A review study of juvenile antisocial behaviors related to intellectual and developmental disabilities (including forensic and/or criminal issues)

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Preface

In this report, we discuss association of developmental disabilities and antisocial behaviors. In the United States, the American Psychiatric Association (APA) apparently defines that delinquency in childhood strongly associates with conduct disorder (CD) or oppositional and defiant disorder (ODD) (Burke, Waldman, & Lahey, 2010). The research strongly supports the predictive validity of these diagnoses by showing that they predict both future psychopathology and enduring functional impairments. In addition, children with CD significantly tend to suffer from antisocial personality disorder (APD) when they grow up (after 18 years old) (Kimonis & Frick, 2010). Etiology of CD and/or ODD has not been found yet; however, these disorders were categorized in developmental disabilities (DD), which include intellectual disability (ID), learning disorders (LD), autism spectrum disorders (ASD), attention deficit/hyperactivity disorder (ADHD), and so on. All of the DD are caused by brain dysfunction. In the DD, ADHD is a highly prevalent disorder with significant functional impairment. ADHD is frequently complicated by oppositional symptoms, which are difficult to separate from comorbidity with ODD, CD, and aggressive symptoms. ADHD is most intensively studied than any other

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DD from many different aspects. There have been researches addressing the impact of oppositional symptoms on ADHD, disease course, functional impairment, clinical management, and treatment response. We reviewed the articles and found that ODD or CD might be comorbid in more than half of ADHD cases and were more common with the combined than with the inattentive ADHD subtype. Comorbid symptoms of ODD and CD in individuals with ADHD could have a significant impact on the course and prognosis for these individuals and might lead to differential treatment response to both behavioral and pharmacologic treatments. Hence, assessment of oppositional symptoms is an essential part of ADHD screening and diagnosis and should include parental, as well as educator, input. Although clinical evidence remains limited, some stimulant and nonstimulant medications have shown effectiveness in treating both core ADHD symptoms and oppositional symptoms. Oppositional symptoms are a key consideration in ADHD management, although the optimum approach to treating ADHD complicated by such symptoms remains unclear. Future research should focus on the efficacy and safety of various behavioral and medication regimens, as well as longitudinal studies to further clarify the relationships between ADHD, ODD, and CD (Connor, Steeber, & McBurnett, 2010).

As other developmental disabilities, CD is significantly more common in boys than girls, and increases in prevalence with age. On the other hand, gender differences in ODD vary by researchers. Estimates of age trends in ODD depend heavily on treatment of overlaps with CD (Maughan, Rowe, Messer, Goodman, & Meltzer, 2004). CD and ODD showed high levels of overlap, and both diagnoses showed substantial comorbidity with other non-antisocial disorders. Some children comorbid ASD with CD, and some children with ADHD more tend to comorbid CD or ODD than typically developed children (Fowler et al., 2009; Hazell, 2010). Of course antisocial behaviors were more or less influenced by psycho-social factors, including socio-economic status, living or family environment, and so on. However, growing up in the same environment, some children are diagnosed as CD or ODD, but the others are not. In addition, some show antisocial behaviors, but the others
never show them.

As a whole, children with DD are unfortunately more likely to involve into crimes. In this report, we discuss forensic and/or criminal issues related to ID or DD, which are caused by brain dysfunction.

I. Intellectual Disabilities and the Death Penalty

First of all, we briefly describe the case “Atkins vs Virginia.” The case involved Daryl Renard Atkins, who was convicted of capital murder and sentenced to death for abducting, robbing, and killing 21-year-old airman, Eric Michael Nesbitt. The evidence introduced at trial showed that at approximately midnight on August 16, 1996, Atkins and William Jones, both armed with semiautomatic weapons, abducted Nesbitt, robbed him, drove him to an automated teller machine, forced him to withdraw additional cash, and then took him to an isolated location where they shot him eight times at close range (Cornell University, 2010).

