicians diagnose symptomatology of ADHD in young defendants, they often lack expertise to understand the impact of these symptoms on the individual's functionality, especially in the context of the criminal justice system. Eme (2008) suggests that all personnel involved in the adjudication of youth, including judges, lawyers, and probation or parole officers, should be educated about ADHD and its impact on criminal behavior. Given the acknowledged gap between the legal concept of mental illness and the clinical concept (as cited in the introduction to the DSM IV-TR, APA, 2000), it seems that in order to more effectively consider the impact of mental illness in general, and ADHD in particular, on the actions of alleged or convicted offenders, an interface between clinical evidence-based data on mental illness (such as ADHD), and between legal parameters as defined by the various statutes that concern mental illness in the criminal justice

system, is required.

This paper focuses on content analysis of relevant court decisions in order to identify the nature and extent of such interface as it may be reflected in mental health expert testimony and courts' decisions in cases that involve criminal adjudication of young defendants with a diagnosis of ADHD. It is not the purpose of this paper to critically examine the judicial soundness of the various court decisions that are analyzed here. Rather, the paper seeks to examine how the various courts are interpreting the impact of ADHD on the functioning of the defendants, and how much consideration is given to evidenced-based clinical information on ADHD when such interpretations are applied. Similarly, the content of court decisions is analyzed to examine how expert witnesses offer their testimony about ADHD and its impact on the defendant's functioning in the adjudicative context. Analysis of court decisions that is guided by these questions can help to identify opportunities for collaboration between the legal and mental health systems in the courtrooms that adjudicate youth with ADHD.

Review of ADHD as per the Diagnostic Statistical Manual

Currently, ADHD is understood to be a developmental/neurological disorder, with childhood onset that involves symptoms of inattention, hyperactivity/impulsivity, or a combination of both. Thus, according to the Diagnostic Statistical Manual -4th Edition- Text Revised (DSM IV TR, APA, 2000), a person may be diagnosed with either Attention Deficit Hyperactivity Disorder, Primarily Hyperactive/Impulsive Type (ADHD/PHI), if the main symptoms include over- activity and impulsive behavior, or with Attention deficit Hyperactivity Disorder, Primarily Inattentive Type (ADHD/PI), if the main symptoms include deficits in attention processes. Finally, a diagnosis of Attention Deficit Hyperactivity Disorder, Combined Type is warranted if the symptoms include both hyperactive and impulsive behavior and deficits in attention processes. The 5th and newest version of the DSM (APA, 2013) has eliminated the typological diagnosis of ADHD, but continues to recognize that persons diagnosed with ADHD tend to display clusters of symptoms that can be classified as either predominantly inattentive presentation, hyperactive/impulsive presentation, or a combined presentation.

The neurobiological origin of ADHD seems to stem from under-development in certain regions of the brain, especially the frontal lobe (Mash & Wolfe, 2013). Theories that explain the impact of ADHD on functioning differentiate between the categorical subtypes, or presentations of the disorder. The two most widely accepted models are Barkley's Behavioral Inhibition Model (Barkley, 1997) and Klorman's Selective Attention Model (Klorman, 1992).

The Behavioral Inhibition Model of ADHD

According to Barkley (1996; 1997), the mechanism of behavioral inhibition is responsible for self-regulation of behavior by delaying responses to environmental or internal stimuli and by modulating on-going responses in the presence of changing environmental conditions. In addition, behavioral inhibition contributes to short-term memory, by inhibiting responses to stimuli while the individual pauses to catalogue mental representation of events by temporal or consequential order. Persons with ADHD/PHI experience deficits in the behavioral inhibition mechanism, which leads to poor short-term memory and to poor self-regulation of affect and behavior. In other words, the individual is unable to inhibit an impulsive response (either emotional or behavioral) to the stimulus, thus reacting to environmental or internal cues without the benefit of a mechanism that allows him or her to process the stimulus in its entirety or in its proper environmental context. According to Barkley (1996; 1997), impulsivity occurs when the person reacts in response to poorly processed environmental or internal cues, whereas hyperactivity results from the person's inability to self-regulate and modify a behavior pattern to match different environmental or social demands. Deficits in inhibition response mechanism interfere with sustained attention, a process that allows the individual to maintain a level of attention over time.

The Selective Attention Model of ADHD

The Selective Attention Model, which attempts to explain the effect of ADHD, predominantly inattentive type, or presentation, on overall level of functioning, is based on the principle of cognitive event-related potentials (ERP) (Klorman, 1992). The ability to respond to an event (stimulus) in a timely fashion is decreased by the presence of

competing stimuli, especially when such stimuli are complex. Selective attention, a process that allows the individual to identify and focus on relevant information while preferentially ignoring irrelevant information, increases event-related potential (ERP) in the presence of irrelevant stimuli. According to Klorman (1992), persons who are diagnosed with ADHD, Primarily Inattentive, exhibit deficits in their selective attention process, thus their ERP is slower and lower in magnitude. Klorman's model was supported by later research, which demonstrated that children who were diagnosed with ADHD Primarily Inattentive Type, exhibited deficits in speed of cognitive processes and response speed, especially in the visual and spatial domain (Barkley 1997; 1996; Mayes, Calhoun, Chase, Mink, & Stagg, 2009; Solanto, Gilbert, Raj, Zhu, Pope-Boyd, Stepak, & ... Newcorn, J. H., 2007).

