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An Exploration of Psychopathy Amongst Juvenile Sex Offenders

Laura M. Morrell

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Table of Contents

Title Page.....	1
Acknowledgements.....	2
Table of Contents.....	3
Abstract.....	4
Review of Literature.....	5
Methods.....	18
Results.....	22
Table 1.....	23
Table 2.....	24
Table 3.....	25
Table 4.....	25
Discussion.....	26
References.....	30

Abstract

Despite the growing body of knowledge regarding psychopathy among adolescent sex offenders, additional research is still necessary. In this study I examine four measures of juvenile psychopathy (Childhood Psychopathy Scale, Antisocial Process Screening Device, Millon Adolescent Clinical Inventory, and Inventory of Callous and Unemotional Traits) in a sample of 191 incarcerated adolescent sex offenders located in juvenile detention facilities in a Midwestern state. I examine how the diverse scales relate to characteristics of sexual aggression and non-sexual criminality, and which scale specifically has the best predictive validity for sexual as well as non-sexual crime. Of the four instruments and nine scales only the APSD Narcissism and Impulsivity scale was significantly correlated to a characteristic of sexual crime, and no scale was found to predict sexual crime at a significant level. Findings did however show that several scales were correlated to the total delinquency score as measured by the Self Reported Delinquency Measure. In a series of multiple regressions, the MACI Factor 2 and ICU total scale were found to have the best fit for prediction of total non-sexual delinquency. The results continue to support the comorbidity between psychopathy and criminal behavior, and demonstrate that rather than fueling sexual crime characteristics, psychopathy instead may fuel non-sexual delinquency in juvenile sex offenders. Additionally, the current results demonstrate the importance of focus on both non-sexual and sexual offenses within treatment, in order to provide the soundest therapeutic interventions and preventions of recidivism.

Literature Review

Psychopathy as a clinical construct continues to remain a source of much contention. Theoretical conceptualizations of the aetiology of psychopathy have oscillated between social influences such as disturbance in family relationships (i.e. loss, neglect, inconsistent disciplinary action) (Hare, 1970; Jenkins, 1966; McCord & McCord, 1964) and genetic-biological factors as the origin of antisocial behavior and psychopathy (Lidberg, Levander, Schalling, & Lidberg, 1978; Mednick, Gabrielli, & Hutchings, 1987). Despite the wide ranging hypotheses about the aetiology of psychopathy, an apparent consensus does exist regarding psychopathy as a constellation of personality characteristics (Cleckley, 1976; Gough, 1948; Hare, 1970, 1993, 1996).

Presently psychopathy is defined by a distinct class of interpersonal, behavioral, and emotional attributes including lack of empathy and remorse, manipulateness, impulsivity, egocentricity, and the recurrent violation of societal norms and standards (Guay, Knight, Ruscio, & Hare 2007; Hare, 1991, 1996, 1998). While the labeling of psychopathy has shifted dramatically in the *Diagnostic and Statistical Manual of Mental Disorders* and its many revisions, it has consistently been linked to Narcissistic and Antisocial Personality Disorder (Widiger, 2006). Specifically the DSM-IV, unlike the DSM-III, provided an additional statement to the diagnosis of Antisocial Personality Disorder clarifying that, “This pattern has also been referred to as psychopathy, sociopathy, or dissocial personality disorder” (APA, p. 645). Although utilized synonymously, research literature has indicated a clear distinction between APD and psychopathy. For instance Antisocial Personality Disorder has been conceptualized as a broader and more behaviorally based diagnosis than psychopathy and its traditional associated personality characteristics (Ogloff, 2006).

Furthermore researchers have proven that more than fifty percent of individuals in prison settings who meet APD diagnostic criteria often fail to qualify for psychopathic label (Hare, 2003). Yet widespread interest in psychopathy as a construct continues to be evident, despite the fact that a limited amount of research has truly examined whether psychopaths should be designated as a distinct class of individuals (Edens, Lilienfeld, Marcus, & Poythress, Jr., 2006). More recently evidence has been procured arguing for the dimensional structure of psychopathy (Edens et al., 2006). Yet from a theoretical standpoint the debate between the taxonicity and dimensionality of psychopathy in research literature persists as a source of contention.

In the vein of research supporting dimensionality, (Hare, 1991; Harpur, Hare, & Hakistan, 1989) it has been suggested that the two dimensions of behavior, psychopathy and antisocialism, in fact have associations with other variables. Namely, APD has been linked with difficult family background factors such as socioeconomic status and low intelligence, whereas traits of psychopathy have been positively correlated with measures of narcissism and negatively correlated with measures of anxiety (Hare, 1991; Harpur et al., 1989).

Correlates of psychopathy and the construct itself, to date, have quite often been studied using the Hare (1980) Psychopathy Checklist (PCL) (Hare, 1991, 1993). The PCL (Hare, 1991, 1993) is considered one of the most reliable and valid psychometric tools for assessing psychopathy. Largely based on the criteria set forth by Cleckley (1941), Hare's (1980) PCL was determined to have good inter-rater reliability as well as good construct validity. As it was originally devised the PCL consisted of a two-factor solution (Harpur et al., 1989). Factor 1 constitutes core theoretical personality traits of psychopathy such as lacking remorse, guilt, and empathy, whereas Factor 2 measures more behavioral characteristics including a chronically unstable and antisocial lifestyle (Hare, 1991). For example the belief that the DSM-IV APD

criterion insufficiently characterizes the construct of psychopathy is currently supported by the differences found in correlation between APD with Factor 1 and APD with Factor 2 of the Psychopathy Checklist Revised (Lilienfeld, 1994).

In more recent years the validity of the PCL-R factor model has been called into question (Cooke & Michie, 2001; Lilienfeld, 1994). Given researchers' indications that the Antisocial Personality Disorder criterion correlates more highly with Factor One as opposed to Factor Two (Hart & Hare, 1989; Shine & Hobson, 1997) it has been argued that tendencies towards aimlessness, impulsivity, irresponsibility, and delinquency are more identifiable traits as opposed to core psychopathic personality characteristics (Widiger, 2006). By the same token it has not been concluded that the DSM-IV APD and PCL-R criterion for psychopathy identify different disorders. Rather, both sets of criterion in actuality identify the same personality disorder albeit using different approaches (Widiger, 2006). Taking a closer look at the historical evolution of the way psychopathy has been defined may provide insight into researchers' current understanding of the term.

While historical theoretical conceptualizations emphasized traits of the psychopathic personality (Cleckley, 1941), more current theories integrate both personality traits and antisocial behavior into diagnostic criteria (Hare, 1991, 2003). As it was originally identified, psychopathy involved severe underlying psychopathology veiled by an external charming and psychologically healthy appearance (Cleckley, 1976; Hare, 1991; Patrick, 2006). However, as Cleckley (1976) indicated within his sixteen trait diagnostic foundation, overt behavioral maladjustment and affective impoverishment abound in psychopathic individuals as evidenced by poor judgment and insincerity. Cleckley (1976) also identified in psychopaths an affective impoverishment indicated by lack of remorse or shame. A specific manifestation of this affective deficiency

arises in what Gough (1948) described as psychopaths' inability to role play. More explicitly, Gough (1948) believed that psychopaths lacked the capacity to perceive themselves as social objects, and as a result were unable to recognize the social consequences of their actions. Moreover, Gough (1948) wrote that psychopaths are incapable of forming deep personal attachments due to their inability to empathize with others.

In addition to the more historically researched interpersonal facet of psychopathy, researchers have also discovered the relevance of and link between the psychopathic construct and antisocial behavior, as defined by the DSM-IV APD criterion. Namely the comorbidity of psychopathy and criminal behavior has consistently been demonstrated through research (Hare, Cooke, & Hart, 1999; Hart & Hare, 1997; Hemphill, Hare, & Wong, 1998; Salekin, Rogers, & Sewell, 1996). Furthermore a plethora of studies have indicated that the presence of psychopathic traits predicts higher overall disruptive behavior, levels of criminal and violent recidivism, and severity of crime. A poorer response to treatment is also indicated in the psychopathic incarcerated offender population (Das, Ruiters, Lodewijks, & Doreleijers, 2007; Doren & Yates, 2008; Gretton, Catchpole, & Hare, 2004; Forth, Hart, & Hare, 1990). Thus it remains clear from much of the existing empirical data and literature that psychopathy has severe legal and behavioral implications and must continually be assessed before, during, and after the engagement in psychological treatment.

