The Relationship Between Oppositional Defiant Disorder, Conduct Disorder, Antisocial Personality Disorder and Psychopathy: A Proposed Trajectory

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This review paper critically examines the literature on oppositional defiant disorder (ODD), conduct disorder (CD), antisocial personality disorder (APD) and psychopathy. Through examining diagnostic criteria laid out in the DSM-IV along with statistics related to diagnosis and prognosis, the idea that ODD, CD, and APD may fall on a developmental trajectory as opposed to being distinct, categorical entities is proposed. Additionally, the notion that these three disorders may represent narrow, behavioural indicators of a general psychopathic personality is suggested using comparisons to Hare’s Psychopathy Checklist Revised (PCL-R). Several implications related to child development, family instability and violence, as well as labeling and stigma are discussed and the importance of family intervention and involvement is highlighted. Finally, a number of implications related to the criminal justice system, including the prediction of conviction and recidivism rates, are explored.

The construct of psychopathy has had a long history within the literature of clinical and forensic psychopathology, constantly evolving through revisions of the Diagnostic and Statistical Manual of Mental Disorders (DSM) used extensively by psychologists. It was identified by clinical psychologists as one of the first acknowledged personality disorders, called ‘Psychopathic Personalities’ and was published in the first edition of the DSM as ‘Sociopathic Personality Disorders’ (Ogloff, 2006). The DSM-II changed this label to ‘Personality Disorder, Antisocial Type’ in 1968 (Ogloff, 2006), which has ultimately progressed to the current title ‘Antisocial Personality Disorder (APD)’ in the most recent version, the DSM-IV-TR (American Psychological Association, 2000). Historically, the terms asocial, sociopath, psychopath, and APD have been used interchangeably; however, recent improvements in nosology have helped to clarify the distinction between them. The largely case study/clinical description-based format of the DSM-II evoked criticisms of poor inter-rater reliability which led to the development of the specific-criteria approach used in current versions of the DSM today (Ogloff, 2006). Now, criteria in the DSM are based on overt behavioural traits that can be observed and measured instead of relying on the often ambiguous interpersonal and affective personality characteristics used to infer diagnoses in the past (Coid & Ullrich, 2010). This improvement helped distinguish between APD and general psychopathy, with the former construct focusing on the overt antisocial behaviours of such individuals and the latter characterizing a more overarching personality style involving interpersonal, affective, and behavioural dimensions (Ogloff). Drawing this distinction between behavioural and personality factors undoubtedly helped resolve some of the inter-rater reliability criticisms from the past. However, in doing so, it has generated the notion that overt behaviours can actually be separated from personality factors, and that mental disorders and personality disorders are real and distinct categorical entities with independent characteristics. That being said, a large body of literature supports the idea that APD, and several other disorders diagnosed in childhood and adolescence, are actually on a continuum with psychopathy and may be specific points along a developmental trajectory rather than distinct diagnostic categories (Burke, Waldman, & Lahey, 2010; Coid & Ullrich). A diagnosis of Oppositional Defiant Disorder (ODD) and/or Conduct Disorder (CD) in childhood or adolescence often precedes the

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development of APD in adulthood, all of which may serve as narrow, behavioural indicators of a general psychopathic personality. Examining these behavioural disorders from a developmental standpoint is important as several implications related to child development and the criminal justice system can be drawn.

The DSM-IV-TR describes ODD as a pattern of “nagative, defiant, disobedient, and hostile behaviour towards authority figures” (Rowe, Costello, Angold, Copeland, & Maughan, 2010, p. 726) lasting at least six months and causing significant distress or impairment in the child’s life. Some typical behaviours include irritability, frequently losing his or her temper, arguing with adults, deliberately provoking people, and blaming others for his or her own misbehaviour (American Psychiatric Association, 2000). This behavioural disorder usually onsets early in childhood, around two to four years of age, and is characterized by a display of oppositional behaviours and emotions in contexts involving other people, particularly those in positions of authority (Hofvander, Ossowwki, Lundstrom, & Anckarsater, 2009). There has been some speculation as to whether these behaviours are indicative of an actual disorder or are merely typical childhood acts of rebellion (American Psychiatric Association, 2000). However, it is the persistence of these behaviours (i.e., lasting at least six months) and their ability to cause significant distress in a child’s life that distinguishes between such normal acts of rebellion and clinically-disordered behaviour (American Psychiatric Association, 2000). Additionally, several longitudinal studies have noted striking similarities between ODD and other childhood disruptive behaviour disorders (e.g., ADHD, CD) and have proposed that they may reflect manifestations of the same behavioural disorder at different stages in development (Burke et al., 2010).

