**The Association Between Motivations for Violence, the Victim-Offender
Relationship, and Psychopathic Traits in Violent Youth**

Jillian I. Flight

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfillment of
the requirements for the degree of
Master of Arts
Carleton University

Ottawa, Ontario

May, 2004

© Jillian Flight, 2004

National Library
of Canada

Bibliothèque nationale
du Canada

Acquisitions and
Bibliographic Services

Acquisitions et
services bibliographiques

395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

ISBN: 0-612-93900-6

Our file Notre référence

ISBN: 0-612-93900-6

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this dissertation.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de ce manuscrit.

While these forms may be included in the document page count, their removal does not represent any loss of content from the dissertation.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

Abstract

Psychopathy is a personality disorder that consists of specific affective, interpersonal, and behavioral traits. Psychopathy, among adults, has been well documented as a robust predictor of violence, with psychopaths engaging in more acts of violence than non-psychopaths (Hare, 2003; Hart, 1998; Hemphill et al., 1998; Serin, 1991). In addition, research with adults has demonstrated a relation between psychopathy and instrumental violence, callous acts of violence carried out in an attempt to serve some self-gratifying goal (Cornell et al., 1996; Williamson et al., 1987; Woodworth & Porter, 2002). Explanations for this relation have focused on the affective deficit that characterizes psychopathy (Woodworth & Porter, 2002).

This study examined whether the relation between psychopathy and violence, frequently observed in adults, also pertains to youth. Fifty-one incarcerated adolescent male offenders were assessed on psychopathy using the Psychopathy Checklist: Youth Version (PCL: YV; Forth et al., 2003). The relation between the number of violent and non-violent official charges and convictions and PCL: YV total scores was not significant, however psychopathy was significantly related to the severity of victim injury in past violent offenses. In addition, youth who were classified as instrumentally violent scored higher on psychopathy than those who were not, and this relation could be attributed to the PCL: YV Affective/Interpersonal factor (Factor 1) but not the Behavioral/Antisocial factor (Factor 2).

The motivations underlying violence were also examined in relation to the victim-offender relationship. More specifically, those youth who have been instrumentally violent to family members and friends were examined in relation to those who have only

been instrumentally violent to acquaintances and strangers. Results revealed that the groups did not differ on measures of attachment, empathy, or psychopathy.

Such research is important in that it provides support for the construct of psychopathy, as demonstrated in adults, existing in youth. Implications of these findings for the potential intervention and prevention of persistent serious and violent offending are discussed.

Acknowledgements

I would like to thank my supervisor, Dr. Adelle Forth, for all her support, encouragement, persistence and guidance without which completion of this endeavor would not have been possible. I am forever grateful for the opportunity and pleasure to work with you, one I will never forget.

Appreciation is also extended to Dr. Pozzulo, Dr. Bennell, Dr. Saunders, and Dr. Logan for your time and advice in helping me complete this study. I must also thank Matthew Wadden and Yvonne Atandi for your assistance in the coding and entry of data.

I would like to thank Dr. Marie-Claude Robinson, Dr. Judith Mack, and Dr. Ian Shields for your help in coordinating collection of the data and facilitating our visits to your facilities. Special thanks to all the youth from Bluewater Youth Center, Brookside Youth Center, and the Ottawa-Carleton Detention Center for your participation in this project; without it this would never have been possible.

I would like to extend my sincere thanks to Krista Richard for being my traveling companion, a sounding board, and most of all a great friend. You have truly been an inspiration to me and enriched this experience, making it one I will remember fondly – aside from the winter driving part ☺.

I thank my mother, father and sister for your encouragement, never-ending love and support. You have always had faith in me, even when I ceased to have it in myself and I will never forget that. Without you I would not be who I am today, you have given me the strength to pursue my dreams. Special thanks to my family and friends for your encouragement, support, and understanding, it has been invaluable. Last but not least I thank Travis, my best friend, companion, and true love. You have been by my side

during everything, whether it was offering encouragement, laughter, a much needed break from work, or someone to talk to. I will never ever forget your support, patience, and understanding, it really did make all the difference.

Table of Contents

Abstract.....	ii
Acknowledgements.....	iv
Table of Contents	vi
List of Tables	ix
List of Appendices.....	xi
Violence and Aggression.....	3
The Construct of Psychopathy.....	6
Measurement of psychopathy.....	8
Psychopathy in Youth.....	13
Criticisms of application of psychopathy to juveniles.....	13
Research on psychopathy in juveniles.....	15
Measurement of psychopathy in youth.....	16
Reliability and validity of the PCL: YV.....	20
Summary.....	24
Psychopathy and Motives for Violence.....	24
Does this relation exist in youth?.....	30
Summary.....	34
Empathy and Attachment.....	35
Victim-Offender Relationship.....	37
Deviant violence.....	38
Victim-offender relationship, psychopathy and motives for violence.....	40
Purpose and Rationale.....	41

Method	44
Participants.....	44
Measures.....	44
Procedure.....	51
Results	54
Data screening.....	55
PCL: YV scores.....	55
Reliability of PCL: YV scores and factor scores.....	55
Violent classifications.....	56
Reliability of violent classification ratings.....	57
PDS results.....	59
Descriptives for measures.....	60
Psychopathy scores and violent offending.....	63
Violent and non-violent official charges.....	63
Severity of injury.....	63
Psychopathy and instrumental violence.....	64
Instrumental rating in relation to factor scores.....	67
Instrumentality, empathy, and attachment.....	71
Empathy.....	71
Attachment.....	74
Link between empathy and violence.....	75
Instrumental violence against family members and intimate partners.....	76
Exploratory analyses.....	77

Severity of instrumental violence and psychopathy.....	77
PCL:YV scores and attachment.....	78
Psychopathy and reasons for past violence.....	79
Discussion.....	81
References.....	101

List of Tables

Table 1.	PCL-R Factor structure for 2-factor, 3-factor, and 4-facet models.....	12
Table 2.	PCL:YV Factor structure and items for 3-factor and 4-factor models.....	19
Table 3.	Descriptive Statistics for Measures.....	61
Table 4.	Correlations between Measures employed in the Study.....	62
Table 5.	Means and Standard Deviations on Psychopathy, Attachment, and Empathy for Instrumental versus Non-Instrumental Groups.....	65
Table 6.	Means and Standard Deviations on Psychopathy, Attachment, and Empathy between Instrumentality Groups.....	66
Table 7.	Means and Standard Deviations on Psychopathy, Attachment, and Empathy for Versatile Group versus Non-Versatile Group.....	67
Table 8.	Correlations between Instrumental and Reactive Rating and Psychopathy Scores.....	68
Table 9.	Means and Standard Deviations for Empathy Constructs as a Function of Never Instrumental versus Instrumental.....	72
Table 10.	Means and Standard Deviations for Empathy Constructs as a Function of Versatile versus Non-Versatile.....	73
Table 11.	Means and Standard Deviations for Empathy Constructs as a Function of Instrumentality.....	74
Table 12.	Means and Standard Deviations on Psychopathy, Attachment, and Empathy for Instrumental to Family versus Others.....	77

Table 13.	Regression Coefficients for the set of Attachment Predictors.....	79
Table 14.	Correlations between PCL: YV Scores and Reasons for Past Violent Offending.....	80

List of Appendices

Appendix A. PCL:YV Interview Guide.....	116
Appendix B. Semi-Structured Motivations Interview.....	129
Appendix C. Interpersonal Reactivity Index (IRI).....	137
Appendix D. Inventory of Parent and Peer Attachment (IPPA).....	139
Appendix E. Paulhus Deception Scale (PDS).....	145
Appendix F. Violent Offenses Scale (VOS).....	147
Appendix G. Sample Recruitment Sign.....	150
Appendix H. Information Form.....	151
Appendix I. Informed Consent.....	153
Appendix J. Consent to access files, audiotape, follow-up.....	154
Appendix K. Debriefing.....	155
Appendix L. IRI Coding.....	156
Appendix M. IPPA Coding.....	157

The Association between Motivations for Violence, the Victim-Offender Relationship and Psychopathic Traits in Violent Youth

Why is it that some individuals are capable of taking the lives of innocent people without the slightest hint of guilt or remorse, while others go their entire lives without displaying a single form of violence? Violence in society is a complex phenomenon that affects us all, and it is one that before we as a society can attempt to prevent, we first must understand. For purposes of intervention and prevention, the purpose of the current study was to gain an understanding of the characteristics associated with violence in youth and, more specifically, examine whether the relation between psychopathy and violence, frequently observed in adults, also pertains to youth.