Physiological Models of ADHD

More recent research has identified other brain abnormalities that may be associated with ADHD. For example, Arnsten & Rubia (2012) report that in children with ADHD, neuroimaging studies indicate abnormalities in the inferior prefrontal cortex and the dorsolateral PFC, both of which are responsible for inhibiting irrelevant aspects of a stimulus, affording greater ability to attend to relevant information. They also indicate abnormalities in the connections between the PFC and brain regions that regulate attention and inhibitory control. On the other hand, some researchers (e.g., Sonuga-Barke, 2010) suggest that individuals with ADHD do not all display abnormalities in the same brain systems. Further research is needed in order to better understand the role brain differences play in the etiology and presentation of ADHD.

The Link Between ADHD and Antisocial/Criminal Behavior

ADHD correlates highly with antisocial and aggressive behavior. In discussing the prevalence of ADHD among juvenile delinquents, Kazdin (2000) estimated the rate to be between 19% and 46%. This prevalence rate is more than four times higher than in the non-delinquent population. More recently, Young et al. (2011) reported findings from international data indicating that up to two thirds of young offenders screen positive for ADHD. Similarly, Gordon & Moore, (2005) who studied incarcerated youth found that 20% of their sample were diagnosed with ADHD, a prevalence that is

significantly higher than the prevalence of the disorder in the general population. Similar findings were reported by Cohn, van Domburgh, Vermeiren, Geluk, & Doreleijers (2012) who studied characteristics of youth who were first time arrestees in the Netherlands. This study found that co-morbid externalizing disorders, such as ADHD in conjunction with Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD), were significantly more common among youth offenders than among the general population, and that compared to undiagnosed or differently diagnosed youth, participants who exhibited these disorders were significantly more likely to be repeat offenders.

Conducting a meta-analysis, Pratt, Cullen, Belvins, Daigle & Unnever (2002), examined the effect of ADHD on delinquency, both generally and by subtype of ADHD. Their results indicated that ADHD is a significant and stable predictor of delinquent and criminal behavior. Unnever, Cullen & Pratt (2003) investigated the link between ADHD and low self-control as a mediating factor leading to delinquent behavior, as well as the direct link between ADHD and delinquency. They found that children with ADHD reported higher levels of delinquent behavior compared to children without ADHD. The results indicated that the effect of ADHD on delinquency was the greatest when accounting for the effect of low self-control as a mediating factor between ADHD and delinquency.

Several studies found specific symptoms of ADHD to be independent predictors of delinquent behavior in youth. For example, White, Moffitt, Caspi, & Bartusch (1994) found that impulsivity, a basic criterion for two of the subtypes of ADHD as per the DSM IV-TR, was highly correlated with delinquency both in terms of severity and persistence of the delinquent behavior. Boys who displayed severe delinquent behavior also exhibited significantly higher rates of impulsivity than boys who displayed stable non-delinquent patterns or mildly delinquent patterns of behavior. Furthermore, impulsivity was found to contribute to an increase in delinquent behavior from age 10 to age 12-13. Based on their results, White et al. (1994) conceptualized ADHD as a cognitive disorder that affects instrumental behavior. They distinguished between cognitive impulsivity and behavioral impulsivity. Cognitive impulsivity results from deficits in the frontal lobes and may be related to poor assessment of problems, which,

in turn, leads to poor choices of solutions. Behavior impulsivity results from lack of balance between the Behavior Inhibition System (BIS), which responds to cues about punishers, and the Behavior Activation System (BAS), which responds to cues regarding rewards. Impulsivity is probably linked to cognitive deficits in accurate identification of rewards and punishers and the consequential inability to modify behavior according to changes in environmental cues. This view of ADHD was later supported by Barkley's Behavior Inhibition Model (Barkley, 1997; 1996).

Other research focuses on the neurobiological etiology of disinhibition and impulsivity (see Neuhaus & Beauchaine, 2013) and have highlighted the link between the presence of impulsive tendencies, environmental risk factors and a number of externalizing pathologies such as ADHD, and myriad delinquent and antisocial behaviors.

Abikoff & Klein (1992) also acknowledged the role of deficits in cognitive processes in predicting aggressive behavior. They found that children with ADHD are more likely than children without ADHD to misinterpret social cues, and thus are more prone to react with aggression to ambiguous social situations. Several studies have focused on investigating the relationship between delinquency and the impact that a diagnosis of ADHD has on functioning, especially in terms of low self-control, or poor self-regulation of behavior, affect and cognitive processes, all described by Barkley (1997; 1996) as the core feature of ADHD. Pratt et al. (2002) have theorized that ADHD may be linked to delinquent behavior because the disorder serves as a "potential catalyst for the early onset of antisocial conduct" (p. 353). Moreover, Unnever, Cullen & Pratt (2003) found that poor self-control, a common characteristic in youth with ADHD, is associated with delinquency. They noted that delinquent persons with ADHD tend to be susceptible to arrests since, due to their condition they are "less judicious in how they commit offenses, thus making them more detectable" (Unnever, Cullen & Pratt, 2003, p. 496). It is important to note that the same processes that affect poor decision-making in terms of how a person with ADHD commits an offense also govern and impair that person's self-control that leads him to commit the offense in the first place. Similarly, Schaeffer, Petras, Ialongo, Poduska, & Kellam, (2003) hypothesized that the link between attention and concentration problems and aggressive behavior found in their sample is associated with the transactional effect of ADHD on the child's

communication patterns with his environment.