Rowe et al. (2010) assessed cohorts of children aged three to seven to examine the predictive validity of ODD to CD. They found that ODD was a significant predictor of child-onset CD with 79% of the children diagnosed with CD meeting diagnostic criteria for ODD directly before, or at the same time as the CD diagnosis. Other longitudinal evidence confirms that ODD typically has an earlier onset and is more prevalent than CD, with ODD children being at greater risk of being diagnosed with CD later in life (Burke et al., 2010).

It is important to note that in order to be diagnosed with ODD, the child must not meet criteria for CD (American Psychiatric Association, 2000). However, clinical studies have demonstrated that 60 to 95% of CD cases include a comorbid ODD diagnosis (Rowe et al., 2010). Such a high rate of comorbidity in CD patients suggests that CD may be a more serious form of ODD along the same behavioural trajectory. It is also significant to note that ODD has been shown to predict later onset of CD, but there has been no confirming evidence of a reciprocal relationship (i.e., CD leading to ODD), thereby lending more support to the developmental pathway of these disruptive behavioural disorders.

Since CD is often seen as a more serious form of ODD, it is not surprising that many, if not all, of the features of ODD are usually present in cases of CD. CD is characterized by general violation of the basic rights of others, with other defining features including aggression towards people and animals, destruction of property, deceitfulness, theft, rule-breaking, and serious violation of societal norms (American Psychiatric Association, 2000). CD has an age of onset similar to ODD, with symptoms emerging as young as four to five years old, and can be diagnosed in childhood, adolescence, or adulthood (Hofvander et al., 2009). Of course, not all children diagnosed with ODD go on to develop CD (American Psychiatric Association, 2000); however, child-onset cases of CD are typically preceded by ODD and patterns of physical violence and family instability appear to be important factors in the transition (American Psychiatric Association, 2000; Rowe et al., 2010).

Milan and Pinderhughes (2006) examined the relationship between family instability and child development and suggested
that early patterns of instability are related to externalizing behaviour problems (e.g., outwardly defiant behaviour). The authors also found that:

“high levels of family instability increased the likelihood that a child would meet criteria for diagnosis [of a disorder in the DSM-IV] in third grade, beyond the predictive accuracy attained through early measures of behaviour problems from teachers and mothers (p. 53)”.

Furthermore, Campbell, Shaw, and Gilliom (2000) found that an early childhood environment with negative parenting and family stress combined with patterns of hyperactivity and aggression may exacerbate the progression of externalizing behaviour problems. Finally, Skodol et al. (2007) determined that positive childhood experiences (e.g., achievements, positive relationships, and competent caretakers) were associated with better prognoses and remission from certain personality disorders. The results of these studies lend support to the notion that an unstable family environment may be a contributing factor in the progression from ODD to child-onset CD. However, the relationship between ODD and adolescent-onset CD is less clear and further research is necessary to understand how they are related (Burke et al., 2010).

The relationship between CD and APD, however, is quite well understood in psychopathological literature. In fact, one of the diagnostic criteria for APD, as laid out in the DSM-IV-TR, is evidence of conduct disorder before the age of 15 (American Psychiatric Association, 2000). The fact that the DSM arranged these disorders in a hierarchical fashion suggests that they are at the very least related, if not variations of the same underlying disorder. Similar to the way ODD and CD are related, all of the behavioural manifestations of CD are present in APD on a more extreme scale. Other diagnostic criteria of APD include violations of social norms with respect to the law, persistent deceitfulness, impulsivity, recklessness, irresponsibility, and lack of remorse (Ogloff, 2006). Violence and criminality are two defining features of this disorder, with a significant proportion of people with APD engaging in a criminal lifestyle (Coid & Ullrich, 2010). The main theme underlying APD is a general disregard for the rights of others, often to the extent of manipulation for personal benefit. Both CD and APD are characterized by disruptive behaviour violating the rights of others, with APD being distinguished by a more encompassing antisocial lifestyle.