An understanding of violence begins with a thorough appreciation of the extent to which it manifests itself in society. This can be seen in reviews of the rates and prevalence of violent criminal offending. Such a review in Canada revealed that, in 2002, nine hundred and sixty-six crimes of violence were committed per 100,000 people. Furthermore, of these 966 violent crimes per 100,000 people, 1.9 involved homicide, 2.2 involved attempted homicide, 748.9 involved assault, and 77.5 involved sexual assault (Statistics Canada, 2004).

While these rates of violent criminal offending in Canada may be astonishing to many, even more so is the fact that in 2002 the rate of youth charged for crimes of violence per 100,000 population almost doubled that of adults charged (933.5 vs. 498.1). More specifically, the rate of charges for assault, attempted murder, sexual assault and robbery per 100,000 youth exceeded the rate of charges per 100,000 adults (680.0, 2.6, 64.3, and 133.5 vs. 397.1, 2.1, 30.9, and 28.5). In addition, a review of crime statistics

by Kelly and Totten (2002) indicates that, from 1990 to 1999, an average of 52 young people have been charged each year with homicide.

It is for these very reasons that the study of crime and violence is one of much research. In the criminal justice system, the identification of individuals who are most likely to commit future violent acts is of paramount interest to clinicians and decision-makers (Serin, 1991). In order to prevent future acts of violence, questions regarding the causes of violence and identifying characteristics of violent individuals, especially violent youth, need to be addressed. As such, attempts are made to examine the characteristics of individuals who commit these acts of violence, the features of victim-offender relationships, and potential motives underlying the violent acts. For the successful prevention and early intervention of violent crime, it is crucial that we are able to identify these characteristics in youth. As Lynam (1996) pointed out “to find the antisocial adult of tomorrow, we must look to the antisocial children of today” (p. 210).

The subsequent introduction will first provide an in-depth description of violence and aggression, and describe in detail the dichotomous nature of violence. Following from this, the construct of psychopathy and its relation to violence will be introduced, recounting the literature demonstrating a strong relation between the two. Next, the measurement and prevalence of psychopathy will be presented, with an emphasis on psychopathy in youth. Since, in adults, a link between psychopathy and the possible motives of violence has been demonstrated, the literature review will examine whether this relation has been examined in youth. Finally, the victim-offender relationship will be examined along with the construct of psychopathy, the underlying motivations of violence, and any interrelations that may exist between the three.

Violence and Aggression

Human aggression is defined as any behavior directed toward another individual that is carried out with the intent to cause harm (Anderson & Bushman, 2002). In addition to this, the perpetrator must believe that the behavior will harm the target, and the target must be motivated to avoid the behavior. In this sense, accidental harm is not aggressive because it is not intended. Violence is defined by Anderson and Bushman (2002) as a form of aggression that has extreme harm, such as death, as its goal.

There exist many theories of aggression, including Berkowitz's (1989) reformulation of the frustration-aggression hypothesis, which proposes that frustrations can give rise to aggression because they are aversive. Also, Bandura's (1983) social learning theory, proposes that people acquire aggressive responses in much the same way that other forms of social behavior are acquired, by direct experiences or by observing others.

The hypothesis that aggression may not represent a unitary phenomenon may have, in fact, originated from these two theories on the causes of aggression. Instead, two primary types of aggression have been distinguished (Decker, 1996; Kingsbury, Lambert, & Hendrickse, 1997; Weinshenker & Siegel, 2002). Kingsbury et al. (1997) proposed a bimodal classification scheme for the study of human aggression. This scheme suggests that aggressive behavior can be classified into two categories: reactive (or hostile) aggression, and instrumental (predatory) aggression.

Reactive or hostile aggression was defined by Kingsbury et al. (1997) as being impulsive, thoughtless, unplanned, and driven by anger, having the ultimate motive of harming the target, and occurring as a reaction to some perceived provocation. Hostile (or reactive) aggression is usually associated with a state of heightened arousal or

excessive stimulation that facilitates aggressive behavior. In this context, reactive aggression conforms to Berkowitz's reformulation of the classic frustration aggression model (Berkowitz, 1989).

Instrumental aggression, on the other hand, is best understood by the principles of operant conditioning, whereby the probability of aggression is increased by a prior history of subsequent reward or reinforcement. Anticipated consequences or rewards, therefore, control instrumental aggression (Kingsbury et al., 1997). According to this theory of aggression, deficits in the ability to experience or anticipate remorse, or the aversive outcomes that come as a consequence of aggression, increase the risk of instrumental aggression (Kingsbury et al., 1997). Viewed from this perspective, instrumental aggression is best understood in the context of the social learning model of aggression (Bandura, 1983). Instrumental aggression is, therefore, proactive rather than reactive, and a calculated behavior that is motivated by some external goal.

Research on instrumental and reactive aggression has linked the development and maintenance of these two types of aggression in children to distinctive social information processing patterns (Dodge, 1990; Dodge & Coie, 1987). According to these models, children's social behavior is a function of sequential steps of processing, including encoding and interpretation of social cues, clarification of goals, response access, response decision, and behavioral enactment (Crick & Dodge, 1994; see Dodge, 1986). It has been hypothesized that skillful processing at each step leads to competent performance within a social situation, whereas biased or deficient processing leads to deviant social behavior, such as aggression.

Research on individual differences in social information processing has consistently shown that aggressive children perceive, interpret, and make decisions about social stimuli in ways that increase the likelihood of their engaging in aggressive acts (Dodge & Crick, 1990). One social information processing pattern involves processing at the interpretation step of the previously described model. Studies of individual differences in children's attempts to interpret social stimuli have established that aggressive children exhibit hostile attributional biases in response to ambiguous provocation situations, more often attributing malicious intent to the peer provocateur than do other children. As such, aggression for these children may serve as retaliation or defense against the peer, otherwise known as reactive aggression (Crick & Dodge, 1996; Dodge, 1980; Dodge & Frame, 1982; Hubbard, Dodge, Cillessen, Coie & Schwartz, 2001).

A second social information processing pattern, involving the response decision step of processing, has been suggested to account for instrumental aggression. It is stated that during this step, children evaluate possible behavioral responses to a particular social situation according to several criteria, such as the outcome likely to accrue for each response and the degree of confidence they feel in their ability to perform each response (Dodge & Crick, 1990). Research on the response decision step of processing has demonstrated that aggressive children evaluate aggressive acts in ways that are likely to lead to aggressive behavior. That is, they expect relatively positive outcomes as a result of aggressing, and feel more confident about their ability to perform aggressive acts than do other children (Crick & Dodge, 1996; Feldman & Dodge, 1987; Smithmyer, Hubbard, & Simons, 2000). As such, for children who exhibit this second social information-

processing bias, aggression may function as a viable means for obtaining desired goals, otherwise known as instrumental aggression.

Understanding these two forms of aggression has many clinical implications. For instance, understanding the reinforcers that are associated with instrumentally aggressive behavior, as well as the consequences the perpetrator expects from the hostile act, removing the reinforcement and changing the expectation of rewards, may decrease the expression of instrumental aggression. Similarly, understanding the root of reactive aggression and working to change hostile attributions may decrease the expression of reactive aggression (Kingsbury et al., 1997).

