Self-Reported Psychopathic Traits in Sexually Offending Juveniles Compared With Generally Offending Juveniles and General Population Youth

Cyril Boonmann¹, Lucretes M. C. Jansen¹, Lisette A. ’t Hart-Kerkhoffs¹, Pauline Vahl², Sanne L. Hillege¹, Theo A. H. Doreleijers¹,³, and Robert R. J. M. Vermeiren¹,²

Abstract
The aim of the current study is to gain a better insight into the relationship between sexually aggressive behaviour and psychopathy in youths; juveniles who sexually offended (JSOs) were compared with generally offending youths and a general population group. Seventy-one JSOs, 416 detained general offenders, and 331 males from the general population were assessed by means of the Youth Psychopathic traits Inventory (YPI), a self-report instrument. Sexually and generally offending juveniles had significantly lower levels of self-reported psychopathic traits than youths from the general population. Juvenile sexual offenders and generally offending juveniles did not differ in self-reported psychopathic traits. Furthermore, no differences in self-reported psychopathic traits were found between subgroups of JSOs (i.e., child molesters, solo offenders, and group offenders). The finding that self-reported psychopathic traits are less prevalent in offending juveniles than in general population youths raises questions about the usefulness of the YPI when comparing psychopathic traits between clinical samples and general-population samples.

¹VU University Medical Center Amsterdam, Duivendrecht, The Netherlands
²Curium-LUMC Leiden University Medical Center, Oegstgeest, The Netherlands
³Leiden University, The Netherlands

Corresponding Author:
Cyril Boonmann, Department of Child and Adolescent Psychiatry & EMGO Institute for Health and Care Research, VU University Medical Center Amsterdam, P. O. Box 303, Duivendrecht, 1115 ZG, The Netherlands.
Email: c.boonmann@deascule.com
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Background
In adults, high levels of sexually aggressive behaviour have been related to psychopathy (Kosson, Kelly, & White, 1997; Lalumière & Quinsey, 1996). Since adolescence is characterized by significant developmental changes (e.g., brain development, psychosocial development), findings in adults may not simply be generalized to juvenile populations. This may also account for psychopathic traits (Vaughn & Howard, 2005). As it is assumed that juveniles with psychopathic traits need specialized or more intensive forms of treatment (Kimonis, Fanniff, Borum, & Elliott, 2011), it is important to understand these traits in juvenile offenders, including those that are sexually aggressive. For this reason, it is relevant to study the relationship between psychopathic traits and sexual delinquent behaviour in adolescents.

Psychopathy is a personality disorder characterized by interpersonal (e.g., dishonest charm, lying, grandiosity, and manipulation), affective (e.g., callousness, unemotional, and remorselessness), and behavioural (e.g., impulsiveness, irresponsibility, and thrill-seeking) traits (Andershed, Kerr, Stattin, & Levander, 2002; Hare & Neumann, 2010). To gain a better insight in the development of such traits, scholars started to focus on psychopathic traits in children and adolescents (e.g., Andershed et al., 2002; Vincent, 2006). Results have suggested that adult traits of psychopathy are already present in adolescence (e.g., Brandt, Kennedy, Patrick, & Curtin, 1997; Forth, Hart, & Hare, 1990; Kosson, Cyterski, Steuerwald, Neumann, & Walker Matthews, 2002; Neumann, Kosson, Forth, & Hare, 2006). However, as adolescents are still maturing, the stability of psychopathic traits into adulthood is under debate (Edens, Skeem, Cruise, & Cauffman, 2001; Hempel, Buck, Cima, & van Marle, 2013; Seagrave & Grisso, 2002); several characteristics (e.g., impulse control, social perspective, and social-emotional reactivity) are still developing during adolescence and may only be temporarily present (Edens et al., 2001; Seagrave & Grisso, 2002; Viljoen, Elkovitch, Scalora, & Ullman, 2009). Psychopathic traits in juveniles may, therefore, not necessarily persist into adulthood.

Brain-development research provides indirect support for the hypothesis that traits associated with psychopathy are only temporarily present in juveniles. The discrepancy between late development of prefrontal brain areas and earlier development of subcortical areas may explain adolescents’ tendency to engage in impulsive or risk-taking behaviours, especially in the presence of peers (Blakemore & Robbins, 2012; Ernst & Fudge, 2009; Gardner & Steinberg, 2005; Steinberg, 2008). Next, as perspective taking and moral reasoning evolve from adolescence to young adulthood (Dumontheil, Apperly, & Blakemore, 2010; Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005), adolescents in general may show more callous and unemotional (CU) traits and less remorse than adults. It remains unclear whether the relationship
between psychopathic traits and antisocial behaviour, especially sexually aggressive behaviour, in juveniles is similar to the relationship that exists in adults.