Atkins vs Virginia 536 U.S. 304” is a case in which the Supreme Court of the US (in a 6 to 3 decision) ruled that executing individuals with ID violates the Eight Amendment’s ban on cruel and unusual punishments. Although Daryl Atkins with intellectual disability and William Jones without ID are never remissible. Finally, Atkins was sentenced life imprisonment in June, 2009. We reviewed other past similar cases as Atkins vs Virginia. We centered on how “Intellectual Disability” can be defined: Assessing IQ, Assessing Adaptive Skills. In the case, psychological testimony was influential because this testimony struck at the very core issue in the case: namely, whether or not the individual was mentally retarded. Despite the importance of psychological testimony, courts had not been made to understand the subtleties and complexities of the issues in diagnosing ID. There were five IQ related issues: (a) the nature of intellectual functioning, (b) the Flynn Effect, (c) measurement error, (d) practice effects, and (e) the nature of school "diagnoses" (Greenspan, 2009). We found that examples of each of these issues were illustrated with an actual Atkins case.
Atkins v. Virginia is a case that has changed the landscape in relation to the assessment of malingering in a legal context. This landmark decision abolished the death penalty for defendants found to have ID, but limitations in our assessment techniques lead to questions regarding the veracity of ID claims (K. L. Salekin & Doane, 2009). In fact, Justice Scalia noted with clarity that concerns exist regarding the ability of individuals to feign ID and to do so successfully. We noticed that little empirical research has been completed, but that which exists demonstrates an overall lack of validity for traditional measures of cognitive malingering for use with persons with ID.

Under Atkins vs Virginia, the Eighth Amendment exempts from execution individuals who meet the clinical definitions of mental retardation set forth by the American Association on Intellectual and Developmental Disabilities and the American Psychiatric Association. Both define ID as significantly subaverage intellectual functioning accompanied by significant limitations in adaptive functioning, originating before the age of 18. Since Atkins, most jurisdictions have adopted definitions of ID that conform to those definitions. In the US, however, some states, apply exclusion criteria that deviate from and are more restrictive than the accepted scientific and clinical definitions. These state deviations have the effect of excluding from Atkins's reach some individuals who plainly fall within the class it protects (Blume, Johnson, & Seeds, 2009). We hereby would like to address that the state deviations, which permit what Atkins did not: the death-sentencing and execution of some capital defendants with ID.

In DSM-V, which will be published in 2013 by APA, Mental Retardation will be changed to Intellectual Disability in its diagnostic name and degree of severity by IQ scores will be deleted. We have to focus on the issues relating to the second prong of the definition of ID: adaptive behavior. Comparing to US or European countries, in Japan, there is no assessment tools of adaptive behaviors which is definitely necessary for making a diagnosis of ID in cases such an Atkins. It is very important that using standardized assessment instruments, self-report, selection of respondents, use of collateral information, malingering, and clinical judgment.
While there have been no standardized instruments for assessing adaptive skills, gullibility and credulity should be focused on adaptive skills in individuals with ID in the future.

II. Psychopathy

In 1982, Cleckley reported that the individuals with ‘Psychopathy’ show normal to above-normal physiological responses to perceived potential threats, and their crimes tended to be unplanned and impulsive with little thought of the consequences (Cleckley, 1976). The psychopaths (i.e. the individual with psychopathy) have hot tempers, tend to reactive aggression, experience normal to above-normal levels of anxiety, but are nevertheless highly stimulus-seeking and have trouble tolerating boredom (Verona, Patrick, & Joiner, 2001). The psychopaths’ lifestyle may lead to depression and even suicide. Primary psychopathy is defined as the root disorder in patients diagnosed with it, whereas secondary psychopathy is defined as an aspect of another psychiatric disorder or social circumstances (Andershed, Kohler, Eno Louden, & Hinrichs, 2008). Today, primary psychopaths are considered to have mostly Factor 1 traits (arrogance, callousness, manipulativeness, lying) from the Hare’s Psychopathy Checklist Revised (PCL-R), whereas secondary psychopaths have a majority of Factor 2 traits (impulsivity, boredom proneness, irresponsibility, lack of long-term goals). (Andershed, et al., 2008; Decuyper, De Fruyt, & Buschman, 2008; Hare, Clark, Grann, & Thornton, 2000) Dr. Hare believes that the DSM should list psychopathy as a unique disorder, given that psychopathy has no precise equivalent in either the DSM-IV-TR, (Hare & Neumann, 2008) where it is most strongly correlated with the diagnosis of antisocial personality disorder, or the ICD-10, which has a partly similar condition called dissocial personality disorder.