The Construct of Psychopathy

A discussion of violence is incomplete without mention of the construct of psychopathy. In fact, Hart (1998) suggested that the two are so intimately connected that a full understanding of violence is impossible without a full appreciation of the role played by psychopathy. Research has consistently shown psychopathy to be related to violence (Hemphill, Hare, & Wong, 1998; Serin, 1991; Williamson, Hare, & Wong, 1987). More specifically, empirical evidence has demonstrated that psychopaths are more likely than non-psychopaths to have been convicted for crimes of violence (Hare, 1981; Hare & McPherson, 1984), to have a higher incidence of aggression and violent behaviors both within institutions and in the community (Hare & McPherson, 1984; Serin, 1991), and to use weapons during their assaults on victims (Hare & McPherson, 1984; Serin, 1991). In addition, following release from custody, psychopaths are four times more likely to violently re-offend than are other offenders (Hemphill et al., 1998; Serin, 1991; Serin, Peters, & Barbaree, 1990).

Psychopathy is a personality disorder that is characterized by a constellation of interpersonal, affective, and behavioral characteristics associated with risk for general, violent, and sexual recidivism (Hare, 2003). Psychopaths constitute roughly 1% of the general population (Hare, 1999), but have a prevalence of 15 to 25% in the federal offender population (Hemphill et al., 1998).

Psychopathy was first described by Phillipe Pinel (1806/1962), an early nineteenth-century French psychiatrist, who used the term "insanity without delirium" to describe a pattern of behavior marked by utter remorselessness and a complete lack of restraint, a pattern he considered distinct from the ordinary "evil that men do". These were men who Pinel described as appearing insane, yet whose ability to reason remained intact.

An understanding of the construct of psychopathy has, however, been complicated by terms such as sociopathy. Many researchers and clinicians use the terms psychopathy and sociopathy interchangeably (Hare, 1993). Often times, the term sociopathy is used because it is less likely to be confused with psychoticism or insanity, however, the choice of terms often reflects the user's views on the origins and determinants of psychopathy. As such, those who believe that the syndrome is entirely due to social forces and early experiences prefer the term sociopathy. On the other hand, those who feel that psychological, biological, and genetic factors also contribute to the development of the syndrome generally use the term psychopathy.

The most influential clinical description of the construct of psychopathy remains the now classic book, *The Mask of Sanity*, first published in 1941 by Hervey Cleckley (1964). Cleckley (1964) provided detailed clinical accounts of psychopathy, highlighting

the constellation of affective, interpersonal, and behavioral characteristics associated with it. According to Cleckley (1964), the psychopath lacks the ability to experience the emotional components of personal and interpersonal behavior, and although mimicking the human emotion, is unable to really feel. From this perspective, although the verbalizations of a psychopath may appear normal, they are lacking in emotional meaning. Other main features of psychopathy outlined by Cleckley include: superficial charm and good intelligence, an absence of delusions and other signs of irrational thinking, an absence of nervousness, untruthfulness and insincerity, a lack of remorse or shame, antisocial behavior, poor judgement, a failure to learn from experience, unresponsiveness in general interpersonal relations, and a failure to follow any life plan.

Measurement of Psychopathy

More recently, the study of psychopathy has been greatly advanced by the work of Robert Hare at the University of British Columbia. Hare's work in the area of psychopathy has resulted in the Psychopathy Checklist-Revised (PCL-R; Hare, 1991, 2003), which has been referred to as the "gold standard" for assessing the syndrome of psychopathy in forensic and correctional settings (Edens, Skeem, Cruise, & Cauffman, 2001). The PCL-R is a 20-item symptom rating scale that uses information from a semi-structured interview and case history. Total scores can range from 0 to 40 and reflect an estimate of the degree to which an individual matches the prototypical psychopath (Hare, Clark, Grant, & Thornton, 2000).

Although psychopathy is often treated as a relatively homogeneous construct, extensive empirical research and factor analyses of the PCL-R initially indicated that, the items on the PCL-R measure a construct that is formed by two distinct, but highly

correlated factors (Hare, 1991; Harpur, Hakstian, & Hare, 1988). The first factor (Factor 1) is termed the Interpersonal/Affective factor. Factor 1 has been shown to reflect the core interpersonal and affective components of the disorder, and consists of items such as glibness, grandiose sense of worth, pathological lying, conning, lack of remorse or guilt, shallow affect, callous with a lack of empathy, and a failure to accept responsibility. The second factor (Factor 2) is the Socially Deviant Lifestyle factor which is representative of a chronic unstable and antisocial lifestyle. This factor consists of items such as a need for stimulation, parasitic lifestyle, poor behavioral controls, early behavioral problems, lack of realistic goals, impulsivity, irresponsibility, juvenile delinquency, and revocation of conditional release (see Table 1 below).

While there is extensive empirical research attesting to the validity of this two-factor model of psychopathy (Hare, Harpur, Hakstian, Forth, Hart, & Newman, 1990; Harpur et al., 1988), recent research has provided support for a three-factor model (see Table 1 below). Cooke and Michie (2001) conducted a series of studies to determine whether or not the two-factor model adequately described the construct of psychopathy. In the first study, both Exploratory and Confirmatory Factor Analysis was conducted on the PCL-R development sample ($N = 1389$) and results did not support the two-factor model of psychopathy. In the second study, with a larger sample ($N = 2067$) and Item Response Theory (IRT), they isolated three distinct, but correlated factors formed by 13 of the 20 PCL-R items: Arrogant and Deceitful Interpersonal Style, Deficient Affective Experience, and Impulsive and Irresponsible Behavioral Style (see Table 1). The two factors, interpersonal and affective, are based on the same eight items that loaded on Factor 1 in the two factor model (described above). Four of these items load on the

interpersonal factor and the other four load on the affective factor. Also, five of the same nine items that were associated with Factor 2 in the two- factor model were found to load on the behavioral factor in the three- factor model. Overall, Cooke and Michie (2001) provided support for a three-factor model that presents psychopathy as a coherent construct, with greater emphasis on personality features than behavioral features. Support for these findings has since been demonstrated in a sample of Caucasian and African American participants (Cooke, Kosson, & Michie, 2001).

More recently, research examining factor analyses of a large sample of adult cases suggests that a model comprised of two factors underpinned by four correlated facets provides a very good explanation for the pattern of co-variation between item scores obtained with the PCL-R (Hare, 2003). See Table 1 for a list of these factors. In this model, two of the factors are identical to the interpersonal and affective factors that Cooke and Michie (2001) identified; a third factor is similar to the impulsive/irresponsible behavior factor, and the fourth factor is comprised of five items assessing antisocial behavior and short temper/poor behavioral controls that were not included by Cooke and Michie. These factors were derived from exploratory and confirmatory factor analysis conducted on a large sample comprised of male offenders, female offenders, file reviews, and male forensic psychiatric patients ($N = 9, 016$). Hare (2003) stresses in the manual that the two factor, four facet model maximizes the usage of items, and also takes into account the three-factor model found by Cooke and Michie (2001) without losing any important information.

Notwithstanding, the resurgent interest in psychopathy over the past few years is perhaps attributable to the documented relationship between the PCL-R and antisocial

behavior, particularly future violence among criminal offenders (Hare, 1991; Hemphill et al., 1998). The PCL-R has been demonstrated by many as having predictive value and has been found, in many studies, to perform as well as or better than statistically derived actuarial measures, designed specifically to predict future violence (Hemphill et al., 1998; Serin et al., 1990). Given the widespread focus on preventing violence, the PCL has gained support within various criminal justice agencies as one of the key risk prediction instruments utilized at the sentencing, treatment assessment and parole stages.