Research comparing psychopathic traits in juveniles who sexually offended (JSOs) and generally offending youths has shown inconsistent results. JSOs had lower mean scores than generally offending youths on psychopathy (Freeman, Dexter-Mazza, & Hoffman, 2005) but had more CU traits (Caputo, Frick, & Brodsky, 1999). In other studies, no differences in psychopathy or CU traits between both groups were found (Caldwell, Ziemke, & Vitacco, 2008; Valliant & Bergeron, 1997; Zakireh, Ronis, & Knight, 2008). Only one study compared 16 JSOs and 13 generally offending juveniles with 13 non-offending juveniles (Valliant & Bergeron, 1997); JSOs and generally offending youths had significantly higher psychopathic deviance scores than non-offending juveniles. This result, however, can only be seen as tentative due to the small sample sizes and the focus on personality problems in general (including psychopathic deviancy) rather than psychopathic traits in specific. Therefore, the research of Valliant and Bergeron (1997) needs replication with a larger sample using an instrument designed to examine psychopathic traits.

Furthermore, as JSOs constitute a heterogeneous group (Hunter, Figueredo, Malamuth, & Becker, 2003; Hunter, Hazelwood, & Slesinger, 2000; ‘t Hart-Kerkhoffs et al., 2009), it is important to look at specific subgroups. Research comparing psychopathic traits in JSOs against children, JSOs against peers or adults, and JSOs against children as well as peers or adults (mixed offenders) by means of a clinical rating scale, showed higher levels of psychopathy only in mixed offenders compared with JSOs against children (Parks & Bard, 2006). These results need to be replicated and need to take subgroups of JSOs into account to enable conclusive results.

The aim of the current study is to examine the prevalence of psychopathic traits in JSOs as compared with generally offending juveniles and youths in the general population. Furthermore, differences between specific subgroups of JSOs will be studied. The current study will examine psychopathic traits by means of a self-report instrument.

**Method**

**Samples**

JSOs. The JSO sample comprised 71 adolescent males charged and eventually convicted of a sex offense (\(M_{age} = 14.9; SD = 1.4\)). Between May 2003 and December 2006, the participants were recruited from 4 (out of 22) regional Child Protection Board (CPB) offices and 4 (out of 13) pretrial Juvenile Justice Institutions (JJIs) in the Netherlands. Exclusion criteria were an IQ below 70 and insufficient knowledge of the Dutch language. Informed consent was obtained from the juvenile offenders as well as their parents or legal guardians. They were informed that information was used for scientific research only. The Youth Psychopathic Traits Inventory (YPI) was conducted as part of a larger study on mental-health problems in juveniles charged with a sex offense. The Ethics Committee of the VU University Medical Center Amsterdam,
The Netherlands, approved the study (for more details regarding sample selection, see ‘t Hart-Kerkhoffs, 2010).

Based on their offense characteristics, the offenders were classified in three subgroups: (a) child molesters ($n = 11; M$ age $= 14.5; SD = 1.2$): juveniles who assaulted or sexually abused children (below the age of 12 and at least 4 years younger than the offender); (b) solo offenders ($n = 19; M$ age $= 14.9; SD = 1.4$): juveniles who raped or sexually assaulted peers and/or adults; and (c) group offenders ($n = 41; M$ age $= 14.9; SD = 1.4$): juveniles who raped or sexually assaulted peers and/or adults as part of a group.

Within the group of JSOs, no age differences between subgroups were found ($F = 0.53, p = .59$). Subgroups of JSOs did differ in ethnic origin ($\chi^2 = 32.73, p < .00$). Post hoc analyses showed that child abusers and solo offenders were more often of Dutch ethnic origin than group offenders.

**Control groups.** The sample of generally offending youths consisted of 416 incarcerated males ($M$ age $= 16.02; SD = 1.0$). These juveniles were admitted to two JJIs in the Netherlands between May 2008 and May 2010. The YPI was part of a JJI-standardized self-report mental-health screening procedure. Almost all adolescents were tested within 7 working days after admission. The JJIs informed parents and youths that (a) mental-health screening would take place for clinical purposes, (b) anonymous screening information would be used for scientific purposes, and (c) that they were allowed to prohibit such use. No refusals for scientific use were recorded during the study period. The relevant institutional review and scientific boards of the JJIs approved this study and the procedure (for more details, see Vahl et al., 2013).