Although seemingly counterintuitive, psychopathic individuals while only comprising 1-3% of the population are estimated as being responsible for 50-60% of known crimes (Farrington, Ohlin, & Wilson, 1986). However it is not surprising that psychopathic individuals would be heavily involved in a range of criminal activities as behaviorally they are risk-taking

sensation seekers. As such they are among the most violent and persistent of criminal offenders as well as the most prolific and versatile (Lynam, 1996).

Indeed committing more crimes than the average criminal (Hare, 1981; Jutai & Hare, 1983; Hare, McPherson, & Forth, 1988; Wong, 1984), the psychopathic adult male non-sex offender is also more likely to recidivate when released from prison (Hart, Kropp, & Hare, 1988). For example in 10 year follow up study of 169 adult male non-sex offenders, in which 31% were classified psychopathic, results determined that the 77% (40 of the 52) of the psychopaths violently recidivated as opposed to 21% (24 of the 114) of the nonpsychopathic male offenders (Harris, Rice, & Cormier, 1991). This data also suggests that psychopathic non-sexual offenders remain at high risk for recidivating throughout their life span, confirming past findings that adult psychopaths continue to offend at high rates up to age 40 (Hare et al., 1988; Wong, 1984).

A propos to the relationship between psychopathy and violence, instrumentality has provided a meaningful distinction in the classification of criminal behavior (Walsh, Swogger, & Kosson, 2009). Instrumentality has been defined as violence committed as a means to attain a secondary goal, as opposed to more reactive violence in response to perceived threat or aggravation (Sears, Maccoby, & Levin, 1957). In a study utilizing the Psychopathy Checklist-Revised (PCL-R; Hare, 2003) the authors reported that adult male offenders who had committed one or more instrumental violent acts had higher PCL-R scores than offenders whose behavior was reactively violent (Cornell et al., 1996). In a similar vein, homicides committed by male psychopathic offenders were more instrumental than homicides committed by nonpsychopathic male offenders (Woodworth & Porter, 2002).

With consideration to the PCL-R factors specifically, the association between violence and psychopathy has largely been linked to the antisocial traits as indicated by Factor 2. Yet fairly recent evidence has exposed that the callous and unemotional Factor I interpersonal traits in psychopathic individuals fits with the cold-blooded calculation of instrumental violent crimes (Hare, 2003; Woodworth & Porter, 2002). Largely consistent with prior findings, Walsh et al. (2009) confirmed in their study the positive relationship between psychopathy and instrumental violence, as well as the dependence of this relationship on core facets of the psychopathic personality.

In contrast hostile attribution bias (HAB), conceptualized as the increased likeliness of psychopaths when confronted by another's provocative and ambiguous behavior to attribute those behaviors to hostile intent (Crick & Dodge, 1994; Gomez et al., 2001; Orobio de Castro et al., 2002; Van Oostrum & Horvath, 1997) seemingly coincides with a tendency towards reactive violence. According to several researchers psychopathic individuals' antisocial behaviors are very much due to the extreme hostile distortions they maintain (Newman & Wallace, 1993; Serin & Kuriyuchuk, 1994). As it has been previously established psychopaths tend to view the world as both a hostile and unpredictable place (Cleckley, 1976; Hare 1991; Millon, 1981; Newman and Wallace, 1993); holding beliefs such as victims deserving the brutality committed against them, as well as a 'survival of the fittest' mentality used to justify their behaviors regardless of illegality or violations of conventional morality. Furthermore such attitudes of psychopaths serve to justify crimes (Millon, 1981). In regards to crime, while recent results have validated two distinct pathways linked with the development of hostile attributions in an incarcerated sample of psychopathic non-sexual offenders, specifically depressogenic attributional style and

psychopathy, hostile attribution scores have not been significantly associated with violent crimes (Vitale et al., 2005).

Sex offending and Psychopathy in Adult Males

Special consideration must also be extended to the adult psychopathic sex offender. Within the sex offender population, the most commonly utilized classification system dichotomizes child molesters and rapists as a function of victim age (Porter et al., 2000). As a result of the distinction in typology many differences within the population of sex offenders have been illuminated. Mainly molesters present with more motivation towards the sexual aspects of an offense (Malcolm, Andrews, & Quinsey, 1993). On the contrary, rapists display increased motivation by violence and anger (Barbaree et al., 1994; Serin, Malcolm, Khanna, & Barbaree, 1994). Taking into account personality attributes, rapists demonstrate more severe antisocial histories and much higher rates of general and violent recidivism, however less sexual reoffense (Hanson & Scott, 1994; Prentky, Lee, Knight, & Cerce, 1997; Quinsey, Rice, & Harris, 1995) as compared to molesters who have shown more socially inept and unassertive behavior than rapists although a higher risk for sexual reoffending (Prentky & Knight, 1991).

Indeed the prevalence of psychopathy is significantly high among convicted rapists (Forth & Kroner, 1994; Porter et al., 2000) as well as in mixed rapist/molester populations as compared to offenders who victimize children exclusively (Porter et al., 2000). For example in a sample of incarcerated offenders within a federal prison setting, 26.1% of 211 rapists, 18.3% of 163 mixed sex offenders (including child molesters), and 5.4% of 82 incest offenders were deemed psychopathic (Forth & Kroner, 1994).

Similarly within a sample of offenders located at the Massachusetts Treatment Center for Sexually Dangerous Persons at Bridgewater, it was determined that 45.3% of 95 rapists and

30.5% of 59 child molesters meet PCL criteria for psychopathy (Prentky & Knight, 1991). A further significant difference was found between a sample of 103 rapists, 25 mixed rapist/molesters, and 101 exclusive child molesters. Results showed specifically that the rapist and mixed rapist/molester groups all scored significantly higher than the molester groups on Factor 2 of the PCL-R, indicating that the former groups were characterized by more persistent, chronic, and diverse antisocial lifestyles than molesters (Porter et al., 2000). In addition researchers have made evident that sexual offenders who perpetrate against both children and adults are not only more likely to be psychopaths, but also more likely to have higher Factor 1 scores (Porter et al., 2000). Consequently the mixed rapist/molester offender group poses a considerable risk as they have the highest potential among the three groups for recidivism.

Development of Psychopathy

Researchers conducting longitudinal studies have consistently demonstrated adulthood psychopathy as a construct originating in childhood or adolescence (Gretton, Hare, & Catchpole, 2004; Freidenfelt & Klinteberg, 2007), as well as indicated that adolescent psychopathic tendencies extend and remain stable into adulthood (Blonigen et al., 2006; Forth et al., 1990; Loney, Taylor, Butler, & Iacono, 2007; Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007). Nevertheless the overall content validity of juvenile psychopathy as a distinct and separate construct continues to be debated.

Many instruments have recently been developed to measure the existence of psychopathy among juvenile populations including, the Antisocial Process Screening Device (Frick & Hare, 2001), the Psychopathy Checklist: Youth Version (PCL: YV; Forth, Kosson, & Hare, 2003) and the Childhood Psychopathy Scale (CPS; Lynam, 1997), however each still remains a condensed and translated version of the primary and best researched adult assessment, The Hare

Psychopathy Checklist—Revised (PCL-R; Hare, 1991). As a result concerns have been raised regarding the extent to which the converted adult construct accurately depicts psychopathy in a different developmental stage (Lynam, Derefinko, Caspi, Loeber, & Stouthamer-Loeber, 2007). Furthermore several researchers have illuminated the many challenges of assessing psychopathic traits in children and adolescents including the evolvement of personality over an extended developmental process (Edens, Skeen, Cruise, & Cauffman, 2001; Hart, Watt, & Vincent, 2002; Heatherton & Weinberger, 1994; Johnstone & Cooke, 2004; Ogloff & Lyon, 2000). Nevertheless childhood temperament does have a connection with adult personality, and therefore it can be hypothesized that psychopathic personality is likely to have antecedents in both childhood and adolescent development (Caspi, Roberts, & Shiner, 2005).