Not all cases of CD progress to a diagnosis of APD; however, numerous empirical studies have demonstrated a strong link between the two. Gelhorn, Sakai, Price, and Crowley (2007) noted that generally, around 40% of people with CD move on to develop APD. They tested this figure by examining a sample from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) and found the percentage to be significantly higher, with 75% of their sample of CD patients also meeting diagnostic criteria for APD at the age of 18 (Gelhorn et al.). Hofvander et al. (2009) suggested that approximately half of children with CD develop APD in adulthood, while another longitudinal study demonstrated that around one third of their sample of CD cases progressed to APD, which was interestingly around the same percentage of children with ODD that went on to develop CD (Burke et al., 2010).

Although many children and adolescents with ODD or CD outgrow their disorder and have symptoms that persist only at a subclinical level, the relationship of these two childhood disorders to APD is pronounced. The significant overlap in behavioural criteria needed to diagnose these three disorders and the fact that they are arranged hierarchically in the DSM-IV-TR suggests that they may be age-dependent manifestations of the same behavioural disorder along distinct points of a developmental trajectory ending in APD.

That being said, as previously discussed, the DSM-IV-TR utilizes a behavioural approach in developing diagnostic criteria to eliminate confusion and improve reliability of diagnosis between clinicians (Coid & Ullrich, 2010).
Since diagnoses of ODD, CD, or APD are restricted to observing only the behavioural manifestations of the disorder, it is plausible to suggest that all three of these disorders are related to the construct of psychopathy which encompasses behavioural, interpersonal, and affective characteristics of the antisocial personality not otherwise taken into account by clinicians using the DSM-IV-TR.

The Psychopathy Checklist Revised (PCL-R) developed by Robert Hare is a validated 20-item measurement tool used to assess a person’s level of psychopathy based on these behavioural, interpersonal and affective traits. Many of the behavioural dimensions assessed in the PCL-R are consistent with the diagnostic criteria laid out for APD (e.g., irresponsibility, impulsivity, violation of social norms). Interpersonally, psychopathic individuals come off as “grandiose, arrogant, callous, dominant, superficial, deceptive, and manipulative. Affectively, they are short-tempered, unable to form strong emotional bonds with others, and lacking in empathy, guilt, remorse, or deep-seated emotions.” (Hare, Clark, Grann, & Thornton, 2000, p. 624). It has been noted that certain items on the PCL-R also relate directly to ODD and CD (Coid & Ullrich, 2010). For example, criteria for diagnosing ODD in the DSM-IV, such as ‘often loses temper’, ‘argues with adults’, and ‘blames others for his or her mistakes or misbehaviour’ are directly related to ‘poor behavioural controls’ (item 3 on the social deviance factor) and ‘failure to accept responsibility for own actions’ (item 8 on the interpersonal/affective factor) on the PCL-R (American Psychiatric Association, 2000; Hare, 2003). Similarly, the criteria ‘deceitfulness or theft’ and ‘often lies to obtain goods or favours or to avoid obligations (i.e., “cons” others)’ necessary for a CD diagnosis are directly related to items 3 and 4 on the interpersonal/affective dimension of Hare’s PCL-R: ‘pathological lying’ and ‘conning/manipulative’ (American Psychiatric Association, 2000; Hare, 2003). Finally, CD criteria such as ‘often stays out at night, despite parental prohibitions, beginning before age 13 years’ and ‘is often truant from school, beginning before age 13 years’ directly correspond to ‘early behavioural problems’ and ‘juvenile delinquency’ in the PCL-R (i.e., items 4 and 8 on the social deviance dimension; American Psychiatric Association, 2000; Hare, 2003).

