Unmasking the association between psychopathic traits and adaptive functioning in children☆

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ABSTRACT

The appearance of positive adjustment is a theoretically relevant element of psychopathy, and is valuable for demonstrating its incremental validity over a broader antisocial orientation. We examined associations between psychopathic-like features and two measures of adaptive functioning: psychometric intelligence and (immunity to) internalizing problems. Ratings of psychopathy and behavioral problems were obtained in a community sample of children (N = 1210). A bifactor model was fit to the psychopathic personality items to capture the underlying variance common to all traits (i.e., general factor) and to isolate a unique cluster of interpersonal traits. We hypothesized that the general psychopathy factor and specific interpersonal factor would exhibit opposing patterns of associations with external criteria. As expected, the general psychopathy factor was associated with greater anxiety/depression and lower cognitive ability. Contrary to hypothesis, the interpersonal factor was not associated with adaptive functioning (i.e., reduced internal distress or superior cognitive ability), although the predicted relations emerged after controlling for antisocial behavior. Hence, in a large representative sample of children, there is limited support for the premise that psychopathic traits are associated with positive adjustment and enhanced intelligence. Implications regarding the construct validity of psychopathy are discussed, including the role of heterogeneity in sample characteristics and instrument.

1. Introduction

1.1. Unmasking the association between psychopathic traits and adaptive functioning in children

Psychopathy is based on several seeming contradictions. On one hand, the prototypical psychopath is described as showing "good" intelligence, an absence of nervousness, and social potency (Cleckley, 1941; Lynam & Derefinko, 2006). In other respects, the same individual shows profound ineptness: unreliability, impulsiveness, lack of long-term goals, and proneness to fits of anger. The complex and multi-faceted structure of psychopathy stems from the co-occurrence of socially advantageous features, on one hand, and harmful, self-destructive traits on the other hand. This intriguing paradox led Hervey Cleckley (1941) to describe psychopathy as a "mask of sanity".

In order to jointly accommodate the socially strategic features (e.g., superficial charm) and undercontrolled behaviors, most instruments operationalize psychopathy in such a manner that two broad factors arise: an "interpersonal" factor and an "impulsiveness" factor.[1] The external correlates of the two factors are often distinct, especially when controlling for their shared variance. The interpersonal factor often correlates with positive adjustment (e.g., extraversion and stress immunity), whereas the second factor is typically associated with maladaptive traits such as negative emotionality and poor self-control (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003).

Given that the two factors tend to have distinct correlates with criterion measures, use of the global (full-scale) psychopathy score may obscure the underlying personality processes (Blonigen et al., 2010). In particular, the considerable covariance between facets of the Psychopathy Checklist-Revised

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[1] According to empirical work with the dominant psychopathy instrument (i.e., Psychopathy Checklist-Revised), the first factor can be subdivided into interpersonal and affective facets, and the second factor can be subdivided into lifestyle and overtly antisocial components (Hare, 2003). Nevertheless, this four-factor model easily reverts to the original two-factor framework (Hare & Neumann, 2008).

(PCL-R; Hare, 1991) often leads to suppressor effects; it is not unusual for the two factors to exhibit opposing relations with an external criterion when entered simultaneously in a prediction model (Hicks & Patrick, 2006). This phenomenon suggests that prevailing conceptualizations of the psychopathy construct, which is typically modeled as a single higher-order dimension responsible for two or more lower-order domains, could profitably be reconsidered.

Alternative ways of modeling the structure of psychopathy in adult offenders have been investigated by Patrick, Hicks, Nichol, and Krueger (2007). They used a hierarchical approach to account for the general variance permeating all of the PCL-R items, and then modeled specific factors (interpersonal, affective, and impulsivity) to account for the unique variance shared by certain subsets of items. By adopting this approach, it became much easier to isolate the specific aspects of psychopathy that were related to external variables. The general psychopathy factor was found to be positively correlated with negative emotionality, whereas the specific interpersonal factor was inversely related to negative emotionality (Patrick et al., 2007). Moreover, they showed that the common variance underlying all items of the PCL-R was essentially redundant (i.e., correlation approached unity) with symptoms of antisocial personality disorder and child conduct disorder.

Although a full-blown manifestation of psychopathy is not applicable to children, psychopathic-like dimensions can be measured at an early age (Farrington, 2005; Lynam, 1997). Psychopathy demonstrates validity not only among incarcerated males, but also in mixed-gender community samples, where psychopathic characteristics are more benign (Bare, Hopko, & Armento, 2004; Blonigen, Hicks, Krueger, Patrick, & Iacono, 2005). Few studies, however, have examined the relationship between psychopathic-like traits and measures of positive adjustment in nonclinically ascertained children.