As it has been acclaimed, the PCL-R remains the golden standard for measuring psychopathic features among samples of adult offenders. Among its use with youth, numerous studies have confirmed the clinical utility, reliability, and validity of the PCL-R in application with a variety of adolescent male samples (Das et al., 2007; Ridenour, Marchant, & Dean, 2001). Additionally, in terms of factor structure of the PCL: YV in incarcerated adolescents researchers have made clear that 3 or 4 factor model provide the best overall fit (Jones, Cauffman, Miller, & Mulvey, 2006; Neumann, Kosson, Forth, & Hare, 2006).

However the PCL-R still remains a complex and lengthy clinical interview. Therefore it is not surprising that many new instruments such as the Antisocial Process Screening Device (APSD; Frick & Hare, 2001) the Millon Adolescent Clinical Inventory (MACI; Millon, 1993), and the Psychopathy Content Scale (Murrie & Cornell, 2000) instead incorporate the use of self report or brief informant report. In a study investigating the correspondence among the three previously mentioned measures, results determined that correlations between the PCL: YV and

APSD self report were rather low ($r=.30$), whereas the PCL:YV and MACI obtained a higher correlation ($r=.49$) (Murrie & Cornell, 2002). It is therefore clear that further research is necessary to achieve long term stability of the psychopathy construct in adolescents (Edens et al., 2001).

An additional study investigating the relationship between psychopathic features, violence, and treatment outcome compared three youth measures (Spain, Douglas, Poythress, & Epstein, 2004). Researchers hypothesized that psychopathic features in youth would correlate positively with disciplinary action (due to violence) and poorer treatment responses among a sample of juvenile non-sexual offenders. Indeed analyses supported these hypotheses, demonstrating that the APSD and mCPS were comparable to the PCL:YV in predicting institutional infractions and progress in treatment (Spain et al., 2004). Moreover results indicated that that self report measures were more consistently related to treatment progress as opposed to the clinician-rated PCL: YV. Similarly, the mCPS compared to the APSD and specifically the PCL:YV was a stronger predictor of all three studied types of institutional infraction (Spain et al., 2004).

Another self report measure commonly used in adolescent offender populations is the Millon Adolescent Clinical Inventory (Millon, 1993). The MACI assesses three areas of juvenile functioning including clinical disorders, personality patterns, and expressed concerns (Amato, Cornell, & Fan, 2008). Indeed comparison studies have revealed patterns of statistically significant relationships between PCL-R factor scores and several factor scores on the MACI (Amato et al., 2008; Murrie & Cornell, 2000). For example, results demonstrated that the PCL-R scores of 90 incarcerated adolescents significantly correlated, albeit not highly, with six MACI scales including, Substance Abuse Proneness (.47), Unruly (.43), Delinquent Predisposition

(.41), Forceful (.38), Impulsive Propensity (.34), and Social Insensitivity (.29) (Murrie & Cornell, 2000).

Moreover psychopathy as a syndrome that predicts future violent and aggressive behavior in adulthood (Vitacco, Caldwell, Van Rybroek, & Gabel, 2007) perceivably has several emotional, behavioral, and psychological correlates. Numerous researchers have identified risk factors associated with antisocial and delinquent behavior in youth including dispositional characteristics such as poor response inhibition/impulsivity (Moffitt, Lynam, & Silva, 1994). Additionally, a number of contextual risk factors exist associated with juvenile delinquency including parental psychopathology (Lahey et al., 1998), peer rejection (Coie, Dodge, & Kupersmidt, 1990), family conflict (Amato & Keith, 1991), and exposure to violence (Richters & Martinez, 1993).

Early childhood traumatization, expectedly, also has a significant impact on the development of antisocial traits and behavior in adulthood. Theoretically the association between early childhood victimization and violence may be mediated through psychopathy (Krischer & Sevecke, 2008). Several studies have given evidence to the proposed link through demonstrating that samples of juvenile offenders victimized in childhood had significantly higher PCL-YV scores than controls (Krischer & Sevecke, 2008; Lang, Klinteberg, & Alm, 2002; Moeller & Hell, 2003; Weiler & Widom, 1996). As such one may begin to question the mediating influence early childhood trauma has on the degree and type of victim injury committed by psychopathic juvenile offenders, although little is truly known on the subject.

Additionally due to psychopaths' deficits in response modulation and fear detection, adolescents who score high in psychopathic traits are more likely to engage in delinquent behavior (Myers, Burket, & Harris, 1993) as well as greater victim injury (Vitacco et al., 2007).

For example in a study conducted on 168 male juvenile offenders) results demonstrated that the greatest difference in incidence between the low injury (98 adolescents) and high injury group (70 adolescents) was early onset of criminal behavior and criminal versatility (Vitacco et al., 2007). Furthermore in terms of psychopathy the results unveiled several items significantly higher within the high injury group including callousness, lack of empathy, need for stimulation, and shallow affect. Thus these results provided relatively strong evidence for an association between psychopathy and serious victim injury among non-sexual juvenile offenders (Vitacco et al., 2007). Likewise in another sample of 175 juvenile delinquents, results confirmed initial hypotheses in that the more violent group (based on self report data) not only displayed higher levels of psychopathic traits, as well as higher levels of physical aggression, but also an increase in perceptions of antisocial behavior as normative (Fritz, Wiklund, Kuposov, af Klinteberg, & Ruchkin, 2008). All in all it seems that psychopathic juvenile offenders tend to engage in more violent and aggressive behavior than their other delinquent counterparts.

In effort to improve upon already existing measures including the PCL:YV and APSD specifically, the Inventory of Callous-Unemotional Traits (ICU) (Frick, 2004) was developed to provide a valid and reliable assessment of CU traits. Indeed in its utilization with a sample of 248 juvenile offenders, the total ICU score was correlated with self report measures of aggression and delinquency as well as with self-reported and psychophysiological indices of constricted emotion (Kimonis et al., 2008). Clearly evidence supports the ICU as a promising measure of the psychopathy construct and unemotional-callous traits that has proven helpful in classifying a subgroup of antisocial youth (Kimonis et al., 2008).

One means of examining dimensionality of psychopathy among youth in diversion programs has been to employ internalizing and externalizing indices. Studies with male

delinquent adolescents have determined that psychopathic features are associated with both internalizing (INT) and externalizing (EXT) symptomatology (Benning, Patrick, Blonigen, Hicks, & Iacono, 2005; Patrick, 2003; Wareham, Dembo, Poythress, Childs, & Schmeidler, 2009). For instance several studies have indicated that incarcerated adolescent males scoring high on the PCL:YV concordantly display higher levels of externalizing behaviors such as aggressiveness (Gretton, McBride, Lewis, O'Shaughnessy, & Hare, 1994), conduct disorder symptoms, and greater alcohol and substance abuse when compared to lower scoring adolescent males on the PCL:YV (Forth & Burke, 1998).

Sexual Offending in Psychopathic Adolescents

In addition to the discussion on adolescent delinquency, a small body of research has been written on the more specific topics of sexual assault and molestation among juvenile offenders. Researchers examining psychopathy as a risk factor among adolescents have discovered its numerous implications for recidivism. Researchers in one specific study investigating a sample of 220 juvenile male sex offenders, hypothesized that offenders identified as psychopathic, namely those with phallometric evidence of deviant sexual arousal, would be more apt to commit additional sexual, violent, and non violent offenses than other offenders (Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001). Interestingly the primary offense for the majority of the juvenile delinquents involved either a child under the age of 12 (65.6%) or an adolescent or adult (21.5%). The remaining 12.9% of offenders committed acts against both children and adolescents or adults (Gretton et al., 2001).