In his excellent review of studies that investigate causal factors in antisocial behavior, Rutter (2003) noted that early conduct problems as well as emotional callousness are significant risk factors in antisocial behavior. He further noted that

conduct problems (a)re associated with emotional and behavioral dysregulation [sync], as reflected in impulsivity and hyperactivity, whereas callousness and unemotionality [sync] appeared to operate through lack of behavioral inhibition to novel and dangerous activities, responses to cues to punishment, and reactivity to negative emotional stimuli. (p.372)

In this analysis, Rutter, in fact, describes the classical behavioral, cognitive, and emotional functioning patterns of individuals with ADHD. Understanding these patterns in context of the disorder and in the context of their effect on antisocial behavior underscores the role of ADHD in predicting, and contributing to, antisocial behavior. More recent research (as cited in Frick, Ray, Thornton, & Kahn, 2013) suggests that children displaying high levels of callous and unemotional traits appear to display fearlessness, indifference to punishment, and “low responsiveness to cues of distress in others” (p. 27) which place them at risk for antisocial behavior because they fail to inhibit their behavior in response to cues of distress from others.

Key Concepts: The Impact of ADHD on the Adjudication of Young Defendants

Concern for the rights of minors who face criminal charges has become increasingly relevant since 1967, when *In re Gault*, the Supreme Court mandated due process for minors who were adjudicated in either juvenile court or in adult criminal court (NASW, 2010). While *Gault* was intended to protect minors by providing them with rights equivalent to those of adult defendants, i.e., notice of charges, assistance of counsel and the opportunity to confront and cross-examine witnesses, (Feld, 2000), it failed to consider whether youth were capable, developmentally, to exercise these rights (Buss, 2000). Adjudicative competence involves the ability to understand the charges and their ramifications, the ability to understand the judiciary process and the

respective roles of the participants (judge, jury, prosecutor, defense attorney etc.) and the ability to make autonomous decisions in one's own best interest, including the ability to assist counsel in the defense process (Bonnie & Grisso, 2000; Buss, 2000; Grisso, 2000). Research suggests that young defendants in general and those with the disorder of ADHD in particular, experience special challenges that may compromise their ability to effectively participate in the judicial process (Grisso, 2000; Gudjonsson & Young, 2006). Generally speaking, a defendant can raise his or her condition of ADHD in relation to any of the following three adjudicative processes: pre-trial, trial and sentencing.

ADHD in Pre-Trial Procedures

In the pre-trial phase, ADHD may interfere with the defendant's ability to fully understand his or her *Miranda* rights and the ramifications of waiving these rights. Feld, 2000, notes that young defendants may be aware of their rights, and can even repeat them (which is a typical standard that courts use to test for knowingly waiving *Miranda* rights). However, oftentimes they do not comprehend the meaning of these rights or the ramification of waiving them. Considering Barkley's Behavioral Inhibition Model of ADHD (1997, 1996), it is easy to understand how the presence of ADHD, with its associated impulsive behavior and faulty decision making processes, may compromise the full comprehension of *Miranda* rights, and their implications.

ADHD during Trial Procedures

During trial, ADHD may play a factor in determining the defendant's capacity at the time of the alleged crime, as well as the defendant's competency to stand trial (Bonnie & Grisso, 2000). Capacity and competency issues in young defendants are often dictated by developmental process, which may be affected by both maturity and mental health factors, such as the presence of ADHD. Grisso & Schwartz (2000) noted that as more and more states adopted policies that permitted the adjudication of adolescents in adult criminal courts, the issue of youth defendant's capacity became increasingly relevant. However, there is no doctrine or stated policy to guide the courts in recognizing factors associated with developmental disorders (such as ADHD) as affecting either capacity to control behavior at the time of the alleged offense, or the

competence to stand trial (Bonnie & Grisso, 2000). Barnum (2000) suggests that youth's competency to stand trial may be affected by the presence of psychopathology as well as by deficits in attention and information processing. More recently, Gudjonsson & Young (2006), in addressing the impact of ADHD on the young defendant's "ability to effectively participate in his trial due to his problems with sustained attention and poor behavioral control" (p. 215), have suggested that courts may need to adopt special considerations in cases that involve a young defendant with ADHD. For example, granting regular breaks during the proceedings, and simplifying questions during testimony can help to ensure that defendants with ADHD fully understand the content and process of court proceedings (Gudjonsson & Young, 2006). These recommendations are particularly relevant in the context of Klorman's Selective Attention Model of ADHD (1992).

ADHD and Sentencing Considerations

During sentencing, consideration of defendant's ADHD can serve as a mitigating circumstance, helping to determine eligibility for rehabilitative purposes. Traditionally, the focus in adjudicating juveniles was to encourage treatment and rehabilitation (NASW, 2010; Scott, 2000). However, since the law provides that children ages 13 and older, who commit certain crimes, may be prosecuted in adult courts, the rehabilitative needs of young defendants in general and those with mental health challenges, such as ADHD, in particular, may be compromised. Scott (2000) notes that as more and more children are tried in adult courts for an increasing number of offenses, the "best interest of the juvenile" doctrine gave way to the "social control" doctrine that advocates punitive, rather than rehabilitative, approaches. Corriero (2006) suggests that when sentencing a child, even if conviction has taken place in an adult court, the government has an obligation to strike a balance between protecting the public from violence and between working towards reforming the youth's behaviors.

A waiver to adult court, a legal procedure aimed at allowing adjudication of a youth as an adult, while occurring at the beginning of the prosecutorial process, bears direct impact on consideration of rehabilitation or alternative incarceration of a young defendant during sentencing, if convicted. A judicial waiver empowers a judge to decide whether to try a youth in adult court (Corriero, 2006, p. 130). There are six criteria that

the court usually considers in making a waiver decision including: age and social background of the defendant, the nature of the alleged crime, the defendant's previous criminal record, the defendant's level of intellectual and psychological functioning, the defendant's response to past treatment, and the availability of programs to address the defendant's rehabilitative needs. While there are no guidelines as to the relative weight the court must assign to each of these criteria (Corriero, 2006), the recognition that a defendant may have a disorder and requires treatment may influence the court's decision of whether to try a youth with ADHD as an adult and may also play a role in considering the option of rehabilitative services during sentencing.