The sample of general population youths comprised 331 adolescent males in the upper grades of two secondary schools in the northern parts of the Netherlands ($M$ age $= 15.5; SD = 0.8$). Written informed consent was obtained from the adolescents. Following a passive consent procedure, parents were given the opportunity to object to the participation after having been informed about the purpose and procedure of the study. The study was approved by the administration of the schools and the relevant ethics boards (for more details, see Hillege, Das, & de Ruiter, 2009).

JSOs, generally offending juveniles, and general-population youths differed in age ($F = 46.23, p < .00$) and ethnic origin ($\chi^2 = 261.46, p < .00$). Post hoc analyses showed that JSOs were significantly younger than generally offending juveniles as well as general-population juveniles, and more often of non-Dutch ethnic origin than general-population youths. Generally offending juveniles were significantly older and more often of non-Dutch ethnic origin than juveniles from the general population.

**Assessment of Psychopathic Traits**

Psychopathic traits were assessed using the YPI (Andershed et al., 2002). The YPI is a 50-item self-report instrument for adolescents to measure the three personality dimensions of psychopathy: an arrogant and deceitful interpersonal style (Grandiose-Manipulative Dimension), a deficient affective experience (Callous-Unemotional Dimension), and an impulsive and irresponsible behavioural style (Impulsive-Irresponsible...
The Grandiose-Manipulative Dimension has four subscales: Dishonest Charm, Grandiosity, Lying, and Manipulation; the Callous-Unemotional Dimension has three subscales: Callousness, Unemotional, and Remorselessness; the Impulsive-Irresponsible Dimension has three subscales: Impulsiveness, Irresponsibility, and Thrill seeking. Items are scored on a 4-point Likert-type scale (1 = does not apply at all, 4 = applies very well; Andershed et al., 2002).

The YPI has shown moderate to good psychometric properties in general population samples (Andershed et al., 2002; Declercq, Markey, Vandist, & Verhaeghe, 2009; Hillege et al., 2009; Larsson, Andershed, & Lichtenstein, 2006) as well as in forensic population samples (Dolan & Rennie, 2006; Poythress, Dembo, Wareham, & Greenbaum, 2006; Skeem & Cauffman, 2003). Earlier research has demonstrated the aforementioned underlying 3-factor structure (Andershed et al., 2002; Declercq et al., 2009; Dolan & Rennie, 2006; Hillege et al., 2009; Larsson et al., 2006). The internal consistency of the interpersonal dimension ranged from .90 to .91, from .57 to .77 for the affective dimension, and from .82 to .83 for the behavioural dimension (Poythress et al., 2006; Skeem & Cauffman, 2003).

**Statistical Analysis**

Data were analyzed using International Business Machines Corporation Statistical Package for Social Sciences, version 19 (IBM SPSS 19). Differences between JSOs, generally offending juveniles, and juveniles from the general population, as well as differences between subgroups of JSOs, were tested using analysis of covariance (ANCOVA) with age and ethnic origin as control variables. Post hoc multiple comparison tests with Bonferroni correction were performed.

**Results**

Sexually offending and generally offending juveniles scored significantly lower than general-population adolescents on the YPI total psychopathic traits score, as well as on all psychopathy personality dimensions (Table 1). All effect sizes were medium to large. Furthermore, JSOs and generally offending youths did not differ on the total psychopathy traits score or any of the dimensions of the YPI.

Subgroups of JSOs differed neither on the total psychopathy score nor on the three dimensions of psychopathy (Table 2).

**Discussion**

JSOs were compared with generally offending adolescents and general-population youths with regard to self-reported psychopathic traits. Sexually offending and generally offending juveniles reported significantly lower psychopathic-trait scores than general-population adolescents. Furthermore, JSOs and generally offending juveniles did not differ in self-reported psychopathic traits. Finally, there were no differences in self-reported psychopathic traits between specific subgroups of JSOs.
The finding of lower psychopathic traits in JSOs as well as general offenders compared with adolescents from the general population contradicts earlier research (Valliant & Bergeron, 1997) and is counterintuitive. Within a general-population sample, conduct problems and antisocial behavior were positively associated with higher scores on the YPI (Andershed et al., 2002). A possible explanation for the lower mean

### Table 1. YPI Scores JSOs, Generally Offending Juveniles, and General Population Corrected for Age and Ethnic Background.