Similarly in a study investigating the differences in recidivism factors and traits associated with psychopathy results determined that the majority of juvenile sex offenders reoffended nonsexually more often than sexually (Parks & Bard, 2006), and that additional

predictors of sexual recidivism included prior sexual offending (Langstrom, 2000; Langstrom & Grann, 2002), offending against stranger victims (Langstrom, 2002; Smith & Monastersky, 1986), and histories of childhood sexual abuse and intrafamily violence (Boyd, 1994).

Despite the growing body of knowledge regarding psychopathy in juvenile sex offenders there is still a strong need for additional research. As a result this study will address how well each of the four measures of juvenile psychopathy, including the CPS, APSD, MACI, and ICU, relate to one another in a sample of incarcerated male adolescent sex offenders. This research will also determine how well the diverse scales of psychopathy relate to characteristics of sexual aggression, and given the indication of relationships between or among scales research will discover which scale in particular is the best predictor of sexual crimes. Finally this study will attend to how well the diverse scales relate to nonsexual criminality in this sample of sex offenders, and in the event that scales relate well which scale is the best predictor of nonsexual crimes. This study hypothesizes that adolescent sex offenders with higher psychopathy scores, as measured by the ICU, APSD, CPS, and MACI will not only be more likely to have engaged in greater victim injury, utilized more force in offenses, and have a higher number of victims than their nonpsychopathic sex offender counterparts.

Method

Sample

The sample was comprised of 191 male juvenile sex offenders arrested and incarcerated in juvenile correctional facilities in a Midwest state. On average their age was 17.18 years and the juvenile offenders were determined to be, on average, enrolled in the 10th grade. The majority of the sample was of White (49.2%) and secondarily Black racial composition (26.7%). Additionally the majority of the sample lived in two parent homes (31.4%) or came from a single

parent family (22.5%). This sample on average perpetrated against 4.78 victims each, and on average perpetrated their victims utilizing penetration with penis, digits, or objects (scale described below). In addition, on average this sample reported using threats with their victims while abusing them as opposed to being more physically forceful. Of 191 respondents, 25.1% stated that they had abused children, 7.9% stated they abused teens, and 1.0% said they abused adults. Many youth did not answer this question and some youth may fit into more than one category.

Administration

Confidential data were culled utilizing pencil and paper surveys from six juvenile detention facilities in a Midwestern state. The surveys were dispensed in small (8-12) groups in a classroom format. Juvenile participants were separated in classrooms to ensure that they could not view each other's answers. The juveniles were not given any form of compensation for participating in this research study or completing the survey. For participants (n=4) that struggled to read or comprehend questions being asked in the survey, trained graduate student research assistants read aloud to youth privately and out of view of other juvenile participants. No data is available on non-responsive participants.

Measures

Due to the purpose of this study a detailed demographics and history form (Burton, 2003; Burton, Miller, & Shill, 2002) was included in participants' surveys. This particular measure includes two items utilized to assess feelings of guilt and shame regarding juveniles' criminal offenses. These items specifically were scored using a 0 (not at all) to 4 (a great deal) ordinal scale. Reliability testing for this entire instrument produced $\alpha = .86$, with an 8 week test-retest agreement of 79% (Burton & Fleming, 1998) for a subsample.

The Self Report Sexual Aggression Scale (SERSAS) is a multi-item inventory included in prior studies (Burton et al., 2002; Burton, 2003). The SERSAS measures sexually aggressive behaviors over the course of an offender's life. Items inquiring as to several sexual acts are prefaced with, "Have you ever conned or forced someone to ...?". The original extensive survey was reduced to two pages based on collapsed variables used in previous projects. The SERSAS instrument is a checklist of relationships and acts with a previous 8-week test-retest reliability, for a small sample, of 96% (Burton, 2000).

The Self Reported Delinquency Measure (SRD) was used to assess delinquency (Elliot, Huizinga, & Ageton, 1985), and includes 32 questions using a 7-point frequency scale from 1 (never) to 7 (2-3 times per day) on questions ranging from drug use to aggression. The SRD consists of multiple subscales including General Delinquency, Property Damage, Public Disorderly, Felony Assault, Felony Theft, Robbery, Alcohol Use, Drug Use, and Selling Drugs. Due to the intentions of this study, the scales were collapsed to create a Violent Crime subscale and a Non-Violent Crime subscale. All of the subscales have acceptable to good internal consistency. Cronbach's alphas on the SRD subscales range from .63 (Violent Crime) to .91.

The Millon Adolescent Clinical Inventory (MACI) was formulated based upon Millon's theory of personality patterns (Millon & Davis, 1996). The MACI was designed for use with youth in treatment or in correctional institutions. The MACI's scales consist of 160 True or False questions. Additionally, the recently developed two factor psychopathy content scale (Lexcen, Vincent & Grisso, 2004) based on psychometric and validity studies of the original psychopathy scale by Murrie and Cornell (2000) was used as a measure of antisociality for the youth in the current study. Factor I, a scale assessing manipulateness, callousness, and a lack of response to punishment was quite internally consistent with an $\alpha = .67$. Yet Factor II,

assessing delinquency and rule breaking, demonstrated less internal consistency with $\alpha = .34$ and is therefore not used in further analysis.

The Antisocial Process Screening Device (APSD: Frick & Hare, 2001) is a brief scale composed of 20 items, and designed for assessing psychopathic features in youth ranging from 6-13 years old. The instrument's statements are prefaced by, "You blame... You engage... You act... You feel," and are scored with an ordinal scale 0, 1, or 2, reflecting the respondent's (parent, teacher, youth) belief that the statement is either NT (not at all true), ST (sometimes true), and DT (definitely true) as it applies to the youth being rated. The measure consists of three subscales including Callous/Unemotional, Narcissism, and Impulsivity. Studies utilizing clinical and community samples indicate that the two factor scoring yields coefficient alphas ranging from 0.68 to 0.81 for the CU scale, and 0.82 to 0.83 for the Impulsive scale (Barry et al., 2000; O'Brien & Frick, 1996). A considerable amount of research indicates the construct validity of the APSD as a research measure (Frick, 2007).

The Modified Childhood Psychopathy Scale (mCPS: Lynam, 1997) is a 55 item instrument congruent with 14 aspects of psychopathy measured by the PCL-R (Hare, 1991). The respondent (parent or youth) rates each item according to if it's false (score of 0) or true (score of 1) as it applies to the youth being rated. Lynam et al. (2001) reported findings on the original report version of the mCPS with two samples of male juveniles (ages 13-17), and discovered that coefficient alphas for both samples were 0.91 and 0.92 for the mCPS total score. Evidence for convergent validity was found utilizing significant correlations with self reported aggression (0.20, 27) and impulsivity (0.21, 0.34). Additionally verification for criterion validity was reported using correlations with previous and concurrent self report measures of delinquent behavior.

The Inventory of Callous and Unemotional Traits (ICU: Frick, 2004) was developed in effort to overcome the limitations of the APSD in assessing CU traits. The ICU includes 24 items (i.e. “I do not show my emotions to others”) that are rated utilizing a four-point Likert scale in which a score of 0 corresponds to not at all true, 1 to somewhat true, 2 to very true, and 3 to definitely true. Initial testing of the psychometric properties of the ICU were conducted upon a large sample of 13-18 non-referred German adolescents (Essau, Sasagawa, & Frick, 2006). Utilizing exploratory factor analysis, three factors emerged and were labeled as Callousness, Uncaring, and Unemotional. This three factor bifactor model fits well for use with both male and female juveniles, and its scores are internally consistent (.77 for the total score). Lastly the three factor bifactor model is correlated with measures of conduct problems, aggression, personality features, and psychosocial impairments largely consistent with former research on CU traits (Kimonis et al, 2008).

Results

Of the four instruments (APSD, ICU, CPS and MACI) and nine scales (APSD callous and unemotional, APSD narcissistic and impulsive, ICU total, CPS total, CPS behavioral dyscontrol, CPS lacking guilt and CPS Manipulative, MACI factor1, MACI factor 2) only the APSD narcissistic and impulsive was significantly correlated ($r = .226, p = .012$) to any characteristics of sexual crime; amount of force used in the sexual crimes. No scale was significantly correlated to the number of victims or the severity of the sexual crimes committed. However several scales were correlated to the SRD total delinquency score (see Table 1).