The Current Study

This exploratory qualitative study analyzes content of court decisions that involve adjudication of youth with ADHD, and aims to gain a better understanding of the role a defendant's diagnosis of ADHD plays in court proceedings and decisions. To avoid confusion, the current study does not use the term "young offenders", which has a specific legal connotation (Corriero, 2006). Instead we refer to the youth in the court decisions as "young defendants". Further, this study does not aim to legally analyze, nor criticize, the courts' decisions. Rather, it seeks to understand the role that ADHD may play in the adjudication process as reflected in the courts' decisions. More specifically, the following analysis of courts' decisions seeks to respond to the following questions:

1. How do the various courts interpret the impact of ADHD on the functioning of young defendants during the various phases of the adjudicative process?
2. How do expert witnesses offer their testimony about the condition of ADHD and its impact on functioning, in the adjudicative context?
3. What consideration do the courts give to evidenced-based clinical information on ADHD in the adjudicative decision making process?

Method

The Cases

This study explores and analyzes the content of 12 court decisions representing various jurisdictions across the United States (see table 1).

Table 1. Court Decisions Jurisdictions

<u>Jurisdiction</u>	<u>Number of Cases</u>
California	3
Florida	1
Illinois	2
Minnesota	1
Missouri	1
New Jersey	1
New Mexico	1
Tennessee	1
Wisconsin	1

Consistent with research principles that suggest that “a qualitative study is aimed at an in-depth understanding of a few cases, rather than a general understanding of many cases” (Grinnell & Unrau, 2011, p. 57) and that “qualitative samples tend to be small” (Trotter, 2012, p. 399), we have chosen to limit the number of cases in this analysis in order to allow for a more comprehensive and rich understating of the relevant content. The cases were chosen using an availability and purposive sampling procedure, resulting from the following search terms in the Lexis Nexis data base (a computerized legal database), under the *federal and state cases* category: Attention Deficit + juvenile + sentencing; ADHD + juvenile + sentencing; ADHD + child + sentencing; ADHD + minor + sentencing; ADHD + juvenile; ADHD + child + decided. Cases were included in the analysis if they met the following inclusion criteria:

Defendant’s age at the time of the offense. Only cases in which the defendant was 18 years or younger at the time of the offense were chosen. It is understood that the law allows for adult prosecution of offenders under the age of 15 when the alleged crimes, if committed by adults, amount to a felony (18U.S.C.5038(f)). However, we embrace Grisso & Schwartz (2000) perspective that, in effect, the legal definition of juvenile delinquency leads courts to increasingly ignore developmental factors that may qualitatively differentiate between adults’ and youths’ capacity for the same offense (Grisso & Schwartz, 2000), or competency to participate in the legal proceedings (Bonnie & Grisso, 2000). Since this paper focuses on the role a developmental disorder, namely ADHD, plays in the legal system, the use of the legal definition of a juvenile delinquent is replaced with the broader definition of youth defendant. Here we mean a

person who is a defendant in criminal proceedings, and who, at the time of the alleged offense, has not yet achieved chronological and developmental maturity.

A diagnosis of ADHD. Only cases in which the defendant was diagnosed with ADHD were analyzed here. Several cases involving co-morbid disorders were also included in this analysis.

Time-period. The court decisions analyzed here are dated from 2000 through 2011, to parallel the time frame during which the DSM IV- TR (APA, 2000) was used to define the diagnostic criteria of ADHD. Appendix 1. represents the distribution of cases along several dimensions.

Data Analysis

Data were analyzed manually, inductively and thematically, relying on the constant comparative method of thematic document analysis (see Grbich, 2007, for a comprehensive discussion of qualitative data research methods). Each author read each court decision independently and conducted a first level coding of the data to identify units of meaning and group into contextual categories. The authors then met to compare the categories and respective units of meaning they generated for each case. When there was a disagreement in coding, the authors reviewed the court decisions together to ensure accuracy of data. The authors then used the constant comparative method during the second level coding of the data, which again was conducted independently. During this phase, the authors generated themes based on the categories that were identified during the first-level coding. The authors met several times to compare findings, especially in terms of category grouping within the generated themes and in terms of relevance of specific cases to the generated themes and categories. When instances of disagreement arose, the authors reviewed the court decision content again independently and met a subsequent time to discuss the specific area of disagreement. Based on the units of meaning extracted during the first-level coding, there were 86 instances of grouping content from the court decisions into specific categories. Initially, and after each researcher analyzed the data separately, there were 80 instances of agreement, representing an inter-rater reliability of 93%. At subsequent

meetings and upon further independent review of the data, most instances of disagreement were eliminated, save one, representing a 99% inter-rater reliability.

Results

First-Level Coding

The following categories have been identified during the first level coding phase: Role of ADHD relative to the legal proceedings phase: (e.g., interferes with the defendant's understanding *Miranda*; contributes to diminished culpability or capacity; referred to in sentencing consideration); substance of evidence regarding presence/impact of ADHD: (e.g., how do expert witnesses explain the ADHD condition in the defendant, and its impact on functioning? How is the diagnosis linked to the legal issues at hand, namely, capacity to understand legal procedures, differentiate between right and wrong, control behavior, need for treatment, etc.?); the court's treatment of the claim regarding role of ADHD in the legal proceedings (e.g., allowed/excluded testimony; evidence of court's understanding, or lack thereof, of the nature of ADHD's impact on functioning; degree of consideration of defendant's condition of ADHD in court's decision).