1.2. Psychopathy and negative emotionality

Abnormally low anxiety/nervousness is considered a core feature of psychopathy (Lykken, 1995). Cleckley (1988) describes the prototypical psychopath as "embodying the concept of a well-adjusted, happy person" and showing "relative immunity from such anxiety and worry as might be judged normal or appropriate" (pp. 339–340). This leads to an apparent contradiction. Contrary to theory, individuals who chronically engage in antisocial behavior tend to be *more* anxious and depressed than typical individuals (Sareen, Stein, Cox, & Hassard, 2004). Conduct-disordered children are at elevated risk for anxiety/depression, and there is high comorbidity between antisocial personality disorder and anxiety disorders (Russo & Beidel, 1994; Widiger, 2006). How can this be reconciled with the hypothetically low anxiety of psychopaths?

This paradox may stem from the fact that the two psychopathy factors exhibit divergent associations with anxiety and depression (Frick, Lilienfeld, Ellis, Loney, & Silverthorn, 1999). For example, emotional distress is strongly and positively related to the impulsive/antisocial factor of the PCL-R, but is negatively related to the interpersonal factor (Hicks & Patrick, 2006; Pennington, Cramer, Miller, & Anastasi, 2015; Vaughn, Edens, Howard, & Smith, 2009). As a result, higher levels of anxiety/distress and depression are observed in the bulk of antisocial individuals, who happen to lack the compensatory interpersonal features of psychopathy.

1.3. Psychopathy and intelligence

It is well established that an inverse association between externalizing problems and intelligence prevails. The overlap between low IQ and antisocial behavior is particularly strong in boys, and appears to be genetically mediated (Koenen, Caspi, Moffitt, Rijsdijk, & Taylor, 2006). Antisocial outcomes in adolescents are generally associated with lower IQ, especially the verbal component. As a result, one might assume that psychopathy is inversely related to verbal

intellectual functioning, as appears to be the case in community samples of adults (Neumann & Hare, 2008).

However, the various psychopathy facets often show divergent associations with IQ. When partialling out the variance shared between different facets, the interpersonal factor of the PCL-R is positively related to IQ, whereas the affective factor is negatively related to IQ (De Tribolet-Hardy, Vohs, Mokros, & Habermeyer, 2014; Neumann & Hare, 2008; Vitacco, Neumann, & Jackson, 2005; Vitacco, Neumann, & Wodushek, 2008). A similar pattern is obtained in community samples of children (Fontaine, Barker, Salekin, & Viding, 2008); interpersonal manipulation is positively related to IQ, whereas callous/unemotional traits and impulsivity are negatively related to IQ. It lends credence to Cleckley's assertion that the prototypical psychopath is not intellectually deficient, particularly if he is superficially charming.

2. Present study

In summary, there is evidence that low IQ and high negative emotionality are ubiquitous in individuals with externalizing psychopathology. However, according to Cleckley's (1976) influential treatise, the classic psychopath is distinguished by his "good intelligence" and absence of nervousness. These contradictions can potentially be explained by invoking a hierarchical (i.e., bifactor) conceptualization of psychopathy, in which there is a general factor accounting for the covariance among the subscales alongside one (or more) specific factors. This would explain the overall coherence of the psychopathy construct while also accounting for the multi-factor structure. A general factor should permeate all of the psychopathy subscales, representing a broad liability for antisocial behavior (Patrick et al., 2007). This general factor should be associated with the typical correlates of externalizing problems in children (e.g., lower IQ and greater anxiety/depression). However, the specific interpersonal facet—independent of the general psychopathy factor—should be related to good cognitive and psychological functioning.

We applied a bifactor modeling approach to items from the Childhood Psychopathy Scale (CPS) in order to demonstrate its incremental validity over a broader antisocial orientation. Previously, using a second-order factor model in the present sample, Bezdjian, Raine, Baker, and Lynam (2011) showed that the covariance among CPS items is reducible to two moderately correlated factors: Manipulative/Deceitful and Callous/Disinhibited. However, these two factors are equivalently related to antisocial behavior (Bezdjian, Tuvblad, Raine, & Baker, 2011), suggesting that a general externalizing factor pervades the CPS domains. Examination of the two factors without considering their shared variance prohibits a clear interpretation of how each psychopathy facet is uniquely related to external criteria. We hypothesized that a bifactor approach would enable the emergence of a distinct interpersonal component which would demonstrate the hypothesized relationships with reduced negative emotionality and superior cognitive ability.

3. Method

3.1. Participants

The sample was drawn from participants in the USC Twin Study of Risk Factors for Antisocial Behavior, a longitudinal study of the interplay of genetic, environmental, social, and biological factors on the development of antisocial behavior (Baker, Barton, Lozano, Raine, & Fowler, 2006). The twins were recruited from Greater Los Angeles, and primarily contacted from enrollment records at local school districts. The sample is representative of the ethnic and socio-economic makeup of this region (Baker, Barton, & Raine, 2002). The ethnic distribution of the sample is as follows: 37.5% Hispanic, 26.6% Caucasian, 14.3% Black, 4.5% Asian, and the remaining 17.0% of mixed/other heritage. The present research is based on data collected from the first wave of