Table 1: Correlations Between Psychopathy Scales and SRD Total Delinquency

Psychopathy Scale	SRD total
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APSD Callous and Unemotional	.245*
APSD Narcissistic and Impulsive	.309**
ICU total	.412***
CPS total	.332***
CPS Behavioral Dyscontrol	.161
CPS Lacking Guilt	.387***
CPS Manipulative	.171
MACI Factor1	.457***
MACI Factor2	.533***

* p<.01, ** p=.001, ***P < .001

In comparing the four measures of juvenile psychopathy, results indicate that the scales are correlated significantly, but not at particularly high levels as might be expected (see Table 2). Indeed it seems that each scale is measuring psychopathy differently.

Table 2: Psychopathy Scale Correlations

	APSD callous	APSD	ICU	CPS	CPS	CPS	CPS	MACI	MACI
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	and unemotional	narcissistic and impulsive	total	total	behavioral dyscontrol	lacking guilt	Manipulative	factor1	factor2
APSD callous and unemotional	1.0								
APSD narcissistic and impulsive	.149	1.0							
ICU total	.545**	.288**	1.0						
CPS total	.459**	.639**	.591**	1.0					
CPS behavioral dyscontrol	.180*	.458**	.227**	.557**	1.0				
CPS lacking guilt	.319**	.117	.495**	.424**	.106	1.0			
CPS Manipulative	.273**	.566**	.555**	.663**	.283**	.043	1.0		
MACI factor1	.354**	.480**	.458**	.694**	.333**	.240*	.555**	1.0	
MACI factor2	.291**	.322**	.471**	.406**	.214*	.127	.220*	.539**	1.0

* $p < .05$, ** $p < .01$

Using multiple regressions to assess the best fit for prediction of total delinquency, the two APSD scales, the ICU total scale, the two MACI scales and the CPS were regressed onto total delinquency scale. In the first model only the MACI factor 2 scale and the ICU total scale were significant ($F(70) = 7.36, p < .000, R^2 = .40$) (Please see Table 3). In a more parsimonious model the same two variables were consistently powerful in their predictive ability ($F(70) =$

20.44, $p < .000$, $R^2 = .37$) (See Table 4) with similar coefficients, indicating that this is a robust model.

Table 3: Regression Model 1: Measures Predicting Total Delinquency Score †

	Beta	SD	β
ICU Total	-.66	.30	-.296*
MACI Factor 2	2.38	.821	.34*
MACI Factor 1	1.19	1.25	.128
APSD IMP	.23	.51	.058
APSD CU	-.16	1.22	-.29
CPS Total	2.54	23.4	.018

† Sorted by smallest p value

* $p < .05$, $R^2 = .40$

Table 4: Regression Model 2: A Parsimonious model of Measures Predicting Total Delinquency Score †

	Beta	SD	β
ICU Total	-.620	.225	-.285**
MACI Factor 2	3.06	.725	.436***

† Sorted by smallest p value

** $p < .01$, *** $p < .001$, $R^2 = .37$

Discussion

Extensive comparisons of all psychopathy measures indicated that the scales are quite significantly correlated. Yet the correlations failed to be at high levels as might be expected. It is likely that the strongest relationships among the diverse scales were due to the similarity between the measures however, it remains clear that none of the diverse scales measure psychopathy in the same way. The APSD CU and NI scales correlated significantly with both MACI scales and CPS total, yet again not at high levels. This finding suggests that even with some congruencies in conceptualization of the psychopathy, authors of the measurements still define and therefore assess the construct differently.

Moreover applying the construct of psychopathy to juvenile offenders remains as a point of controversy in the field. As was previously noted all psychopathy measures designed for assessing youth are condensed versions of the psychopathy golden standard; the PCL-R (Hare, 1991) utilized with adults. It is therefore not surprising that concerns abound about the extent to which the converted adult construct accurately and validly maps onto psychopathy in children. However similar to the present study, prior researchers have found small, although significant, correlations amongst childhood psychopathy scales including, the PCL: YV and APSD and slightly higher between the PCL: YV and MACI.

Upon hypothesis that all of the diverse psychopathy scales would predict characteristics of sexual aggression, intriguingly findings indicated that only one scale predicted sexual aggression. It thus remains clear that in this particular sample of juvenile sex offenders, psychopathy did not predict sexual offending. However findings indicated in the multiple regression analyses demonstrated that only the MACI Factor 2 Scale and the ICU total scale were significant in the prediction of non-sexual delinquency. Additionally in a more

parsimonious model the same two variables were consistently powerful in their predictive ability with similar coefficients indicating the robustness of this model.

Taking into consideration the relationships between psychopathy and characteristics of sexual aggression, astonishingly the APSD NI held the only significant correlation. Results indicated that the APSD-NI was significantly related, albeit with a small correlation, to the total number of sexual abuse victims. Although surprising, this finding remains quite congruent with the pre-established notion that psychopathy is not only linked to antisocial, but narcissistic and impulsive traits as well (Harpur et al., 1989; Hare, 1991; Widiger, 2006).

This finding may imply that male juvenile sex offenders who meet a higher level of criteria for psychopathy (NI traits) as opposed to antisociality sexually offend exclusively, and perhaps more frequently and severely than male juvenile sex offenders who satisfy more criteria on the antisocial spectrum committing a higher combination of nonsexual and sexual offenses. In regards to the relationship between psychopathy and non-sexual delinquency, data corroborated that the majority of psychopathy scales predicted non-sexual crime.

Fitting with the current literature, these correlations between measures indicate the ways in which psychopathy in this sample of juvenile sex offenders integrates both personality traits and antisocial behaviors (Hare, 1991, 2003). Indeed the comorbidity between psychopathy and criminal behavior has been consistently demonstrated through research (Coid, 2002; Dolan & Doyce, 2000; Hare et al., 1999; Hart & Hare, 1997; Hemphill et al., 1998; Salekin et al., 1996). Additionally as was found in the present study, youth scoring high in psychopathic traits were also more likely to engage in delinquent behavior per results established in previous research (Myers et al., 1993).

It thus remains clear that the higher the score of CU and NI traits among the juvenile sex offenders the higher the total number of delinquent acts committed. Taking these findings into account multiple regressions were utilized to assess the best fit for prediction of total delinquency. Results indicated that only the MACI factor 2 scale and the ICU total scale were significant. Therefore it remains clear that non-sexual delinquency in this sample of juvenile sex offenders was driven by both facets of psychopathy—personality attributes as measured by the ICU along with recurrent violations of societal norms and standards as measured by the MACI Factor 2 (Guay et al., 2007; Hare, 1991, 1996, 1998). Furthermore, this result confirms prior findings that the association between violent delinquency and psychopathy is linked with antisocial traits indicated by the PCL-R Factor 2 in Hare’s (2003) study, and the MACI Factor 2 in the present study.

Overall these findings suggest that psychopathy, rather than fueling sexual crime characteristics, instead predicted non-sexual delinquency in this sample. Perhaps the underlying reasoning for this finding is due to the fact that the diverse psychopathy scales lack sensitivity to the motivation and nature of CU and NI traits in juvenile sexual offenders. Equally as valid is the possibility that totally different traits impel these areas of crime. In addition, psychopathy in sexual offending adolescents may need to be measured altogether differently than from the several measures translated from adult versions. Another plausible explanation may include that non-sexual and sexual delinquent crimes were in fact motivated by different traits among the same young men.

Indeed this investigation yielded complex and interesting findings in which little of what was hypothesized was evidenced by results. Therefore it remains clear that research cannot boldly characterize psychopathic juvenile sexual abusers as the most psychopathic offenders

compared to their counterparts. Continual research must be conducted on psychopathic juvenile sex offenders and the manifestations of psychopathy on an individual basis. Additionally, more research must be done to improve the compatibility between the diverse psychopathy scales, in order for psychopathy to be assessed validly.

Implications for treatment of sexual offenders are thus that therapy cannot focus on sexual offenses exclusively. Without a doubt therapy must include the breadth of crime committed by the juvenile in order to provide the soundest interventions and prevention of recidivism both sexual and non-sexual.