Second Level Coding

The second-level coding yielded three themes: (a) The defendant's/appellee's perspective regarding the role of ADHD in the legal proceedings; (b) Testimony regarding ADHD; and (c) The Court's perspective regarding the role ADHD in relation to the legal proceedings. The following sections present findings within each theme.

The defendant's/appellant perspective regarding role of ADHD in the legal proceedings. Two of the 12 court decisions addressed the impact of ADHD on defendants' understanding *Miranda* rights. In both cases (Illinois v. Morgan, 2002, and New Mexico v. Gutierrez, 2011,) the defendants appealed their convictions claiming that their confessions were illegally obtained because the presence of ADHD interfered with their ability to fully understand the *Miranda* warnings they were given.

Several of the court decisions (Illinois v. Ramsey, 2010; *In re* AJF, 2007; Randy Lamar Schoenwetter v. State of Florida, 2010; Tennessee v. Guy, 2008) raised ADHD in

relationship to diminished capacity, where the defendants appealed their respective convictions, claiming that their condition of ADHD should have been taken into account when the court determined culpability. For example, in *Illinois v. Ramsey*, 2010, the defendant, an 18-years-old boy who was sentenced to death after being convicted of two murder counts, claimed, through the testimony of a psychologist, that he met one of the criteria of the insanity defense because his condition of ADHD prevented him from conforming his conduct to the requirements of the law, thus diminishing his culpability.

Two of the court decisions raised the issue of ADHD in relationship to the diagnosed defendant's competency to stand trial (*Schoenwetter v. State of Florida*, 2010; *The People v. Bobby Martin Gonzales*, 2010), claiming that the condition prevented them from fully understanding the legal procedures. More specifically, in *The People v. Bobby Martin Gonzales*, 2010, the defendant, a 16-years old boy who has been sentenced 15 years-life imprisonment after being convicted of a second degree murder charge, appealed his sentence on the basis that his ADHD prevented him from fully understanding the consequences of his guilty plea, which the court had later refused to allow him to withdraw.

The majority of the court decisions focused on the role of ADHD diagnosis in the sentencing phase of the adjudicative process. In some cases the defendant raised the question of the morality in sentencing a youth with a mental disorder (that is, ADHD) to death (*Schoenwetter v. Florida*, 2010; *The People v. Thornton*, 2007). In most of the cases the defendants requested consideration of their need for treatment to be incorporated into sentencing decisions. For example, in *Tennessee v. Keaton M. Guy*, 2008, the defendant requested an alternative to incarceration which would involve rehabilitative services for his ADHD. Some cases involved waiver procedures in which the defendants appealed court decisions to waive their cases to adult courts. In these cases, trying the defendant as a juvenile would have afforded rehabilitation services to be incorporated into the sentencing (re *D.D.*, 2003; re *Patrick, L.M.*, 2003; *State v. Morgan*, 2001; *United States v. A.F.F.* 2001).

Of note is one case (re *Brian J.*, 2007) in which the defendant argued *against* continued rehabilitative services to address his ADHD. At age 14 Brian J. was incarcerated in a juvenile facility after molesting an 8 year old girl. He appealed "a two

year extension of his commitment” under the juvenile extended detention act (EDA). Under this act a ward’s civil commitment may be extended for up to two years if there is sufficient evidence that his mental disorder continues to render him a danger to society. The youth argued that there was insufficient evidence that his mental disorder caused him serious difficulty in controlling his dangerous behavior or that any risk of re-offense was a result of a mental disorder, and that, therefore, extending his commitment was unconstitutional because it was penal in nature, violated substantive due process, and resulted in cruel and unusual punishment.

Testimony regarding defendant’s condition of ADHD. In most of the cases reviewed here, testimony about the young defendants’ ADHD was offered by mental health professionals, usually a psychologist or a social worker. In some cases, however, testimony was offered by non-clinician witnesses. For example, in *Illinois v. Ramsey*, 2010, as well as in *The People v. Thornton*, 2007, the court heard testimony from teachers who spoke about the respective defendants’ behavior and academic difficulties. In *re Patrick, L.M.*, 2003, and in *State v. Morgan*, 2001, the court heard testimony from probation officers who spoke about the availability of rehabilitation services in adult vs. juvenile facilities. Of all the cases reviewed here, only one case (*re Patrick, L.M.*, 2003) involved testimony that addressed the presence of ADHD in itself. All the other cases involved testimony that lumped ADHD with other co-morbid disorders such as Asperger’s Syndrome (e.g., *Schoenwetter v. Florida*, 2010), Conduct Disorder and Borderline Personality Disorder (e.g., *Illinois v. Ramsey*, 2010). In some cases, expert testimony offered by mental health professionals focused on specific or isolated symptoms, not necessarily in the context of ADHD as a syndrome or a disorder. For instance, in *The People v. Thornton*, 2007, expert testimony addressed neurological deficits in the defendant, which was linked to possible hyperactivity, but made no direct allusion to ADHD. In *re Brian J.*, 2007, the evidence emerging from the expert testimony, offered by a psychologist, highlighted impulsivity, as well as the differential ability to contextually control behavior, but not in the context of the specific diagnosis of ADHD.