Table 1
PCL-R Factor Structure and Items for 2-Factor, 3-Factor, and 4-Facet Models

Two Factor Model	Three Factor Model	Four Facet Model
<p><i>Factor 1: Selfish, Callous, and Remorseless Use of Others</i></p> <p>1.Glibness/Superficial Charm</p> <p>2.Grandiose Sense of Self Worth</p> <p>4.Pathological Lying</p> <p>5.Conning/Manipulative</p> <p>6.Lack of Remorse or Guilt</p> <p>7.Shallow Affect</p> <p>8.Callous / lack of empathy</p> <p>16.Failure to Accept Responsibility</p> <p><i>Factor 2: Chronically Unstable, Antisocial, and Socially Deviant Lifestyle</i></p> <p>3.Need for Stimulation / Proneness to Boredom</p> <p>9.Parasitic Lifestyle</p> <p>10.Poor Behavioural Controls</p> <p>12.Early Behaviour Problems</p> <p>13.Lack of Realistic Long-Term Goals</p> <p>14.Impulsivity</p> <p>15.Irresponsibility</p> <p>18.Juvenile delinquency</p> <p>19.Revocation of conditional release</p>	<p><i>Factor 1: Arrogant and Deceitful Interpersonal Style</i></p> <p>1.Glibness/Superficial Charm</p> <p>2.Grandiose Sense of Self Worth</p> <p>4.Pathological Lying</p> <p>5.Conning/Manipulative</p> <p><i>Factor 2: Deficient Affective Experience</i></p> <p>6.Lacks Guilt</p> <p>7.Shallow Affect</p> <p>8.Callous</p> <p>16.Failure to Accept Responsibility</p> <p><i>Factor 3: Impulsive and Irresponsibly Behavioural Style</i></p> <p>3.Need for Stimulation / Proneness to Boredom</p> <p>9.Parasitic Lifestyle</p> <p>13.Lack of Realistic Long-Term Goals</p> <p>14.Impulsivity</p> <p>15.Irresponsibility</p>	<p><i>Facet 1: Interpersonal</i></p> <p>1.Glibness/Superficial Charm</p> <p>2.Grandiose Sense of Self Worth</p> <p>4.Pathological Lying</p> <p>5.Conning/ Manipulative</p> <p><i>Facet 2: Affective</i></p> <p>6.Lack of Remorse or Guilt</p> <p>7.Shallow Affect</p> <p>8.Callous/Lack of Empathy</p> <p>16.Failure to Accept Responsibility for Own Actions</p> <p><i>Facet 3: Lifestyle</i></p> <p>3.Need for Stimulation/ Proneness to Boredom</p> <p>9.Parasitic Lifestyle</p> <p>13.Lack of Realistic Long-Term Goals</p> <p>14.Impulsivity</p> <p>15.Irresponsibility</p> <p><i>Facet 4: Antisocial</i></p> <p>10.Poor Behavioural Controls</p> <p>12.Early Behavioural Problems</p> <p>18.Juvenile Delinquency</p> <p>19.Revocation of Conditional Release</p>

Psychopathy in Youth

Due to the extensive empirical literature demonstrating the relation between psychopathy and violence in adults (Cornell, Warren, Hawk, Stafford, Oram, & Pine, 1996; Serin, 1991; Serin, 1996), there has been a resurgent interest in the construct of psychopathy as it applies to children and adolescents over the past 5 to 10 years. In view of the fact that, among adult criminals, persons with psychopathic traits are particularly serious and persistent offenders, and research has shown that psychopathic adults usually exhibit significant antisocial behavior in their childhood, many researchers have begun to search for ways to identify psychopathy in youth (Cruise, Colwell, Lyons, & Baker, 2003; Johnstone & Cooke, 2004; Vincent, Vitacco, Grisso, & Corrado, 2003). One of the primary motivations for extending the construct of psychopathy to youth is to hopefully identify these traits when they are more malleable and amenable to treatment since personality traits are generally less stable in children than in adults (Frick, 1998; McCrae et al., 2000). This has tremendous value for the safety of the public as well as for the opportunity to provide early intervention to those at risk (Seagrave & Grisso, 2002).

Criticisms of the application of psychopathy to juveniles

While the area of juvenile psychopathy has evolved considerably over the past several years, our knowledge about the nature, stability, and consequences of juvenile psychopathy remains relatively limited. It is, perhaps, for this reason that several criticisms involving the application of the adult concept of psychopathy to juveniles have emerged.

Given that psychopathy is typically construed as a relatively stable personality disposition (Quinsey, Harris, Rice, & Cormier, 1998), attempts to apply this construct to

juvenile populations raise several conceptual, methodological and practical concerns. It is stated in the Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition that diagnoses of personality disorders should be applied to children and adolescents only "in those relatively unusual instances in which the individual's particular maladaptive personality traits appear to be pervasive, persistent, and unlikely to be limited to a particular developmental stage" (DSM-IV; American Psychiatric Association, 1994, p.631). This presents concerns as to whether or not adult features of psychopathy can be applied to juveniles.

Many authors state that adolescence is a time of enormous developmental change, during which some juveniles engage in considerable delinquent behavior of a transient nature (Edens et al., 2001; Moffit, 1993). For this reason, the construct of psychopathy may not apply to adolescents in the same way that it does to adults. In other words, if one were to identify behaviors and attitudes consistent with psychopathy at a specific point in time for a given youth, it is difficult to determine if one is observing enduring characteristics of a future psychopathic adult or, instead, a transient feature of a developmental process that will not be characteristic of the youth as he or she reaches adult maturity (Seagrave & Grisso, 2002). For these reasons, there are concerns in the development of any psychological instrument designed to measure psychopathy in youth.

Initially, problems arose from the original presumption that adolescents would manifest psychopathy in much the same way as adults, while many of the PCL-R markers of psychopathy are inapplicable to, or inappropriate for, adolescents. This inapplicability of a few of the PCL-R items was apparent from the first attempts to use the PCL-R with juveniles. More specifically, problems were associated with items such as "parasitic

lifestyle" and "many short-term marital relationships". These items are not applicable to adolescents, who typically have limited work and relationship experiences upon which to base scoring of these items (Edens et al., 2001).

Similarly, the argument has been made that, due to this transient nature of adolescence, several additional groups of items included in the PCL-R may also be problematic when applied to adolescents, particularly those in the Socially Deviant Lifestyle (II) factor (a need for stimulation/proneness to boredom, impulsivity, poor behavioral controls, lack of goals, and irresponsibility) (Edens et al., 2001). Furthermore, another group of problematic items have been drawn from the Interpersonal/Affective (I) factor of the PCL-R (Edens et al., 2001; Seagrave & Grisso, 2002). It is suggested that items such as lack of empathy/callousness, lack of guilt or remorse, failure to accept responsibility, and grandiose sense of self-worth may be influenced by the young age and social perspective of adolescents, as well as the fluctuations of identity experienced during adolescence.

In summary, the main concern in applying the construct of adult psychopathy to juveniles may be in the development of a valid and reliable measure for this construct in youth. While such instruments are currently being used for research, the concern resides in the reality that such an instrument will eventually be introduced into forensic clinical practice and, perhaps, become one of the most frequently used instruments in forensic assessments of delinquency (Seagrave & Grisso, 2002).

Research on psychopathy in juveniles

Due to the aforementioned reasons, longitudinal research tracking the stability and course of putative characteristics of psychopathy from adolescence through

adulthood is clearly needed. Despite these shortcomings and many issues for future research, the application of psychopathy to juveniles should not be discounted. Several studies indicate that there is, indeed, a moderate association between various measures of juvenile psychopathy and types of aggression across a range of settings and age levels (Edens et al., 2001). Furthermore, the magnitude of this association is relatively consistent with the PCL-R research that has examined this relationship among adult offenders.

Several studies using a variety of measures of psychopathy, ranging from psychometrically sophisticated rating scales, such as the Youth-Self Report Form (Achenbach, 1991), to inventories, to official records have all investigated the association between juvenile psychopathy, aggression, and violence. These measures have demonstrated utility in predicting violence, with many approximating $r = .30$ and the majority ranging between .20 and .40 (Edens et al., 2001). These results suggest that psychopathy may have much the same implications for the criminal justice system with adolescent offenders as it does with adult offenders (Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001).

Measurement of Psychopathy in Juveniles

The measurement of psychopathy in juveniles has been beset with methodological concerns. As a result of the increasing interest in the construct of psychopathy in youth, Forth, Hart, and Hare (1990) were the first to examine the PCL-R construct of psychopathy in adolescent offenders. To do so, it was necessary to revise the scale in order to make it more appropriate for use with adolescents. Since adolescents typically have a limited work history and few marital relationships, PCL-R Items 9 (Parasitic

lifestyle) and 17 (Many short-term marital relationships) were removed. Furthermore because adolescent offenders have had less opportunity than adult offenders to come into contact with the judicial system, Items 18 (Juvenile delinquency) and 20 (Criminal versatility) were modified. This modified scale was referred to as the modified PCL-R and used in several early studies of psychopathy in youth.