A primary limitation of this study is the small sample size of only 191, which limited the degree to which data could be extrapolated to other facilities in the surrounding regions. Due to the fact that the sample was collected in a small number of facilities, albeit all of those under one state's management the sample is likely thus only representative of the population in those specific facilities. Additionally, conducting research on a cross sectional as opposed to longitudinal basis also poses as a significant limitation to this study. Examining the juvenile psychopathic sex offender youth over the course of time would likely have provided more extensive data confirming the prevalence and different manifestations of psychopathy within this particular sample. Lastly the administration of the survey on a self report basis was also quite limiting to the study. Due to the nature of data being collected it is likely that juvenile sex offender sample reported incongruent answers with their experiences for fear of repercussion or additional reasons.

References

- Amato, J.M., Cornell, D.G., & Fan, X. (2008). Adolescent psychopathy factor structure and correspondence with the Millon Adolescent Clinical Inventory. *Criminal Justice and Behavior, 35*, 294-310.
- Amato, P.R., & Keith, B. (1991). Parental divorce and the well-being of children: A meta-analysis. *Psychological Bulletin, 110*, 26-46.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Barbaree, H., Seto, M., Serin, R., Amos, N., & Presoton, D. (1994). Comparisons between sexual and nonsexual rapist subtypes. *Criminal Justice and Behavior, 21*, 95-114.
- Barry, C.T., Frick, P.J., DeShazo, T.M., McCoy, M., Ellis, M., & Loney, B.R. (2000). The importance of callous-unemotional traits for extending the concept of psychopathy to children. *Journal of Abnormal Psychology, 109*(2), 335-340.
- Benning, S.D., Patrick, C.J., Blonigen, D.M., Hicks, B.M., & Iacono, W.G. (2005). Estimating facets of psychopathy from normal personality traits: A step toward community-epidemiological investigations. *Assessment, 12*, 3-18.
- Blonigen, D.M., Hicks, B.M., Krueger, R.F., Patrick, C.J., & Iacono, W.G. (2006). Continuity and change in psychopathic traits as measured via normal-range personality: A longitudinal-biometric study. *Journal of Abnormal Psychology, 115*(1), 85-95.
- Boyd, B.L. (1994). The use of psychological tests, criminal histories, and demographic variables to predict treatment participation among incarcerated sex offenders *Dissertation Abstracts International: Section B: The Sciences and Engineering, 54*(7-B), pp. 3894.

- Burton, D.L. (2003). Male adolescents: Sexual victimization and subsequent sexual abuse. *Child and Adolescent Social Work Journal, 20*, 277-296.
- Burton, D. & Fleming, W. M. (1998, October 17). Psychometric examination of the sex offender evaluation instrument. Poster presentation for the annual National Association for the Treatment of Sexual Abusers Conference in Vancouver, CA
- Burton, D., Miller, D., & Shill, C.T. (2002). A social learning theory comparison of the sexual victimization of adolescent sexual offenders and nonsexual offending male delinquents. *Child Abuse and Neglect, 26*, 893-907.
- Caspi, A., Roberts, B.W., & Shiner, R.L. (2005). Personality development: Stability and change. *Annual Review of Psychology, 56*, 453-484.
- Coie, J.D., Dodge, K.A., & Kupersmidt, J.B. (1990). Peer group behavior and social status. In S.R. Asher & J.D. Coie (Eds.), *Peer rejection in childhood* (pp. 17-59). New York: Cambridge University Press.
- Cooke, D.J., & Michie, C. (2001). Refining the construct of psychopathy: Towards a hierarchical model. *Psychological Assessment, 13*, 171-188.
- Cornell, D.G., Warren, J., Hawk, G., Stafford, E., Oram, G., & Pine, D. (1996). Psychopathy in instrumental and reactive violent offenders. *Journal of Consulting and Clinical Psychology, 64*(4), 783-790.
- Cleckley, H. (1976). *The mask of sanity* (5th edition). St. Louis, MO: Mosby (Original work published 1941).
- Crick, N.R., & Dodge, K.A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74-101.

- Das, J., de Ruiter, C., Lodewijks, H., & Doreleijers, T. (2007). Predictive validity of the dutch PCL:YV for institutional disruptive behavior: Findings from two samples of male adolescents in a juvenile justice treatment institution. *Behavioral Sciences and the Law*, 25, 739-755.
- Doren, D.M., & Yates, P.M. (2008). Effectiveness of sex offender treatment for psychopathic sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 52, 234-245.
- Edens, J.F., Lilienfeld, S.O., Marcus, D.K., & Poythress, N.G. (2006). Psychopathic, not psychopath: Taxometric evidence for the dimensional structure of psychopathy. *Journal of Abnormal Psychology*, 115, 131-144.
- Edens, J.F., Skeem, J.L., Cruise, K.R., & Cauffman, E. (2001). Assessment of “juvenile psychopathy” and its association with violence: A critical review. *Behavioral Sciences and the Law*, 19, 53-80.
- Elliott, D. S., Huizinga, D., & Ageton, S. S. (1985). *Explaining delinquency and drug use*. Beverly Hills, CA: Sage.
- Essau, C.A., Sasawaga, S., & Frick, P.J. (2006). Callous-unemotional traits in a community sample of adolescents. *Assessment*, 13, 457-469.
- Farrington, D., Ohlin, L., & Wilson, J.Q. (1986). *Understanding and controlling crime*. New York: Springer-Verlag.
- Forth, A.E., & Burke, H.C. (1998). Psychopathy in adolescence: Assessment, violence, and developmental precursors. In D.J. Cooke, A.E. Forth, R.D. Hare (Eds.), *Psychopathy: Theory, research, and implications for society* (pp.205-229). Dordrecht, the Netherlands: Kluwer.

- Forth, A.E., Hart, S.D., & Hare, R.D. (1990). Assessment of psychopathy in male young offenders. *A Journal of Consulting and Clinical Psychology*, 2, 342-344.
- Forth, A.E., Kosson, D.S., & Hare, R.D. (2003). *The Hare Psychopathy Checklist: Youth Version*. Toronto, Ontario, Canada: Multi-Health Systems.
- Freidenfelt, J.J., & af Klinteberg, B. (2007). Exploring adult personality and psychopathy tendencies in former childhood hyperactive delinquent males. *Journal of Individual Differences*, 28, 27-36.
- Frick, P.J., & Hare, R.D. (2001). *Antisocial Process Screening Device*. Toronto, Ontario, Canada: Multi-Health Systems.
- Frick, P.J. (2004). Developmental pathways to conduct disorder: Implications for serving youth who show severe aggressive and antisocial behavior. *Psychology in the Schools*, 41(8), 823-834.
- Frick, P.J. (2007). Using the construct of psychopathy to understand antisocial and violent youth. In D.J. Cooke, A.E. Forth, R.D. Hare (Eds.), *Psychopathy: Theory, research, and implications for society* (pp. 343-367).
- Fritz, M.V., Wiklund, G., Kopolov, R.A., af Klinteberg, B., & Ruchkin, V.V. (2008). Psychopathy and violence in juvenile delinquents: What are the associated factors? *International Journal of Law and Psychiatry*, 31(3), 272-279.
- Gomez, R., Gomez, A., DeMello, L., & Tallent, R. (2001). Perceived maternal control and support: Effects on hostile biased social information processing and aggression among clinic-referred children with high aggression. *J Child Psychol Psychiatry*, 42, 513-522.
- Gough, H.G. (1948). A sociological theory of psychopathy. *American Journal of Sociology*, 53, 359-366.