Several cases involved expert testimony that linked ADHD with the defendant’s functioning and highlighted the relevance of the disorder to the legal standard in

question. For example, in *New Mexico v. Gutierrez*, 2011, a clinical psychologist testified about the impact of ADHD on the young defendant's ability to understand Miranda and stated that ADHD could cause a diminished ability to focus, which might have impacted the defendant at the time Miranda rights were read. Similar testimony was offered by a psychiatrist in *Illinois v. Morgan*, 2002. In *Illinois v. Ramsey*, 2010, a psychiatrist expert witness testified about the defendant's symptoms, as well as the potential impact of mental status on his ability to conform to the law. In *re Brian J.*, 2007, the expert witness opined that the defendant was not in control of his behavior due to the impact of his mental disorders, including ADHD. Several cases involved expert testimony that addressed the link between the defendant's condition of ADHD and the need to consider rehabilitative services during sentencing (e.g., *United States v. A.F.F.* 2001; *re AJF*, 2007; *People v. Bobby Martin Gonzales*, 2010). It is interesting to note that not all instances of expert testimony that addressed the link between the defendant's condition of ADHD and the legal standard in question have favored the defendant's position. For example, in *re AJF*, 2007, the expert witness did testify that ADHD is associated with impulse control issues, but did not indicate that this accounted for the defendant's ability, or lack thereof, to control his actions. Similarly, in *The People v. Bobby Martin Gonzales*, 2010, the expert witness testified that impulsivity could have affected the defendant's judgment in deciding to plead guilty, but conceded that there was no real evidence that this was definitely the case. Essentially, while the witness addressed how impulsivity can play a role in making poor decisions in individuals with ADHD, he could not definitively say that was the case with this defendant.

The Court's perspective regarding the role of ADHD in relation to the legal proceedings. Analysis of the court decisions reveals several instances in which the court was convinced by the expert testimony in regards to the impact of ADHD on the youth defendant, although this did not necessarily mean that the court ruled in favor of the defendant. In *re Brian J.*, 2007, the Appellate court determines sufficient evidence of risk associated with mental disorder, based on expert status of the witnesses, the testimony's focus on observed behaviors rather than on speculations and the link drawn between the youth's risk behaviors and his diagnosis. Notably, in this case the appellant was trying to prove that his functioning was *not* impaired by ADHD/other mental

disorders and that his sentence should end. However, the appellate court was convinced that the youth's mental disorders, including ADHD, continued to have an impact on his functioning (despite his opposite claim) and affirmed a two-year extension of his sentence. In *re AJF*, 2007, and in *Schoenwetter v. Florida*, 2010, the appellate court was convinced by evidence that did not support an impulsive behavior on the part of the defendant at the time of the crime and that therefore ADHD did not reduce culpability. In *State v. Morgan*, 2001, the court was convinced by the probation officer's testimony that treatment for ADHD was available in adult facilities and was equivalent to treatment available in juvenile facilities. Similarly in *re Patrick, L.M.*, 2003, the court accepted testimony regarding the defendant's diagnosis of ADHD and his need for treatment but also accepted testimony that the defendant would get better treatment (longer term, more supervision) in an adult facility. In both these cases the court affirmed denial of waiver and allowed trying the youths as adults.

In several cases the court was convinced by expert testimony that advocated for rehabilitative services for the young defendant as part of the sentencing consideration. In the *United States v. A.F.F.* 2001, the court was convinced by testimony from the mental health expert, who testified that the defendant is likely to benefit from rehabilitation and therapeutic interventions. Since such interventions are more likely to be available in the juvenile system than in the adult criminal system, the court denied State's motion to waive, allowing the defendant to be tried and sentenced, if convicted, as a juvenile. In *re D.D.*, 2003, the court accepted the psychologist's testimony as "most credible". The court ruled that waiver was inappropriate because it would deprive the defendant, if convicted, of the necessary rehabilitation services.

The courts' consideration of expert's testimony about the ADHD did not always result in the court's understanding of the nature of the disorder and its impact on functioning. This was usually related to deficits in expert testimony, as reflected in the court's decisions. For example, in *New Mexico v. Gutierrez*, 2011, the court states that "notwithstanding Child's ADHD diagnosis, there is no evidence that he lacks sufficient intelligence to have understood his rights or the consequences of waiving them." This implies an incomplete understanding of the impact of ADHD, despite the expert's testimony. Here the court states that "as long as there is a sufficient level of intelligence, ADHD could not have interfered with his ability to understand Miranda." There is no

evidence in the court decision that the court has been educated by the expert witness about deficits in executive functioning due to ADHD even in the presence of normal intelligence. In *Tennessee v. Guy*, 2008, the Appellate court cited the defendant's medication refusal as evidence for low rehabilitation potential and therefore agreed that trial court refusal to apply alternative sentencing was appropriate. There is no evidence in the court decision that the court has been educated by the expert witness about other, non-medication-based, treatment options for ADHD. Similarly, in *re Patrick L.M.*, 2003, the court agreed that the defendant needed treatment for ADHD, but seemed to focus only on the duration of treatment available in an adult facility vs. a juvenile facility. In its decision, the court did not seem to address best practices for treatment of ADHD, nor was there a mention of such evidence in the expert's testimony. However, it is important to note that the current analysis is based on the text of the decisions, which is not as comprehensive as the cases' transcripts. Thus, it is possible that these issues were reflected in the procedure itself, albeit not mentioned in the decisions.

Unlike the cases described above, there were several instances in which the court's decisions reflected an understanding of the nature of ADHD, especially in relation to treatment needs. In *United States v. A.F.F.* 2001, the court recognized the need for more than medication in order to effectively treat ADHD. The court recognized that adequate treatment including therapeutic interventions was not available via the adult system and allowed the young defendant to be tried as a juvenile. Similarly in *re D.D.*, 2003, the court exhibited understanding of clinical considerations of ADHD. The court considered evidence such as the impact of mental conditions on the defendant's rehabilitation potential, his response to prior treatment, and his support system in reaching a decision that allowed the defendant to be tried as a juvenile.