With experience in using the 18-item modified PCL-R, researchers identified the need for several additional modifications to the PCL-R. As a result, Forth, Kosson, and Hare (2003) modified the PCL-R items to make them more appropriate for use with adolescents. This resulted in the Psychopathy Checklist: Youth Version (PCL: YV), an age appropriate modification of the PCL-R (Forth et al., 2003). The instructions in the PCL: YV were modified to emphasize appreciation of the nature of normal adolescent behavior and its variability over time, and raters are asked to evaluate individuals' behavior in the context of normative behavior of same age peers. In addition, several items were modified to permit assessment of these characteristics in youth. Five items from the PCL-R underwent minor modifications to reflect the limited life experience of adolescents (items 1, 3, 5, 9, and 15) and four items underwent major revisions to the coding schemes (items 17, 18, 19, and 20).

The PCL:YV parallels the PCL-R in item composition, but to tailor the assessment of psychopathy to the specific life experiences of adolescents, a scoring system was developed that reflected the greater involvement of peers, family, and school in the lives of adolescents, and, as such, is for use with adolescents aged 12 to 18 years (Forth et al., 2003). Like the PCL-R, the PCL:YV items can be divided into Interpersonal/Affective (Factor 1) and Socially Deviant Lifestyle (Factor 2) scales, which

can be summed to form a total score. More recently, however, exploratory and confirmatory factor analyses of PCL: YV scores in a sample of incarcerated male adolescents have demonstrated that both the Hare 2-factor 4- facet model and the Cooke and Michie 3-factor model provide an acceptable fit (Forth et al., 2003). See Table 2 below for a listing of factors and items.

Due to the negative connotations associated with the term "psychopath", it has been recommended that diagnostic labels be avoided when describing youth assessed with the PCL: YV (Forth et al., 2003). Specific categorical diagnostic cutoffs for use with the PCL: YV in research are not yet established for several reasons, including the fact that

research has not established the validity of specific cutoffs for psychopathy during adolescence, diagnostic efficiency of the PCL: YV has not yet been evaluated, and longitudinal research is needed to assess the stability of the PCL: YV items into adulthood (Forth et al., 2003, p. 9).

For research purposes, however, the traditional PCL-R cut off criteria has been suggested as a reasonable marker by which to compare youth.

Regarding the prevalence of psychopathy in youth, empirical findings by Forth and Burke (1998) using the PCL: YV and a cutoff score of 30 found that the base rate of psychopathy averaged across multiple studies was: incarcerated settings = 28.3%, probation settings = 12.0%, and community settings = 3.5%.

Table 2***PCL:YV Factor structure and items for 3-factor and 4-factor models***

Three-Factor Model	Four-Factor Model
<p><i>Factor 1: Arrogant, Deceptive Interpersonal Style</i></p> <ul style="list-style-type: none"> 1. Impression Management 2. Grandiose Sense of self-worth 4. Pathological lying 5. Manipulation for personal gain 	<p><i>Factor 1: Interpersonal Factor</i></p> <ul style="list-style-type: none"> 1. Impression Management 2. Grandiose Sense of self-worth 4. Pathological lying 5. Manipulation for personal gain
<p><i>Factor 2: Deficient Affective Experience</i></p> <ul style="list-style-type: none"> 6. Lack of remorse 7. Shallow affect 8. Callous/Lack of empathy 16. Failure to accept responsibility 	<p><i>Factor 2: Affective Factor</i></p> <ul style="list-style-type: none"> 6. Lack of remorse 7. Shallow affect 8. Callous/Lack of empathy 16. Failure to accept responsibility
<p><i>Factor 3: Impulsive, Irresponsible behaviour</i></p> <ul style="list-style-type: none"> 3. Stimulation seeking 9. Parasitic Orientation 13. Lacks goals 14. Impulsivity 15. Irresponsibility 	<p><i>Factor 3: Behavioral Factor</i></p> <ul style="list-style-type: none"> 3. Stimulation seeking 9. Parasitic Orientation 13. Lacks goals 14. Impulsivity 15. Irresponsibility
	<p><i>Factor 4: Antisocial Behavior</i></p> <ul style="list-style-type: none"> 10. Poor anger controls 12. Early behavioural problems 18. Serious criminal behaviour 19. Serious violations of conditional release 20. Criminal versatility

Reliability and Validity of the PCL: YV

Perhaps one of the greatest concerns pertaining to the investigation of psychopathy in youth involves the validity of instruments used to assess it. Research on the PCL: YV has demonstrated its ability to identify a syndrome in adolescence consistent with theory and research on adults (Corrado et al., 2004; Murrie, Cornell, Kaplan, McConville, & Levy-Elkon, 2004). Furthermore, the overall validity of the PCL: YV has been established through many experiments investigating its concurrent, convergent, discriminant, and predictive validity.

Research examining the concurrent validity of the PCL: YV, its validity with respect to other measures of psychopathy, has been promising (Forth et al., 2003). Several studies have demonstrated a relation between the PCL:YV and other measures of psychopathy in youth, such as the Antisocial Processes Screening Device (APSD; Frick & Hare, 2002; McBride, 1998; Cruise, Rogers, Neumann, & Sewell, 2000), the Interpersonal Measure of Psychopathy (IM-P; Bauer, 1999; Kosson, Steuerwald, Forth, & Kirkhart, 1997; Kosson, Cysterski, Steuerwald, Neumann, & Walker-Matthews, 2002), and the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996; Poythress, Edens, & Lilienfeld, 1998). Results showed correlations between the PCL:YV and the three other measures of youth psychopathy, ranging from approximately .35 to .54.

Furthermore, there is increasing evidence that psychopathy, as measured by the PCL:YV, is related to a variety of clinical, self-report, and criminological variables that are thought to be associated with psychopathy in adults (convergent validity), as well as unrelated to some constructs, which the adult literature suggests to be unrelated to psychopathy (discriminant validity).

Further support for the convergent validity of the PCL: YV exists in studies showing a relation between psychopathy and narcissistic personality disorder (Myers, Burket, & Harris, 1995), alcohol and drug abuse (Mailloux, Forth, & Kroner, 1997) and Attention Deficit Hyperactivity Disorder (Bauer, 1999; Kosson et al., 2002). Correlations between PCL: YV scores and these constructs, demonstrated in the adult literature to be related to psychopathy, have ranged from .20 to .56.

Support for the convergent validity of the PCL: YV is also evident in studies examining psychopathy in youth, and its relation to overall aggression, verbal aggression, peer aggression, frequency of antisocial acts, institutional behavior, and severity of crime (Brandt, Kennedy, Patrick, & Curtin, 1997; Caldwell & vanRybroek, 2000; Corrado, Vincent, Hart, & Cohen, 2004; Dodds, 1999; Forth et al., 1990; Forth, 1995; Kosson et al., 2002; Murrie, Cornell, Kaplan, McConville, & Levy-Elkon, 2004; Smith, Gacono, & Kaufman, 1997; Whalen, 1999).

Research with adult offenders has demonstrated that measures of anxiety and depression are uncorrelated, or negatively correlated, with PCL-R total scores. Consistent with this, evidence of the discriminant validity of the PCL: YV has been demonstrated in studies examining the relationship between anxiety and depression and total scores on the PCL: YV. That is, research has shown PCL: YV scores to be uncorrelated with self-report measures designed to assess depression (Campbell, Porter, & Santor, 2004), reflecting the trend evident in the adult literature.

Studies demonstrating the relation between PCL:YV total scores and anxiety have resulted in more varied results, however, with some demonstrating positive associations (Bauer, 1999; Kosson et al., 2002), some studies demonstrating no relation (Brandt et al.,

1997), and others demonstrating negative associations between the PCL:YV and anxiety (Murrie & Cornell, 2000).