- Gretton, H.M., Catchpole, R.E.H., & Hare, R.D. (2004). Psychopathy and offending from adolescence to adulthood: A 10-year follow-up. *Journal of Consulting and Clinical Psychology, 72*, 636-645.
- Gretton, H.M., McBride, M., Hare, R.D., O'Shaughnessy, R., & Kumka, G. (2001). Psychopathy and recidivism in adolescent sex offenders. *Criminal Justice and Behavior, 28*, 427-449.
- Gretton, H.M., McBride, M., Lewis, K., O'Shaughnessy, R., & Hare, R.D. (1994). *Patterns of violence and victimization in adolescent sexual psychopaths*. Paper presented at the biennial meeting of the American Psychology-Law Society (Division 41 of the American Psychological Association), Santa Fe, NM.
- Guay, J., Knight, R.A., Ruscio, J., & Hare, R.D. (2007). A taxometric analysis of the latent structure of psychopathy: Evidence for dimensionality. *Journal of Abnormal Psychology, 116*, 701-716.
- Hanson, R.K., & Scott, H. (1994). *Sexual and non-sexual recidivism of child molesters and other criminals*. Paper presented at the Canadian Psychological Association Convention, Penticton, British Columbia, Canada.
- Hare, R.D. (1970). *Psychopathy: Theory and research*. New York: Wiley.
- Hare, R.D. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences, 1*, 111-119.
- Hare, R.D. (1981). Psychopathy and violence. In J.R. Hayes, T.K. Roberts, & K.S. Solway (Eds.), *Violence and the violent individual* (pp. 53-74). Jamaica, NY: Spectrum.
- Hare, R.D. (1991). *The Hare Psychopathy Checklist—Revised (PCL-R)*. Toronto, Ontario, Canada: Multi-Health Systems.

- Hare, R.D. (1993). *Without conscience: The disturbing world of the psychopaths among us*. New York: Pocket Books.
- Hare, R.D. (1996). Psychopathy: A clinical construct whose time has come. *Criminal Justice and Behavior*, 23, 25-54.
- Hare, R.D., Cooke, D.J., & Hart, S.D. (1999). Psychopathy and sadistic personality disorder. In T. Millon, P.H. Blaney, & R.D. Davis (Eds.), *Oxford textbook of psychopathology* (pp. 555-584). New York: Oxford University Press.
- Hare, R.D. (1998). Psychopaths and their nature: Implications for the mental health and criminal justice systems. In T. Millon, E. Simonson, M. Burket-Smith, & R. Davis (Eds.), *Psychopathy: Antisocial, criminal, and violent behavior* (pp. 181-212). New York: Guilford Press.
- Hare, R.D. (2003). *Hare Psychopathy Checklist—Revised* (2nd ed.) North Tonawanda: NY: Multi-Health Systems.
- Hare, R.D., McPherson, L.E., & Forth, A.E. (1988). Male psychopaths and their criminal careers. *Journal of Consulting and Clinical Psychology*, 56, 710-714.
- Harpur, T.J., Hare, R.D., & Hakistan, A.R. (1989). Two-factor conceptualization of psychopathy: Construct validity and assessment implications. *Journal of Consulting and Clinical Psychology*, 1, 6-17.
- Harris, G.T., Rice, M.E., & Cormier, C.A. (1991). Psychopathy and violent recidivism. *Law and Human Behavior*, 15(6), 625-637.
- Hart, S.D., & Hare, R.D. (1989). Discriminant validity of the psychopathy checklist. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 56, 227-232.

- Hart, S.D., & Hare, R.D. (1997). Psychopathy: Assessment and association with criminal conduct. In D.M. Stoff, J. Brieling, & J. Maser (Eds.), *Handbook of antisocial behavior* (pp. 22-35). New York: Wiley.
- Hart, R.D., Kropp, P.R., & Hare, R.D. (1988). Performance of male psychopaths following conditional release from prison. *Journal of Consulting and Clinical Psychology, 56*, 227-232.
- Hart, S.D., Watt, K.A., & Vincent, G.M. (2002). Commentary of Seagrave and Grisso: Impressions of the state of the art. *Law and Human Behavior, 26*, 241-245.
- Heatherton, T.F., & Weinberger, J.L. (1994). *Can personality change?* Washington, DC: American Psychological Association.
- Hemphill, J.F., Hare, R.D., & Wong, S. (1998). Psychopathy and recidivism: A review. *Legal and Criminological Psychology, 3*, 141-172.
- Johnstone, L., & Cooke, D.J. (2004). Psychopathic-like traits in childhood: Conceptual and Measurement concerns. *Behavioral Sciences and the Law, 22*, 103-125.
- Jones, S., Cauffman, E., Miller, J.D., & Mulvey, E. (2006). Investigating different factor structures of the psychopathy checklist youth version: Confirmatory factor analytic findings. *Psychological Assessment, 18*, 33-48.
- Jenkins, R.L. (1966). Psychiatric syndromes in children and their relation to family background. *American Journal of Orthopsychiatry, 36*(3), 450-457.
- Jutai, J.W., & Hare, R.D. (1983). Psychopathy and selective attention during performance of a complex perceptual-motor task. *Psychophysiology, 20*, 146-151.

- Kimonis, E.R., Frick, P.J., Skeem, J.L., Marsee, M.A., Cruise, K., Munoz, L.C., Aucoin, K.J., & Morris, A.S. (2008). Psychopathic traits and risk assessment in children and adolescents. *International Journal of Law and Psychiatry*, 31(3), 241-252.
- Krischer, M.K., & Sevecke, K. (2008). Early traumatization and psychopathy in female and male juvenile offenders. *International Journal of Law and Psychiatry*, 31, 253-262.
- Lahey, B.B., Loeber, R., Quay, H.C., Applegate, B., Shaffer, D., Waldman, I., Hart, E.L., McBurnett, K., Frick, P.J., Jensen, P.S., Dulcan, M.K., Canino, G., & Bird, H.R. (1998). Validity of DSM-IV subtypes of conduct disorder based on age of onset. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(4), 435-442.
- Lang, S., Klinteberg, B., & Alm, P.O. (2002). Adult psychopathy and violent behavior in males with early neglect and abuse. *Acta Psychiatrica, Scandinavia*, 412, 93-100.
- Långström, N. (2002). Long-term follow-up of criminal recidivism in young sex offenders: Temporal patterns and risk factors. *Psychology, Crime & Law*, 8(1), 41-58.
- Langstrom, N., & Grann, M. (2002). Psychopathy and violent recidivism among young criminal offenders. *Acta Psychiatrica Scandinavica*, 106(Suppl. 412), 86-92.
- Lexcen, F.J., Vincent, G.M., & Grisso, T. (2004). Validity and structure of a self-report measure of youth psychopathy. *Behavioral Sciences and the Law*, 22, 69-84.
- Lidberg, L., Levander, S.E., Schalling, D., & Lidberg, Y. (1978). Necker cube reversals, arousal and psychopathy. *British Journal of Social and Clinical Psychology*, 17, 355-361.
- Lilienfeld, S.O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Review*, 14, 17-38.

- Loney, B.R., Taylor, J., Butler, M.A., & Iacono, W.G. (2007). Adolescent psychopathy features: 6-year temporal stability and the prediction of externalizing symptoms during the transition to adulthood. *Aggressive Behavior, 33*(3), 242-252.
- Lynam, D.R. (1996). Early identification of chronic offenders: Who is the fledgling psychopath? *Psychological Bulletin, 120*, 209-234.
- Lynam, D.R. (1997). Pursuing the psychopathy: Capturing the fledgling psychopathy in a nomonological net. *Journal of Abnormal Psychology, 106*, 425-438.
- Lynam, D.R., Caspi, A., Derefinko, K.J., Loeber, R., & Stouthamer-Loeber, M. (2007). The content validity of juvenile psychopathy: An empirical examination. *Psychological Assessment, 19*, 363-367.
- Lynam, D.R., Caspi, A., Moffitt, T.E., Loeber, R., & Stouthamer-Loeber, M. (2007). Longitudinal evidence that psychopathy scores in early adolescence predict adult psychopathy. *Journal of Abnormal Psychology, 116*(1), 155-165.
- Malcolm, P.B., Andrews, D.A., & Quinsey, V.L. (1993). Discriminant and predictive validity on phallometrically measured sexual age and gender preferences. *Journal of Interpersonal Violence, 8*, 486-501.
- McCord, W., & McCord, J. (1964). *The psychopath: An essay on the criminal mind*. Princeton, NJ: Van Nostrand.
- Millon, T. (1981). *Disorders of personality: DSM-III Axis II*. New York: Wiley.
- Millon, T. (1993). *Millon Adolescent Clinical Inventory manual*. Minneapolis, MN: National Computer Systems.
- Millon, T., & Davis, R. (1996). Putting humpty dumpty together again: Using the MCMI in psychological assessment. In: *Integrative assessment of adult personality*. Beutler, Larry