Coid and Ullrich (2010) also found a significant correlation between severity of APD and severity of psychopathy as measured by scores on the PCL-R, thereby supporting the notion that the two constructs are on a continuum. They noted that some of the criteria used to diagnose APD in the DSM-IV-TR (e.g., deceitfulness, irritability, aggressiveness, and recklessness) are essentially measuring the same things assessed in the PCL-R (e.g., being conning, manipulation, poor behavioural controls, and irresponsibility). Despite the significant correlation, not all individuals with APD are considered psychopathic. Because of the DSM-IV-TR’s focus on overt behaviours, all individuals with APD would satisfy at least some of the criteria laid out in the PCL-R, with the interpersonal and affective dimensions distinguishing the psychopathic vs. nonpsychopathic APD individuals. These findings suggest that APD may be a moderate form of psychopathy based upon a narrow subset of behavioural traits. Those individuals with APD also possessing the interpersonal and affective characteristics would score higher on the PCL-R and be considered psychopathic if a score of 25 or more was obtained (Coid & Ullrich, 2010).

These findings have several implications within the criminal justice system. As previously discussed, violence and criminality are two defining features of APD and therefore psychopathy (Coid & Ullrich, 2010). Heinzen, Kohler, Godt, Geiger, and Huchzermeier (2011) noted that IQ was an important factor in predicting conviction rates of antisocial individuals. They found that “individuals scoring high on interpersonal features of psychopathy are more intelligent than those scoring high on antisocial features” (Heinzen et al., 2011, p. 336). Applying this finding could help predict conviction and recidivism rates of antisocial offenders. Those individuals

ODD.CD.APD
achieving higher interpersonal scores on the
PCL-R would be more intelligent, more
manipulative, and be better at planning their
criminal endeavors (Heinzen et al., 2011).
Individuals scoring high on the antisocial
features component, however, would probably
offend more impulsively and have a greater
chance of getting caught.

A number of researchers have
demonstrated a significant correlation between
recidivism rates and psychopathy as measured
by the PCL-R. The DSM-IV-TR recognizes in
the associated features section of APD that the
construct of psychopathy has greater predictive
validity in relation to recidivism, especially in
prison settings (American Psychiatric
Association, 2000). Laurell and Daderman
(2005) also demonstrated this by looking at a
sample of convicted homicide offenders to
assess their psychopathy level and rates of
recidivism after getting out of prison. They
found that individuals scoring higher on the
PCL-R reoffended more frequently than those
achieving lower scores (Laurell & Daderman).
Understanding how ODD, CD, APD, and
psychopathy are related is very important in
terms of predicting developmental pathways of
disruptive children, as well as conviction and
recidivism rates of antisocial adults.

The extensive body of literature
attempting to describe, understand, and predict
the lives of individuals with a psychopathic
personality has been ongoing and constantly
changing within the last century (Ogloff, 2006).
Although the shift to a behaviourally-based
classification system of mental disorders has
improved the reliability of diagnosis between
clinicians using the DSM-IV-TR (Coid &
Ullrich, 2010), it has arguably also created the
perception that the diagnostic categories laid out
are real and distinct. Many have suggested that
APD may actually be on developmental
trajectory with childhood disruptive behavioural
disorders ODD and CD, rather than being
discrete categorical entities (Burke et al., 2010).
Since DSM-IV-TR personality disorder criteria
are based solely on overt behaviours, many have
also suggested that the three disorders being
discussed are developmental indicators of
psychopathy, a construct encompassing
behavioural but also interpersonal and affective
antisocial characteristics (Coid & Ullrich).

Generally speaking, many children meet
diagnostic criteria for ODD as young as age 3,
with only a small percentage progressing to CD
in childhood or adolescence and an even smaller
proportion going on to develop APD in
adulthood (American Psychological
Association, 2000). With the three disorders
having overlapping behavioural criteria
necessary for diagnosis, and a significant
proportion of APD and CD cases containing a
comorbid CD or ODD diagnosis respectively, it
becomes clear that ODD, CD, and APD may be
age-dependent manifestations of the same
underlying disorder.