Additional research demonstrating the discriminant validity of the PCL: YV has examined the relation between mental abilities and psychopathy. Research with adult offenders has found that measures of psychopathy are not associated with standard measures of intelligence (Hare, 1991). This relation has been examined in youth by six studies using the PCL:YV or modified PCL-R and, in all six studies, no relationships between psychopathy in youth and overall intelligence were reported. The correlations in these studies ranged from $-.11$ to $.01$ (Forth et al., 2003).

Finally, support for the predictive validity of the PCL: YV is established by examining recidivism and treatment outcome. Evidence of the predictive validity of the PCL: YV is found in studies examining the convergent validity of the PCL: YV with assessment instruments specifically designed to predict recidivism and violence, such as the Structured Assessment of Risk for Violence in Youth (SAVRY; Borum, Bartel, & Forth, 2002) and the Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 2002). The association between the PCL:YV/modified PCL-R and the YLS/CMI and the SAVRY have been demonstrated to be moderate to strong (Forth, 2002; McEachran, 2001; Rowe, 2002). These studies have suggested that the ability of the PCL:YV to predict future risk for re-offending and violence is relatively good when compared with the more actuarial risk scales.

Over the past decade, there has been considerable focus on the importance of the construct of psychopathy as a risk factor for violence in adult forensic and psychiatric correctional samples (Hemphill et al., 1998; Salekin, Rogers, & Sewell, 1996). This

focus is also evident in research with adolescents. The PCL: YV and modified PCL-R correlate moderately to highly with other risk assessment measures and, for this reason, it should not be surprising that evidence regarding the predictive validity of the PCL: YV and modified PCL-R with regards to recidivism has been promising. Studies using both the PCL: YV and the modified PCL-R have demonstrated relations between PCL scores and general recidivism (Corrado et al., 2004; Gretton et al., 2001; Rowe, 2002), violent recidivism (Forth et al., 1990; Gretton et al., 2001; McEachran, 2001; Rowe, 2002), and re-incarceration (Gretton et al., 2001; Rowe, 2002).

Regarding treatment of psychopaths, research investigating the effectiveness of therapeutic communities of intervention with adult offenders has found that psychopaths are less motivated, display less improvement, engage in problematic conduct, are more likely to drop out of the intervention, and have higher rates of recidivism after treatment than non-psychopaths (Hare et al., 2000; Rice, Harris, & Cormier, 1992). To date, however, there have been no controlled evaluations of intervention programs for youth scoring high on the PCL:YV.

Two studies investigating the association between psychopathy in youth, as measured by the PCL:YV or modified PCL-R, and treatment compliance have demonstrated a relation between psychopathy and non-compliance (Cruise et al., 2000; Rogers, Johansen, Chang, & Salekin, 1997). Three studies assessing treatment outcome in youth assessed for psychopathy, by either the PCL: YV or modified PCL-R, demonstrated that psychopathy identified those offenders who did poorly in treatment versus those who succeeded (Ridenour, 1996), and identified those less likely to complete treatment and recidivate (Gretton et al., 2001). Despite this, findings from two studies

(Caldwell & VanRybroek, 2000; Gretton et al., 2001) supported the notion that some youth with psychopathic traits can, in fact, benefit from intervention programs.

A more recent study focusing on the relationship between psychopathic characteristics, as assessed by the PCL: YV, and treatment compliance investigated the outcomes of 64 individuals referred for treatment to a substance abuse program for adjudicated adolescents. Results demonstrated that psychopathic characteristics were negatively related to treatment process and outcome variables such as attrition, participation, substance use, and clinical improvement. Psychopathic characteristics were also positively related to the number of arrests in the 12 months following treatment completion (O'Neill, Lidz, & Heilbrun, 2003).

Summary

Despite criticism in the literature regarding the measurement of psychopathy in youth, several studies provide support for this construct existing in youth. While the validation of the PCL: YV is ongoing, research with youth appears promising, suggesting support for this construct in youth as well as for the use of the PCL: YV as a reliable and valid assessment instrument.

Psychopathy and Motives for Violence

Psychopathy, in both adults and adolescents, is related to violent and aggressive behavior. Research concerning psychopathy suggests that psychopaths exhibit diminished fear reactivity, a lack of empathy or guilt, and poor interpersonal relationships (Cleckley, 1964). Furthermore, research in both adults and youth has demonstrated a relation between psychopathy and rates of delinquency and violence, severity of violence, and both general and violent recidivism (Corrado et al., 2004; Hemphill et al., 1998;

Serin, 1991). As a result of such findings, recent research has not only examined the link between psychopathy and violence, but has further investigated the specific motives underlying violence.

It is important to note that the terminology used to describe the different motivations for violence vary from study to study. More specifically, the terms predatory, instrumental, and proactive are used to refer to those types of offenses that are planned and committed for the sole purpose of personal gain, whereas, the terms expressive, impulsive, and reactive are used interchangeably to refer to those crimes of “passion” that occur as a reaction to some perceived provocation and are usually associated with a state of heightened emotional arousal.

Empirical research has demonstrated a relation between psychopathy and the underlying motives of violence. That is, the concept of psychopathy has provided some utility in distinguishing between affective (reactive) and predatory (instrumental) violence. Several researchers have linked the construct of psychopathy with instrumental offending, which is violence directed at achieving a specific, self-gratifying goal that has been planned before execution (Berkowitz, 1993).

Williamson et al. (1987) examined the nature of violent offenses in a group of 101 Canadian adult offenders. The authors hypothesized that psychopaths would seldom commit violent crimes colored by intense emotional arousal, those described as crimes of passion.

Police reports were obtained describing the offenses responsible for the current incarceration of 55 psychopaths and 46 non-psychopaths, who were selected on the basis of PCL scores (Hare, 1980). Regarding the number of individuals in each group who

committed various offenses, more individuals in the psychopathic group committed serious violent offenses (11 vs. 2) and property offenses (11 vs. 1) as compared to the non-psychopathic group, suggesting that psychopaths are more willing than other criminals to put themselves in a position where violence might be necessary. In contrast, more individuals in the non-psychopathic group were convicted of homicide than were those offenders in the psychopathic group (19 vs. 6).

Regarding the apparent motive for crimes involving a victim, results demonstrated that the psychopathic group were more likely to commit offenses involving material gain than were the non-psychopaths (45.2% vs. 14.6%), whereas most of the offenses in the non-psychopathic group occurred during a period of heightened emotional arousal as compared to those of the psychopathic group (31.7% vs. 2.4%). More specifically, it appeared that "Group P's violence was callous and cold-blooded or part of an aggressive display, without the affective coloring or understandable motives that accompanied Group NP's violence" (Williamson et al., 1987, p.460).

Cornell et al. (1996) examined this relation between psychopathy and violence in two different studies. The authors theorized that the capacity to inflict serious injury on a person for goal directed criminal purposes is made possible by the "lack of well internalized social standards and associated feelings of concern and respect for others that normally would inhibit the offender" (p. 788). That is, the authors examined the possibility that instrumental violence could be an additional characteristic of psychopathic offenders. Furthermore, they addressed the problem associated with distinguishing instrumental from reactive violence in a group of adult violent offenders, where many violent offenders have a history of both instrumentally and reactively violent

offenses. To address this problem, instrumental offenders in the study were defined as offenders with a history of at least one instrumentally violent offense. While the instrumental offenders may have had additional reactive offenses, the reactive offenders were defined as offenders with a history of only reactively violent offenses and no history of instrumentally violent offenses.

One hundred and six adult male offenders and 50 violent criminal defendants who were referred for pretrial forensic evaluation were assessed for psychopathy using the PCL-R (Hare, 2003) and the PCL-SV (Hart, Cox, & Hare, 1995), respectively. Results revealed that the incarcerated instrumentally violent offenders, who had committed at least one violent crime for a clearly identifiable purpose, had higher psychopathy scores than did the reactively violent offenders, whose violent crimes were reactions to interpersonal conflict with a victim. These differences, however, could not be attributed simply to specific items on the PCL-R and PCL-SV that measure the participants' offense history. Instead, on the PCL-R, instrumental offenders could be characterized as more dishonest and manipulative and more impulsive and irresponsible in their dealings with others than reactive offenders. On the PCL-SV, a similar pattern emerged in which the instrumental offenders were more superficial, manipulative, and lacking in feelings for others, as well as more impulsive and irresponsible.