<table>
<thead>
<tr>
<th></th>
<th>JSOs</th>
<th>General offending juveniles</th>
<th>General population</th>
<th>Post hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>F, df = 2, p</td>
</tr>
<tr>
<td>Psychopathy</td>
<td>1.70 (0.29)</td>
<td>1.60 (0.34)</td>
<td>2.12 (0.42)</td>
<td>92.44, p &lt; .001</td>
</tr>
<tr>
<td>Grandiose—manipulative</td>
<td>1.46 (0.30)</td>
<td>1.33 (0.37)</td>
<td>1.93 (0.57)</td>
<td>84.41, p &lt; .001</td>
</tr>
<tr>
<td>Callous—unemotional</td>
<td>1.88 (0.33)</td>
<td>1.76 (0.33)</td>
<td>2.14 (0.42)</td>
<td>55.86, p &lt; .001</td>
</tr>
<tr>
<td>Impulsive—irresponsible</td>
<td>1.92 (0.43)</td>
<td>1.89 (0.52)</td>
<td>2.29 (0.49)</td>
<td>18.96, p &lt; .001</td>
</tr>
</tbody>
</table>

Note. YPI = Youth Psychopathic Traits Inventory; JSOs = juveniles who sexually offended.

^aSignificant difference JSOs versus General population.

^bSignificant difference (p < .05) General offenders versus General population.

^cCohen (1988) defined effect sizes as “small, \( d = .2\),” “medium, \( d = .5\),” and “large, \( d = .8\).”

### Table 2. YPI Scores Juvenile Solo Sex Offenders, Group Sex Offenders, and Child Abusers Corrected for Age and Ethnic Background.

<table>
<thead>
<tr>
<th></th>
<th>Juvenile solo sex offenders</th>
<th>Juvenile group sex offenders</th>
<th>Juvenile child abusers</th>
<th>F, df = 2, p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>Psychopathy</td>
<td>1.78 (0.33)</td>
<td>1.66 (0.26)</td>
<td>1.67 (0.30)</td>
<td>1.34, .27</td>
</tr>
<tr>
<td>Grandiose—manipulative</td>
<td>1.58 (0.35)</td>
<td>1.40 (0.28)</td>
<td>1.45 (0.23)</td>
<td>2.64, .08</td>
</tr>
<tr>
<td>Callous—unemotional</td>
<td>1.91 (0.36)</td>
<td>1.92 (0.32)</td>
<td>1.66 (0.26)</td>
<td>1.99, .14</td>
</tr>
<tr>
<td>Impulsive—irresponsible</td>
<td>2.08 (0.46)</td>
<td>1.81 (0.35)</td>
<td>2.05 (0.58)</td>
<td>1.38, .26</td>
</tr>
</tbody>
</table>

Note. YPI = Youth Psychopathic Traits Inventory.

The finding of lower psychopathic traits in JSOs as well as general offenders compared with adolescents from the general population contradicts earlier research (Valliant & Bergeron, 1997) and is counterintuitive. Within a general-population sample, conduct problems and antisocial behavior were positively associated with higher scores on the YPI (Andershed et al., 2002). A possible explanation for the lower mean
of self-reported psychopathic-trait scores of juvenile offenders compared with non-offenders may be the reference group to which respondents compare their behaviours. When juvenile offenders compare their behaviours with those of delinquent peers, they will probably report lower scores of antisocial traits than non-offending juveniles. The baseline of psychopathic traits may therefore vary between offender-population samples and general-population samples.

Yet, this does not explain the contradictory results of the current study and the study of Valliant and Bergeron (1997) as both studies compared juvenile offenders and non-offenders. In the current study, all JSOs as well as some general offenders were not convicted at the time of assessment, whereas the JSOs in the Valliant and Bergeron’s study already had been convicted. In addition, questionnaires in the detained general-offender sample were gathered as part of regular care and thus open to their mental-health professional. To avoid a negative impression and a high sentence, offenders in the current study may have reported in a socially desirable way. This influence of social desirability on psychopathic traits in offender populations has been shown before (Rogers et al., 2002). The offenders in the study of Valliant and Bergeron were juveniles in an open-custody facility that already had been convicted. These results emphasise the need for more investigation of the ways in which the social setting or context for assessment of juveniles can influence measures of their psychopathic traits.