Understanding this pathway is important
for children diagnosed at a young age since
family education and therapy efforts can be used
to control disruptive behaviours and potentially
intervene the developmental progression.
Roberts (1984) highlighted the importance of
parental involvement in treatment outcomes and
suggested that the ‘effect of the parents’
deployment of action positions has been detailed
both in terms of effective management of the
problems in the patient and in the production of
an emotional crisis in the adolescent” (Roberts,
p. 74). Wells and Egan (1988) found that a
social learning-based parent training therapy
was more effective at decreasing some of the
main disruptive behaviours that characterize
ODD than a traditional systems family
therapy approach. Elias (1997) went on to suggest that
treatment approaches in which parents are
trained to be ‘primary agents of change’ may
contribute to this greater efficacy through
education about the nature of their child’s
problems, clarifying responsibility, and
facilitating the transition of knowledge into
effective action. Finally, he found that
emphasizing work with parents as the main
focus of social learning family therapy may
have positive effects on the treatment of CD as
well.

That being said, it is important to
highlight the interaction of environmental and
genetic factors in the manifestation of
behavioural disorders such as ODD and CD. Inasmuch as patterns of family instability may contribute to the progression of a mental disorder, the initial development is more likely to occur in someone with a genetic predisposition to that behaviour. The reverse is also true. For example, Foley et al. (2004) examined a gene-environment interaction involving the monoamine oxidase A genotype in order to predict risk of conduct disorder in antisocial boys. They found that the mere presence of the monoamine oxidase A genotype only slightly increased the risk of development of CD; however, being exposed to an adverse childhood environment (such as family adversity, inter-parental violence, parental neglect, and inconsistent discipline) significantly increased the risk of a CD diagnosis. Complicating the effects even more, many behavioural disorders (i.e., ADHD, CD, and ODD) are inherited through a combination of multiple genes, not just a single one (Comings, 2000). This means that genes may exert their combined effects on various neurotransmitter systems and receptor sites (e.g., dopamine, serotonin, monoamine oxidase, and gamma-aminobutyric acid) and interact to characterize the behavioural patterns of ODD, CD, or APD. Separating out the effects may be difficult; however, it is important to acknowledge the interaction of both genetic and environmental factors in the development of behavioural disorders and their treatment.

Understanding this developmental pathway is also important in terms of labeling. The possibility of incorrect diagnoses at a young age is dangerous in terms of the negative implications that such a label may have on a child’s self-identity and development. However, there are potential benefits of diagnosis and labeling that can be applied to the criminal justice system. Understanding how these behavioural disorders relate to psychopathy, as measured by scores on Hare’s PCL-R can help to predict conviction and recidivism rates of antisocial offenders (Laurell & Daderman, 2005). As previously mentioned, those offenders scoring higher on the ‘socially deviant lifestyle’ dimension may be more likely to reoffend due to boredom and poor behavioural controls than those scoring higher on the ‘personality aggressive narcissism’ dimension. This kind of information may be helpful during conviction or after an offender is released on parole.

The DSM-IV-TR has supported this notion that APD may be related to psychopathy. The American Psychiatric Association has even suggested the addition of an “Antisocial/Psychopathic Type” category in the personality disorders section of the DSM-V with an emphasis on personality and character (American Psychiatric Association, 2000). Additionally, researchers have also noted that the inhibitory control deficits and patterns of brain activity observed in individuals with Attention Deficit Hyperactivity Disorder (ADHD) are similar to those deficits present in individuals with CD, ODD, and APD. This finding has allowed some to speculate that ADHD may be another behavioural disorder falling somewhere along this spectrum (Barkley, 1997), which may prove to be another exciting avenue of future research.

As this paper presents, it is very important to be critical of psychological classification efforts and the implications that they may have on individuals. As our understanding of mental disorders changes over time, the corresponding nosology must also be updated and improved. It is this kind of analysis that has ultimately moved the DSM forward to the more reliable and valid classification system that it is today.

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References