Despite its extreme negative consequences, homicide remains one of the least studied and most misunderstood forms of antisocial conduct. One of the reasons for this lack of research on the psychology of homicide is that it is uncommon compared with other forms of antisocial and violent behavior. Woodworth and Porter (2002) were the

first to examine the relationship between psychopathy and the motivational nature underlying homicide in adults.

The authors attempted to examine the possible differences between homicidal violence committed by psychopathic and non-psychopathic offenders and focus primarily on the instrumental and reactive elements of the crime. Block and Block (1992) observed that the "expressive-instrumental extremes are ideal types that seldom occur in pure form" (p. 65). Furthermore, a study by Hart and Dempster (1997) revealed that, even if psychopathic individuals commit more instrumental crimes, they may be "impulsively instrumental", goal directed but also highly impulsive and involving little planning. From these studies, it is apparent that some crimes may have elements of both instrumentality and reactivity. That is, in addition to homicides appearing to be exclusively instrumental or reactive, some primarily instrumental homicides may contain a reactive component and some primarily reactive homicides may contain an instrumental component. For these reasons, Woodworth and Porter (2002) based their coding of the homicides on the criteria used by Cornell et al. (1996), and an extensive literature review, to examine in detailed rather than dichotomous fashion whether the degree of instrumentality and reactivity associated with homicide was associated with psychopathy.

Research done by Dempster, Lyon, Sullivan, Hart, Smiley, and Mulloy (1996) on 75 adult male violent offenders demonstrated that Factor 1 was significantly related to ratings of planning and instrumentality, while Factor 2 actually had a negative relationship with elements of planning during the offense. Research on these various traits associated with the two factors of psychopathy and how they relate to violence is mentioned by Patrick and Zempolich (1998) in their literature review, as an area

requiring future study. Based on this research, Woodworth and Porter (2002) hypothesized that instrumental homicide would be related to the Factor 1 features of psychopathy, whereas reactive homicide would be associated with the Factor 2 characteristics.

Using a sample of 125 adult Canadian offenders, the relation between psychopathy and reactive-instrumental motives of homicide was examined. The results supported the hypothesis that psychopaths were more likely to engage in instrumental, or cold-blooded, homicides compared with non-psychopathic individuals. Nearly all (93.3%) of the homicides by psychopaths were primarily instrumental in nature, compared with 48.4% of the homicides by non-psychopaths. While the results did suggest that non-psychopathic offenders were capable of committing instrumental offenses, they did not show the same clear preference for, or tendency toward, instrumental violence as observed in the psychopathic offenders.

Furthermore, examination of the relative contributions of the PCL-R Factor 1 and Factor 2 characteristics in predicting the degree of instrumentality within the homicides revealed a significant correlation of Factor 1 scores with instrumentality. This suggests that Factor 1 scores, but not Factor 2 scores, play a role in predicting the level of instrumentality in the crimes.

In essence, Woodworth and Porter (2002) demonstrated that psychopaths appear to be capable of premeditating and carrying out ruthless, cold-blooded homicides that many non-psychopathic individuals would be less likely to do. Their reasoning behind such a finding was that "it is likely that few people without the affective deficit associated

with psychopathy would seriously consider such acts, and even fewer would actually plan to carry them out" (p. 442).

Does this relation exist in youth?

Research in adults has clearly demonstrated a relation between the characteristics of psychopathy and instrumental violence. Loper, Hoffschmidt, and Ash (2001) using 82 incarcerated juvenile offenders and the Millon Adolescent Clinical Inventory (MACI; Millon, 1993) examined whether this was the case in youth.

The Millon Adolescent Clinical Inventory (MACI; Millon, 1993) is a self-report instrument designed to assess adolescent personality characteristics, personal problems, and the presence of clinical syndromes. The MACI has been shown to reliably distinguish high and low psychopathy youth (Murrie & Cornell, 2000). More specifically, youth with high modified PCL-R total scores, when measured by the MACI, demonstrate a general pattern of heightened resistance to social standard (Unruly), a tendency to dominate and abuse others (Forceful), unpredictable and aggressive behavior (Oppositional), as well as antisocial and illegal behavior (Delinquent Predisposition, Substance Abuse). Furthermore, high modified PCL-R scorers, when measured by the MACI, have been shown to be less likely to be kind-hearted in relationships with others (Submissive), less rule-conscious and serious-minded (Conforming) and less fearful (Anxious). According to this, Murrie and Cornell (2000) created a Psychopathy Content scale based on selected items from the MACI with content similarity to PCL-R items.

Loper et al. (2001) hypothesized that the personality features associated with psychopathy, as measured by the MACI, would be related to the instrumentality, emotional reactivity, and guilt/remorse features of the violent incident. The participants

in the study were 42 female and 40 male youth incarcerated at a state juvenile correctional facility. The participants were classified based on current or past adjudication for assault, homicide, or robbery, or on a documented but non-adjudicated violent offense which occurred during incarceration. The coding of the violent event was accomplished through self-report ratings of violent incidents, in which participants were individually interviewed regarding the violent offense for which they were selected into the study. Offenders who had multiple violent offenses were interviewed regarding the most recent event. Participants initially described the incident in their own words, and then responded to a series of structured questions concerning the event.

Results revealed that those individuals who reported a lack of empathy or guilt, as well as those who reported an instrumental motivation during the violent offense, paralleled traits previously associated with psychopathy on the MACI. More specifically, these individuals scored higher on the Unruly, Forceful, Delinquent Predisposition, and Substance Abuse scales, and lower on the Submissive, Conforming, and Anxious scales. Furthermore, a pattern of elevated instrumentality scores and reduced empathy/guilt scores was associated with higher scores on the Psychopathy Content scale. These results demonstrate that the characteristics of a single specific violent act committed by a juvenile offender were predictably related to personality features that have been associated with psychopathy.

While Loper et al. (2001) were successful in demonstrating the relation between instrumental violence and psychopathy in youth, the study was not without its limitations. The study was a step in the right direction with respect to investigating in youth the relation between motives for violence and psychopathy; however use of self-report as the

only method of coding the violent offense was a major limitation. In addition, the investigation was limited by its reliance on a single event. It is possible that the violent offense examined was not representative of the pattern of offenses for the offender. As noted by previous researchers (Cornell et al., 1996; Woodworth & Porter, 2002), many violent offenders have a history of offenses, which may involve both instrumental and reactive crimes. Also, psychopathic offenders commit a wide range of reactive offenses and they are distinguished from non-psychopaths primarily on the presence of instrumental offenses (Cornell et al., 1996). The basis of the data in the present study on the juveniles' current offense was therefore incomplete as there were most likely offenders in the study who were coded for a reactive offense but had histories of instrumental offenses, and then others who were coded for a reactive offense and had no prior histories of instrumentality. This difference between the two groups of offenders was not reflected in the classification method.

The final limitation of the study by Loper et al. (2001) resides in the measure of psychopathy used. While the MACI provides a means by which to examine characteristics of psychopathy, it is not a reliable or valid measure of psychopathy per se. More recently, Murrie et al. (2004) addressed some of these limitations by examining this relationship in 113 incarcerated youth using the Psychopathy Checklist: Youth Version (Forth et al., 2003). The entire violent history of the adolescents was rated by independent raters, unaware of PCL: YV scores, who reviewed the participants' entire record including admission summary, social history, background records from other institutions, current institutional records, mental health records, pre-sentencing

investigation reports, formal charges, mentions of unadjudicated violence, and institutional charges for aggression.

