



Psychopathic Traits and Onset of Offending Behavior in High-Risk Adolescents

Jessica Klaver, Marlene M. Moretti, & Stephen D. Hart
Simon Fraser University



Introduction

Conduct disordered youth comprise a heterogeneous group and researchers have used several approaches to identify subgroups of youth at elevated risk for future negative outcomes. For example, an earlier age of onset of conduct problems has been linked to more frequent, persistent and serious forms of adult antisocial behavior (Moffitt, 1993). Others have found that high levels of psychopathic traits in youth are reliably associated with violence and criminal recidivism (Edens et al., 2001).

The clinical literature describes psychopathy as having an early onset of behavior problems (Cleckley, 1976). This association is reflected in the contemporary assessment of the disorder, with attention given to indicators of early behavior problems such as lying, cheating, theft, robbery, fire-setting, etc (Hare, 1991, 2003; Forth et al., 2003). Early research found that youth with high levels of psychopathic traits have an earlier first age of arrests and convictions (Brandt et al., 1997; Forth, 1995; Forth et al., 1990). More recently, psychopathic traits in youth have been linked to an earlier age of onset of substance abuse and school behavior problems (Campbell et al., 2004; Corrado et al., 2004; Vincent et al., 2003).

Although an early onset of behavior problems in psychopathy has been recognized as important both clinically and diagnostically, the phenomenon has generally been subjected to little empirical scrutiny. The goal of the present study was to comprehensively examine the relationship between psychopathic traits and the onset of violent and non-violent offending behavior in a sample of high-risk adolescents.

Method

Participants were 216 adolescents (19% male, 81% female) either incarcerated in British Columbia (25%), incarcerated in Virginia (57%), or housed at a provincial assessment center for behaviorally disordered youth in British Columbia (18%). The mean age of youth was 15.9 years ($SD = 1.4$). The sample was 49% Caucasian, 28% African-American, 13% Aboriginal-Canadian, and 10% identified as another ethnicity. Guardian and youth consent were obtained for the study and all participants were treated in accordance with ethical standards.

As part of a larger research protocol, youth completed 13 items from the Self-Report of Offending (SRO; Huizinga et al., 1991) which inquires about violent and non-violent offending behaviors, including impaired driving, selling marijuana, selling hard drugs, breaking and entering, car theft, carrying a gun, encouraging others to harm someone, robbery with a weapon, fighting with a weapon, gang activity, fistfights, serious physical attacks, and shooting at someone. Of interest to the present study, the SRO asks whether the youth ever engaged in the behavior (yes/no) and, if so, at what age the youth first engaged in the behavior.

Psychopathy was assessed using the Psychopathy Checklist: Youth Version (PCL:YV; Forth et al., 2003) with ratings made by experienced graduate students using both interview and file information. In order to comprehensively evaluate psychopathic traits, data were analyzed using the three-factor model of psychopathy (Cooke & Michie, 2001), including Arrogant and Deceitful Interpersonal Style (Factor 1), Deficient Affective Experience (Factor 2), and Impulsive and Irresponsible Behavioral Style (Factor 3).

PCL:YV Descriptives and Inter-Rater Reliability

	Mean (SD)	ICC ₂ (n = 28)
PCL:YV Total	23.4 (6.3)	.96
Factor 1	3.7 (1.8)	.93
Factor 2	4.3 (2.0)	.90
Factor 3	6.3 (1.8)	.85

Results

Predictors of Engagement in and Onset of Offending Behaviors

Logistic regression was used to examine which dimensions of psychopathy predicted engagement in offending behaviors. Only higher Factor 3 (Impulsive and Irresponsible Behavioral Style) scores were significantly associated with an increased likelihood of engaging in a variety of offending behaviors, with odds ratios (OR) ranging from 1.23 to 1.50. Multiple regression was used to investigate which dimensions of psychopathy predicted the age of onset of offending behaviors. Only higher Factor 2 (Deficient Affective Experience) scores were associated with an earlier age of onset of both violent and non-violent types of offending behaviors.

Higher Factor 3 (Behavioral) scores associated with increased likelihood of:

	β	p	OR
Impaired driving	.29	.001	1.34
Selling marijuana	.28	.002	1.32
Selling hard drugs	.40	<.001	1.50
Break & enter	.21	.02	1.23
Car theft	.24	.009	1.27
Carrying a gun	.23	.02	1.25
Robbery with weapon	.32	.003	1.38
Fighting with weapon	.22	.02	1.25
Gang activity	.33	.001	1.39
Serious physical attack	.20	.03	1.23
Shot at someone	.24	.03	1.27

Higher Factor 2 (Affective) scores associated with earlier age onset of:

	β	p
Impaired driving	-.23	.03
Selling marijuana	-.22	.03
Selling hard drugs	-.35	.002
Encouraging harm	-.34	.005
Fighting with weapon	-.23	.03
Shot at someone	-.36	.02

Gender Differences in Age of Onset of Offending Behaviors

Survival analysis was used to examine gender differences in the age of onset of offending behaviors as a function of gender. Median ages of onset for offending behaviors were compared between males and females using Kaplan-Meier survival analyses and the log rank (LR) statistic. Compared to females, males reported a significantly lower age of onset of non-violent behaviors such as breaking and entering, $LR(1) = 5.4, p = .02$, and car theft, $LR(1) = 3.84, p = .04$. In terms of violent offending, the reported age of onset for fistfights was significantly lower in males compared to females, $LR(1) = 15.0, p < .001$.

Discussion

The goal of the present study was to investigate the relationship between psychopathic traits and the ages of onset of violent and non-violent offending behaviors in a sample of high-risk youth. The results indicated that psychopathic traits were associated with engagement in offending behaviors as well as an earlier age of onset of offending. The behavioral dimension of psychopathy was specifically related to an increased likelihood of engaging in various offending behaviors. This is not surprising, given the well-established relationship between psychopathic traits, violence, and criminal behavior in youth (Edens et al., 2001).

Interestingly, an earlier age of onset of both violent and non-violent offending behaviors was uniquely associated with the affective dimension of psychopathy. Thus, youth scoring highly on traits reflecting a deficient affective experience started engaging in offending behavior at an earlier age. This finding is consistent with research emphasizing callous/unemotional traits as important in identifying youth at higher risk for negative outcomes (Frick, Cornell, & Bodin, 2003; Frick & Ellis, 1999) as well as with literature linking deficits in empathy to aggressive behavior in youth (Jolliffe & Farrington, 2004).

Significant gender differences were found in the median age of onset of offending behaviors, with males demonstrating an earlier onset of breaking and entering, car theft, and fistfights. This is consistent with literature postulating a delayed-onset pathway to antisocial behavior in female youth (Silverthorn & Frick, 1999). More research is needed to clarify differential onset patterns of delinquent behavior for males and females.

The current findings have important theoretical and practical implications. Using age of onset to investigate psychopathy from a developmental perspective will further elucidate which types of traits appear first, at what ages they begin to manifest, as well as which factors may influence their expression over time. The association between an early onset of violence and high levels of affective traits offers some direction in terms of targeted intervention for youth demonstrating these deficits at young ages.