Finally, in several cases, the court's sentencing decision reflected the weight the court assigned to the defendant's condition of ADHD in considering the public good vs. the benefit to the defendant. In *re AJF* (2007) the consideration regarding the public safety outweighed the consideration for individual rehabilitation needs. The court weighed mitigating factors against the severity of the crimes (first degree murder, aggravated robbery, burglary, criminal sexual conduct and second degree assault, and kidnapping) and found that the severity of the crimes outweighed AJF's treatment needs or the likelihood of his success of rehabilitation. In *State v. Morgan* (2002) the court

considered availability of rehabilitation services in an adult facility and weighed the potential for the defendant's treatment success in such a facility against the need to protect the public safety. The court concluded that the need to protect society was greater in this murder in the first degree case, especially in light of defendant's potential for rehabilitation in the adult facility. The court noted that in spite of testimony about the defendant's fragile emotional state, and despite the fact that he clearly required treatment, his psychological impairment was so great that his potential for rehabilitation within the facilities that were available to the juvenile system were unlikely. Paradoxically, as this case demonstrates, severe psychological impairment in a juvenile offender can sometimes lead the court to assign less weight to the rehabilitative potential factor.

On the other hand, in *United States v. A.F.F.* (2001), the consideration for individual rehabilitation needs ultimately outweighed the consideration for the public safety. Despite the severity of the crime (murder of an infant), the court gave greater consideration to the defendant's realistic chances of succeeding in rehabilitation. In its decision, the court stated "there is a statutory presumption in favor of treating the offender as a juvenile" (in *A.F.F.*, 2001). Based on this presumption and in light of the juvenile's psychological impairment, and despite the severity of the charges, the court determined that the youth should be tried as a juvenile, so that he would have access to rehabilitation programs available in the juvenile system. Similarly, in considering the defendant's potential for rehabilitation in *re DD* (2003), the court decided to deny waiver so as to allow defendant, if convicted of charges of robbery, attempted murder and aggravated assault, access to necessary rehabilitation services. The court determined that the potential for individual rehabilitation outweighed the consideration for the public safety. In this decision of first impression, the court specifically focused on the need to provide treatment for defendants who were diagnosed with mental illness (ADHD in this case). In denying the waiver motion, the court set a precedent that gave greater consideration to the defendant's mental health needs than that of the public interest, even when the charges were of a very serious nature. In other words, the Superior Court of New Jersey ruled that for youth offenders, presence of mental impairment (such as ADHD) should be considered as a mitigating circumstance in outcome, regardless of the severity of the offense.

Perhaps the most telling case in terms of the relative weight courts assign to the public good vs. the benefit to the defendant is that of Patrick L.M, 2003. The youth, who was diagnosed with ADHD, was charged with five counts of first-degree sexual assault (four of which as party to the crime) and one count of kidnapping as party to the crime, appealed the order of the circuit court in Milwaukee County to transfer him to an adult court. The Court of Appeals of Wisconsin affirmed the waiver. In addressing the potential compromise of treatment available for the defendant in an adult facility, if convicted, the Court of Appeals noted that the juvenile court did not abuse its discretion even though it acted in a manner that was contrary to the best interest of the juvenile. The appellate court concluded that the law did not require the court to assign more weight to factors that related to the best interest of the juvenile than factors that related to the best interest of the public, thus highlighting the lack of standardized method to determine the relative importance of the defendant's benefit vs. the need to protect the public good.

Discussion

This paper describes an exploratory qualitative study utilizing thematic content analysis of court decisions that involve young defendants with ADHD. The findings offer insights on several processes that take place during adjudication: The courts' interpretation of the impact of ADHD on the defendant's functioning during the various phases of the adjudicative process; the nature of expert testimony about the condition of ADHD and its impact on defendants' functioning in the adjudicative context; and on the consideration that courts give to evidence-based clinical information on ADHD in the adjudicative decision-making process.

Results indicate that testimony addressed the cognitive and behavioral impact of ADHD on the defendant's functioning in terms of understanding the adjudicative process (i.e., Miranda, implications of a guilty plea), the defendant's ability, or lack thereof, to appreciate the consequences of the crime or to control his behavior and conform to the law, and the defendant's treatment needs in the context of sentencing decisions. The findings suggest court interpretation and treatment of a defendant's ADHD diagnosis varies across cases, jurisdictions, and phases of the legal procedure, to the extent that these have been represented in the current analysis. Much of this

variability is grounded in statutes that allow the courts considerable flexibility in deciding on the relevancy of the disorder, especially in waiver and sentencing decisions. Thus, the courts often rely on expert testimony regarding the presence of the disorder and its impact on the defendant's functioning in order to arrive at a decision.

In the cases analyzed here, the courts allowed testimony regarding ADHD in relationship to all adjudication phases, including the insanity defense. Usually courts were convinced by testimony regarding ADHD in that they did not challenge the validity of the diagnosis, but in some cases the courts were not convinced the disorder had caused any impairment in the defendant's functioning. Generally speaking, evidence regarding the diagnosis was not sufficient, in itself, for the courts to make decisions that incorporate consideration of the disorder's impact on the defendant's functioning (as in the case of decisions about *Miranda*, competency or capacity) or future treatment needs (as in the case of sentencing decisions). The court's consideration of ADHD in decision making seems to be associated with the nature of evidence provided in expert testimony. Consistent with Gudjonsson & Young (2006), analysis of testimony content in the court decisions discussed in this paper suggests that mental health professionals do not always accurately and properly explain the nature of ADHD, its etiology, and its impact on behavior or information processing (i.e., deficits in cognitive or behavioral inhibitions, or deficits in attention that may result in poor information processing). Nor do they seem always educated in regards to the legal standard at hand when testifying about the defendant's condition of ADHD. This was apparent in cases where expert testimony focused on specific symptoms, not necessarily in the context of ADHD as a disorder, or in cases where expert testimony made no linkages between ADHD and the defendant's functioning or the legal issue at hand.