- E. (Ed.); Berren, Michael R. (Ed.); New York, NY, US: Guilford Press, 1996. pp. 240-279.
- Moeller, A.A., & Hell, D. (2003). Affective disorder and 'psychopathy in a sample of younger male delinquents. *Acta Psychiatrica Scandinavica*, *107*, 203-207.
- Moffitt, T.E., Lynam, D., & Silva, P.A. (1994). Neuropsychological tests predict persistent male delinquency. *Criminology*, *32*, 101-124.
- Murrie, D.C., & Cornell, D.G. (2000). The millon adolescent clinical inventory and psychopathy. *Journal of Personality Assessment*, *75*, 110-125.
- Murrie, D.C., & Cornell, D.G. (2002). Psychopathy screening of incarcerated juveniles: A comparison of measures. *Psychological Assessment*, *14*(4), 390-396.
- Myers, W.C., Burket, R.C., & Harries, H.E. (1993). Adolescent psychopathy in relation to delinquent behaviors, conduct disorder, and personality disorders. *Journal of Forensic Sciences*, *40*, 435-439.
- Neumann, C.S., Kosson, D.S., Forth, A.E., & Hare, R.D. (2006). Factor structure of the hare psychopathy checklist: Youth version (PCL: YV) in incarcerated adolescents. *Psychological Assessment*, *18*, 142-154.
- Newman, J.P., & Wallace, J.F. (1993a). Divergent pathways to impulsive behavior: Implications for disinhibitory psychopathology in children. *Clinical Psychology Review* [Special issue]. *13*, 699-720.
- Newman, J.P., & Wallace, J.F. (1993b). Psychopathy and cognition. In P.C. Kendall & K. Dobson (Eds.), *Psychopathology and cognition* (pp. 293-349). New York: Academic Press.

- O'Brien, B.S., & Frick, P.J. (1996). Reward dominance: Associations with anxiety, conduct problems, and psychopathy in children. *Journal of Abnormal Child Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology*, 24(2), 223-240.
- Ogloff, J.R.P. (2006). Psychopathy/antisocial personality disorder conundrum. *Australian and New Zealand Journal of Psychiatry*, 40(6-7), 519-528.
- Ogloff, R.P., & Lyon, D.R. (2000). Criminality. In A.E. Kazdin (Ed.) *Encyclopedia of psychology* (Vol. 2, pp. 346-351). Washington, DC: American Psychological Association; New York: Oxford University Press.
- Orobio de Castro, B., Veerman, J.W., Koops, W., Bosch, J.D., Monshouwer, H.J. (2002). Hostile attribution of intent and aggressive behavior: A meta-analysis. *Child Dev*, 73, 916-934.
- Parks, G.A., & Bard, D.E. (2006). Risk factors for adolescent sex offender recidivism: Evaluation of predictive factors and comparison of three groups based upon victim type. *Sex Abuse*, 18, 319-342.
- Patrick, C.J. (2003). Affective processes in psychopathy. In: *Emotion and psychopathology: Bridging affective and clinical science*. Rottenberg, Jonathan (Ed.); Johnson, Sheri L. (Ed.); Washington, DC, US: American Psychological Association, 2007. pp. 215-239.
- Patrick, C.J. (2006). Back to the future: Cleckley as a guide to the next generation of psychopathy research. In C.J. Patrick (Ed.), *Handbook of psychopathy* (pp. 605-617). New York: Guilford Press.

- Porter, S., Fairweather, D., Drugge, J., Herve, H., Birt, A., & Boer, D.P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*, 27, 216-233.
- Prentky, R.A., & Knight, R.A. (1991). Identifying critical dimensions for discriminating among rapists. *Journal of Consulting and Clinical Psychology*, 59, 643-661.
- Prentky, R.A., Lee, A.F.S., Knight, R.A., & Cerce, D. (1997). Recidivism rates among child molesters and rapists: A methodological analysis. *Law and Human Behavior*, 21, 635-659.
- Quinsey, V.L., Rice, M.E., & Harris, G.T (1995). Actuarial prediction of sexual recidivism. *Journal of Interpersonal Violence*, 10, 85-105.
- Richters, J.E., & Martinez, P. (1993). The NIMH community violence project: Vol. 1: Children as victims of and witnesses to violence. *Psychiatry*, 56, 1-4.
- Ridenour, T.A., Marchant, G.J., & Dean, R.S. (2001). Is the revised psychopathy checklist clinically useful for adolescents? *Journal of Psychoeducational Assessment*, 19, 227-238.
- Salekin, R.T., Rogers, R., & Swewll, K.W. (1996). A review and meta-analysis of the psychopathy checklist and psychopathy checklist-revised: Predictive validity of dangerousness. *Clinical Psychology: Science and Practice*, 3, 203-213.
- Sears, R.R., Maccoby, E.E., & Levin, H. (1957). *Patterns of child rearing*. Oxford: Row & Peterson.
- Serin, R.C., & Kuriychuk, M. (1994). Social and cognitive processing deficits in violent offenders: Implications for treatment. *International Journal of Law Psychiatry*, 17, 431-441.

- Serin, R.C., Malcolm, P.B., Khanna, A., & Barbaree, H.E. (1994). Psychopathy and deviant sexual arousal in incarcerated sexual offenders. *Journal of Interpersonal Violence, 9*, 3-11.
- Shine, J., & Hobson, J. (1997). Construct validity of the Hare Psychopathy Checklist, Revised, on a UK prison population. *Journal of Forensic Psychiatry, 8*(3), 546-561.
- Smith, W.R., & Monastersky, C. (1986). Assessing juvenile sexual offenders' risk for reoffending. *Criminal Justice and Behavior, 13*(2), 115-140.
- Spain, S.E., Douglas, K.S., Poythress, N.G., & Epstein, M. (2004). The relationship between psychopathic features, violence, and treatment outcomes: The comparison of three youth measures of psychopathic features. *Behavioral Sciences & the Law, 22*, 85-102.
- VanOostrum, N., & Horvath, P. (1997). The effects of hostile attribution on adolescents' aggressive responses to social situations. *Canadian Journal of School Psychology, 13*, 48-59.
- Vitacco, M.J., Caldwell, M.F., Van Rybroek, G.J., & Gabel, J. (2007). Psychopathy and behavioral correlates of victim injury in serious juvenile offenders. *Aggressive Behavior, 33*, 537-544.
- Vitacco, M.J., Neumann, C.S., Caldwell, M., Leistico, A.M., & Van Rybroek, G. (2006). The four-factor model of adolescent psychopathy and its association with instrumental violence. *Journal of Personality Assessment*.
- Walsh, Z., Swogger, M.T., & Kosson, D.S. (2009). Psychopathy and instrumental violence: Facet level relationships. *Journal of Personality Disorders, 23*, 416-424.

- Wareham, J., Dembo, R., Poythress, N.G., Childs, K., & Schmeidler, J. (2009). A latent class factor approach to identifying subtypes of juvenile diversion youths based on psychopathic features. *Behavioral Sciences and the Law*, 27, 71-95.
- Weiler, B.L., & Widom, C.S. (1996). Psychopathy and violent behavior in abused and neglected young adults. *Criminal Behavior and Mental Health*, 6(3), 253-271.
- Widiger, T.A. (2006). Psychopathy and DSM-IV psychopathology.
In: *Handbook of the psychopathy*. Patrick, Christopher J. (Ed.); New York, NY, US: Guilford Press, 2006. pp. 156-171.
- Wong, S. (1984). *The criminal and institutional behaviours of psychopaths*. (User Report). Programs Branch, Ministry of the Solicitor General of Canada.
- Woodworth, M., & Porter, S. (2002). In cold blood: Characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology*, 111, 436-445.