Psychopathy is thought by many to be an untreatable disorder. In the review research of the treatment of psychopathy, treatment for adults showed low to moderate success with three of eight studies demonstrating treatment gains. Treatment of youth appears to be more promising with six of eight studies showing
treatment benefits (R. T. Salekin, Worley, & Grimes, 2010). We also found that there is the mental models approach for the treatment of psychopathy in youths. If the approach is truly effective, psychopathy could be treatable in someday. We found another treatment approach. Antisocial personality disorder, psychopathy, and violence are related to each other: hence, there is a three factor model of personality traits. In the model, personality disorders precede the development of a categorical two factor model of impulsive versus remorseless violence. A paradigm of proactive, medical, and school based early intervention and prevention is advocated as a useful addition to the reactive detention of criminal justice. Integration of psychological tests, neuroimaging, and genomic data in early childhood and school based intervention strategies to prevent the development of conduct disorder and attenuate criminal propensity inform this approach (Peters, 2010).

Associations between psychopathy and developmental disabilities have been reported (Dadds, Fraser, Frost, & Hawes, 2005; de Oliveira-Souza et al., 2008; Fowler, et al., 2009; Gadow, Devincent, & Schneider, 2008; Malterer, Glass, & Newman, 2008; D. A. Pardini, Lochman, & Powell, 2007; Rogers, Viding, Blair, Frith, & Happe, 2006; R. T. Salekin, Neumann, Leistico, & Zalot, 2004). Although there remains critique against this association, (M. Fitzgerald, 2001; M. F. Fitzgerald, 2007) and quite recently there was the study reporting no association between Asperger’s disorder, who is one of the ASD, and crimes, (Hippler, Viding, Klicpera, & Happe, 2009) individuals with developmental disabilities (AD/HD in particular) unfortunately have higher tendency to conduct antisocial behaviors than those who without developmental disabilities.

III. Callous-Unemotional (CU) traits

Oppositional and aggressive behaviors in children twelve years old or under are frequent cause of concern for parents and teachers, and one of the common reasons for referral to child and adolescent psychiatry. While most children outgrow these behaviors, a small subgroup is at risk for developing persistent antisocial behaviors
in later life. Early identification of children at this risk can prevent potential suffering of themselves, their family, (a) potential victim(s), and the society. However, predicting which children are at higher risk for future antisocial behavior is intricate and associated with the perils of mislabeling. Recently, promising approaches for early identification of boys at risk for future antisocial behavior have been developed. These include assessments of risk factors and evaluation of callous and unemotional (CU) traits. CU traits were discovered by Frick and colleagues in 1994 as best representing Psychopathy in youth. (Frick, O'Brien, Wootton, & McBurnett, 1994) CU traits are defined as patterns of emotional dysregulation, such as a pronounced lack of empathy, remorselessness and shallow affects. Callous and unemotional (CU) traits have been linked to severe antisocial behavior in youth. Based on prior research, it was hypothesized that childhood anxiety and parenting practices would interact to predict changes in CU traits over time. One of the researches tested hypotheses were using a sample of 120 moderate to highly aggressive fifth graders followed over a 1-year period. (D. A. Pardini, et al., 2007) . Although CU traits displayed moderate temporal stability and predicted increases in antisocial behavior, evidence suggested that these features were not immutable. Children exposed to lower levels of physical punishment showed decreases in CU traits over time, whereas higher levels of child-reported parental warmth and involvement predicted decreases in both CU traits and antisocial behavior over time. Lower levels of anxiety were uniquely related to increased CU traits for children who described their primary caregiver as exhibiting low warmth and involvement. Research suggests that children and adolescents with a callous and unemotional interpersonal style tend to exhibit a particularly severe and persistent form of antisocial. (Frick et al., 2003; Hawes & Dadds, 2005; D. Pardini, Obradovic, & Loeber, 2006)

There have been centered on CU traits in the US and other European nations; however, astonishingly, there have never been reported CU traits in Japan. Since association between CU traits and AD/HD or Conduct Disorder has been reported, (D. Pardini, et al., 2006) it is possible to prevent children with those developmental
disabilities from developing antisocial behavior in the future. One of our researchers (Osada) has already contacted with Dr. Frick and got permission of translating the Inventory of Callous Unemotional traits (ICU), which Dr. Frick developed, into Japanese. The purpose is to examine usability of Japanese version of the ICU in Japanese populations, including testing association with the aforementioned JIAT and developmental disabilities (e.g. ASD, AD/HD) with my colleagues (a criminal lawyer, and a criminal, correctional psychologist, and a psychiatrist). Confirming the usability of the Japanese version of the ICU, it is possible to early identifying the children with CU traits and preventing them from developing antisocial behaviors in the future. The future research can show evidence to prevention of juvenile forensic issues at least relevant to mental health problems.

References
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