The current findings suggest that when experts testify about the impact of ADHD on a case-relevant behavior or aspect of the defendant's functioning, the court is more likely to take the disorder into consideration in its decision than when experts' testimony simply states that the defendant is diagnosed with the disorder without relating the diagnosis to a case-relevant aspect of functioning, or when the experts' testimony lumps ADHD with other disorders. Courts' considerations for the defendant's diagnosis of ADHD were reflected mainly in decisions to try the defendant as a youth and to allow for rehabilitative options to be factored into sentencing decisions. Courts

were less likely to factor the defendant's diagnosis of ADHD into decisions about capacity and competency. Only one case, the *People v. Ramsey*, 2010, involved expert testimony that directly linked ADHD with the inability to control behavior and conform to the law. The appellate court overturned the conviction in this case, stating that the lower court should have used a broader definition that required the defendant to prove that he experienced "inability to conform" as a result of his mental disorder. Other cases that addressed capacity and competency did not result in courts' decisions in favor of the defendant, possibly because expert testimony did not sufficiently highlight the impact of ADHD on the ability to appreciate the consequences of, or control antisocial behaviors, and to effectively participate in the adjudication process.

The current findings support Eme's (2008) recommendations that professionals in the criminal justice system, who are involved in the adjudication of youth, should be educated about ADHD and its impact on criminal behavior. Indeed, professionals from the legal field (attorneys, judges, legislators) who are involved in the adjudication of youthful offenders with ADHD, must seek significant input from experts in the fields of clinical and developmental psychology in order to understand the nature of ADHD and its impact on the defendant's functioning during the various adjudicative stages, especially in relationship to the defendant's ability to actively and meaningfully participate in the various adjudicative processes. However, the findings also suggest that mental health professionals who serve as expert witnesses in cases that involve young defendants with ADHD should be educated about ADHD's impact on the defendant's functioning in relationship to the various phases of the adjudicative process. Furthermore, mental health professionals who serve as expert witnesses should also be trained in the relevant legal standards in order to ensure that their testimony can be useful as courts make decisions about due process and sentencing of young defendants with ADHD.

The strengths of this study lie in the analysis of cases from various jurisdictions, which offers a broad perspective. Analysis of cases that address different phases of the adjudicative process offers support for findings from the literature on the impact of ADHD on various aspects of defendants' functioning (e.g., Corriero, 2006; Feld, 2000; Gudjonsson & Young, 2006) .

This study features several limitations. First, the findings are based on only a few cases that are available via public domain channels and that meet the inclusion criteria. Moreover, only cases that allowed testimony about ADHD were included, thus introducing a selection bias into the analyses. Finally, court decisions are limited in the information they contain in that they provide summary of testimony rather than actual testimony. In future studies, analysis of actual court transcripts may yield a more comprehensive data, especially if more cases are available for analysis. Moreover, future research should focus on analysis of a more exhaustive sample of cases, possibly utilizing a quantitative content analysis based on coding of themes and categories revealed in the present analysis.

Despite these limitations, and given the scarce body of knowledge about this topic in the literature, the exploratory qualitative design employed here is empirically appropriate. The current findings underscore the need for collaboration between criminal justice professionals and mental health experts. Joint workshops or education days are crucial in order for the system to better serve the needs and rights of young defendants with ADHD.

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About the Author(s)

Orly Calderon, Psy.D., is a New York state Licensed Psychologist and Associate Professor at Long Island University, teaching courses in research design, program assessment and evaluation, psychopathology, and psychological evaluation of children. Dr. Calderon earned her B.S. in psychology and education from

Long Island University, her M.A. in developmental psychology from Teachers College, Columbia University, and her Psy.D. in school and community psychology from Hofstra University. Dr. Calderon’s work focuses on two major scholarly areas: research in innovative educational outcome assessment strategies (examples include ethical awareness development among social work students, and faculty and students’ responses to blended learning), and investigation of psychosocial needs of populations at risk (examples include immigrant youth, and youth with ADHD). Dr. Calderon’s teaching philosophy encourages students to engage in critical thinking and in experiential learning, while integrating the latest teaching technology in order to prepare her students for practice in the 21st century. In addition to her teaching responsibilities at the university Dr. Calderon provides training for other professionals in the USA and elsewhere on topics such as: Best practices in psychological and psychosocial evaluations; program outcome assessment and more. She has served several times as an expert witness in court cases that involve youth at risk. Correspondence concerning this article should be addressed to Orly Calderon, School of Social Work, Long Island University, 720 Northern Blvd. Brookville, NY, 11548. Email: orly.calderon@liu.edu.

Appendix 1.

Court Decisions Characteristics

Charge *	Murder	Attempted murder	Unlawful taking of a vehicle	Reckless vehicular homicide	Robbery	Burglary	Home invasion	Criminal sexual conduct	Aggravated criminal sexual assault	Molestation of a child	Assault	Kidnapping
	8	3	1	1	3	4	1	2	1	1	2	3
Co-morbid disorders**	Fetal Alcohol Syndrome	Frontal Lobe Damage	Asperger's Disorder	Low IQ	Borderline Personality Disorder	Conduct Disorder	Depression	Oppositional Defiant Disorder	Trauma	Antisocial personality disorder	Pedophilia	Learning disorder
	1	1	2	2	1	2	2	4	1	1	1	1

* Represents the number of individuals with these charges, not the total number of charges

** Represents disorders as they are listed in the court decisions, not necessarily fitting with formal DSM terminology