In the current study, no differences in self-reported psychopathic traits were found between JSOs and generally offending juveniles. This was in line with previous research (Caldwell et al., 2008; Valliant & Bergeron, 1997; Zakireh et al., 2008). Recently, Seto and Lalumière (2010) conducted an extensive meta-analysis on similarities and differences between JSOs and generally offending juveniles. Although they did not study psychopathic traits in general, they did study antisocial personality traits, including psychopathic traits. No differences in these traits of antisocial personality were found between JSOs and generally offending youths.

Finally, in contrast to earlier research (Parks & Bard, 2006), no differences in scores representing psychopathic traits were found in subgroups of JSOs. The different results between both studies may be explained by methodological dissimilarities. First, whereas Parks and Bard (2006) subdivided their sample in JSOs against children, JSOs against peers or adults and mixed offenders (offenses against children as well as peers or adults), the current study subdivided sexually offending juveniles in JSOs against children, solo JSOs against peers or adults, and group JSOs against peers or adults. Mixed offenders may therefore be prevalent in all three groups. Second, while Parks and Bard used a clinical rating instrument, our study used a self-report instrument. Although a recent meta-analysis, including adult-clinical and general-population samples, demonstrated a small influence of positive response bias on self-reported psychopathic traits (Ray et al., 2012), this still may have influenced the results. More research is needed to understand the relation between specific subgroup of JSOs and psychopathic traits, as measured by means of a self-report as well as clinical rating instrument. As there is still no consensus about classification of subgroups of JSOs (e.g., child molesters, solo offenders, and group offenders in the current study; child
offenders, peer/adult offenders and mixed group offenders in the Parks & Bard, 2006 study), valid and reliable classification of JSOs is warranted (Hempel et al., 2013).

Limitations

The results of this study should be considered in the context of some limitations. First, the use of different data sets may have hampered comparability of the samples due to differences in data collection and trial status of the samples. JSOs were suspects of a sexual offense at the time of their assessment. Although they were informed that the results would be used for scientific research only, the pretrial status of the JSOs may have influenced their results. As generally offending youths were told that the mental-health screening would be evaluated by their mental-health professional, social desirability could also have influenced their assessment, resulting in lower psychopathic-trait scores. However, the current study was the first to compare self-reported psychopathic traits in large groups of JSOs, generally offending adolescents, and youths from the general population. These findings should still be replicated in one large study including all three samples.

Second, it should be noted that psychopathic traits in psychopaths are difficult to measure with self-report instruments. Juveniles with high psychopathic traits may underreport on self-report questionnaires because of manipulative and deceitful behaviour (Andershed et al., 2002; Hillege et al., 2009). However, due to the use of self-report instruments, the current study was able to examine a large group of sexually offending and generally offending juveniles in a time and cost-effective way (Declercq et al., 2009; Lilienfeld & Fowler, 2007). Clinical rating scales for psychopathic traits are time-consuming, expensive to administer, and based largely on file information, and therefore difficult to use in general-population samples as well as in clinical samples. The use of a self-report instrument for psychopathic traits enables assessment of psychopathic traits in the general population. This will enhance our knowledge about the development of psychopathic traits in children and adolescents (Andershed et al., 2002).

Finally, the current study did not correct for autism spectrum disorders (ASD). This may have hampered our results with regard to CU traits. Previous research showed that poorly developed social skills were more often present in JSOs than in generally offending youths (Van Wijk, van Horn, Bullens, & Hendriks, 2003). As a lack of social and sexual skills is especially characteristic of JSOs with symptoms of ASD (‘t Hart-Kerkhoffs et al., 2009), it is unknown whether the CU-trait scores in JSOs are related to psychopathic traits or to symptoms of ASD. Future research should focus on the underlying concepts of empathy in JSOs compared with general-offending juveniles to disentangle the relation between CU traits and ASD symptoms in sexually offending behaviour.

Implications

As the relevance of psychopathic traits in juveniles is still under debate, and it is inappropriate to label juveniles with psychopathy due to the lack of valid cutoff points (Vincent, 2006), it is recommended not to use self-report instruments for psychopathic
traits for clinical practice. Future research should focus on valid cutoff points or valid reference groups for psychopathic traits in juveniles before self-report instruments for psychopathic traits can be used in clinical practice with delinquent youths. As the definition of psychopathic traits may differ between populations, research should look for these cutoff points or reference groups in well-defined subgroups of juveniles, such as violent-offending juveniles or violent sexual-offending juveniles. Furthermore, as juveniles are still developing, it is important to focus on the short-term effects of psychopathic traits (Hempel et al., 2013) and the assessment of psychopathic traits in children and adolescents should be repeated on a regular basis (e.g., every year).

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