Following the classification scheme developed by Cornell et al. (1996), the raters classified each youth into the nonviolent ($n = 24$), reactively violent ($n = 44$), and instrumentally violent ($n = 38$) categories. Adhering to this system, the violent offenders were not classified as either purely instrumental or reactive, since research has demonstrated that many violent offenders commit a combination of reactive and instrumental violent offenses (Cornell et al., 1996). Instead, the raters gave priority to the presence of any instrumental violent offense; meaning that offenders who had committed only reactive violent offenses were classified as reactive, but offenders who had committed at least one instrumental violent offense were classified as instrumental. Youth were rated as reactively violent when records indicated that they had committed violence only in reaction to an interpersonal dispute or conflict. In contrast, raters coded the presence of instrumental violence when a youth's record indicated that he had committed at least one act of violence for a clearly identifiable purpose other than responding to provocation or conflict, such as armed robbery, strong-arm robbery, or rape. Raters classified youth as having been nonviolent if they had no convictions for violent offenses and no indication of violent behavior in the social or institutional history. The authors noted that this may not be an entirely violence-free group in that some youth may have aggressed in ways that were not documented.

The relationship between psychopathy and several measures of violent offending was analyzed. A dichotomous variable documenting whether a youth had a criminal record of violence was used, as well as a second measure labeled unadjudicated violence

in an attempt to overcome limitations of relying solely on criminal records alone. The later variable indicated whether any clinical or historical records mentioned any violent criminal acts for which the youth was not charged. Results demonstrated that PCL: YV scores were significantly correlated with adjudicated violent offense history ($r = .24$), unadjudicated violence ($r = .30$), and measures of the severity ($r = .30$) and instrumentality ($r = .36$) of prior violence.

Findings indicate that psychopathy in youth is associated with violent behavior, and different types of violent behavior, similar to findings from research with adults (Cornell et al., 1996; Woodworth & Porter, 2002).

Summary

The concept of psychopathy is fundamentally related to violence and aggression. It is quite evident, from these empirical studies, that psychopathy results in an increased tendency to commit acts of aggression and violence. Furthermore, it appears that when these acts of aggression and violence are more instrumental and cold-blooded in nature, they tend to be committed by those scoring high on psychopathy.

Based on the description of psychopathy provided by Hare that

psychopaths are social predators who charm, manipulate, and ruthlessly plow their way through life, leaving a broad trail of broken hearts, shattered expectations, and empty wallets. Completely lacking in conscience and in feelings for others, they selfishly take what they want and do as they please, violating social norms and expectations without the slightest sense of guilt or regret (Hare, 1993, p. xi)

it is not surprising that there exists a clear empirical relationship between psychopathic characteristics and the instrumental or predatory motives underlying acts of violence and homicide. The study of such acts of violence, and the characteristics associated with

them, has many clinical implications for the criminal justice system and for society as a whole, specifically in terms of intervention, prevention, and treatment.

Empathy and Attachment

Woodworth and Porter (2002) noted that the psychopaths in their study appeared to be capable of premeditating and carrying out ruthless, cold-blooded homicides that many non-psychopathic (although potentially violent) offenders would be less likely to consider. These findings were attributed to the marked lack of empathy that psychopaths typically display toward others, which extends to their crime victims. The authors suggested that it is unlikely that those without the affective deficit associated with psychopathy would seriously consider such acts. In addition, the relatively little contact psychopaths have with their families as well as the little intensity they exhibit in their interpersonal relationships has been suggested to account for the relation between instrumental violence and psychopathy. It is stated that deficits in these characteristics, empathy and attachment, make it unlikely that an individual scoring high on psychopathy would participate in acts of violence colored by intense emotional arousal that occurs among individuals in close relationships.

Support for these explanations of instrumental violence is evident in the research by Hirschi (1969) and Bowlby (1979). Hirschi (1969) argued that criminality is often controlled by an individual's commitments and attachments to conventional institutions, beliefs, activities, and groups. Hirschi (1969) stated that many people refrain from engaging in violent behavior because they fear losing their relationships with significant others. Thus, those individuals who lack strong social ties may also lack the motivation to become law-abiding citizens.

Bowlby (1979) supported the notion that attachment is related to violence, by suggesting that early separations from attachment figures, or absence of attachment figures, would predispose a person to the development of emotional coldness, or the affectionless character. Bowlby's (1979) description was of a person lacking in empathy, the ability to understand, perceive, and experience another person's emotions (Davis, 1980). Bowlby (1979) stated that children who fail to bond or connect with their caregivers develop internal working models of others as unworthy of trust, empathy, and concern, and in turn, can lead the way to a broad range of callous traits characteristic of cold-hearted offenders.

Research has demonstrated that perpetrators who commit instrumental acts often score higher on psychopathy than those individuals committing acts that are reactive or expressive in nature. The description provided by Bowlby (1979) suggesting that early separations from attachment figures, or absence of attachment figures, would lead to the development of emotional coldness or an affectionless individual is one that describes the prototypical psychopath quite well. Cleckley (1964) attributed psychopathy to a core affective deficit, resulting in a lack of guilt or remorse and an absence of empathy for the victim.

Despite the suggested relation between attachment, empathy and psychopathy and, in turn, instrumental violence, few studies have directly investigated the relationship between attachment and psychopathy, and none have investigated the relationship between instrumental violence and attachment. One retrospective study by Marshall and Cooke (1999) demonstrated support for the notion of disrupted parent-child attachment in psychopathic adults. However, a second study by Laroche and Toupin (1996) indicated

that parent-child attachment did not differentiate psychopathic from non-psychopathic adolescents identified by the PCL:YV. Kosson et al. (2002) examined this issue using a sample of 115 male delinquent adolescents. The results provided support for the relation of psychopathy to attachment in parents. Using the Psychopathy Checklist Youth Version (PCL:YV; Forth et al., 2003) and the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987), findings suggested that PCL:YV scores correlated significantly with adolescents' perceptions of a lack of attachment to family. More specifically, the IPPA parent scores correlated negatively with PCL: YV scores ($r = -.33$).

Victim-Offender Relationship

Along with the motives involved, the dynamics of the victim-offender relationship are extremely important to any study, and understanding, of violent crime. Empirical data has demonstrated a relation between the dynamics of the victim-offender relationship and the specific motives underlying violence and crime (Block, 1981). More specifically, the offender in an instrumental homicide is rarely an acquaintance of the victim. Also, the offender is usually much younger than the victim, and the probability of either victim participation or precipitation of the crimes is small. Impulsive homicides, however, are far more likely to occur among relatives or acquaintances of nearly the same age, with a higher probability of victim participation or precipitation. These impulsive homicides are far more likely than instrumental homicides to occur within the home and hidden from public view (Block, 1981).

Decker (1996) refers to these qualities of violent and homicidal offenses as "normative". According to Decker, all crimes have a normative nature. For example, burglaries tend to be committed when residents are away from the home, assaults more

often occur between people who know each other, and robberies are typically committed against strangers. Similarly, previous homicide research has found that stranger homicides most often have an instrumental motive, being committed for gain, whereas homicide within primary relationships is often expressive in nature, producing offenses that, as the expression of strongly held emotions or rage, are the product of more intense relationships and interactions (Decker, 1996).

Much research supports the notion of a normative feature of violence (Cook, 1987; Daly & Wilson, 1982; Rojek & Williams, 1993). The empirical data consistently demonstrates that expressive violence is concentrated in more primary relationships, such as relatives and intimate partners, whereas instrumental violence is most often in secondary relationships, such as friends, acquaintances or strangers. When a substantial fraction of events exceed these normative boundaries, questions regarding their traditional explanations arise. Decker (1996) refers to these events, which exceed the normative boundaries, as deviant crimes.

Deviant Violence

Decker (1996) examined the normative nature by which expressive violence is concentrated in primary relationships and instrumental violence is concentrated in secondary relationships. The data for the analysis were drawn from the Records Division of the St. Louis Metropolitan Police. All homicides, for the years 1985 through 1989 for the city of St. Louis were included in the study ($N = 792$).

Motives for each event were classified as either instrumental or expressive. When it was not possible to determine a single motive due to the fact that the events included elements of both instrumental and expressive violence, these potential events were not

included in the analysis. The victim-offender relationships classified as primary included relatives, romantic partners, and friends as a first group; secondary relationships included acquaintances as a second group and strangers as a third. Friends were distinguished from acquaintances by the frequency of their interaction and the extent to which they engaged in supportive and reinforcing acts. These three categories allowed for rank ordering of the intensity of relationships.

A total of 533 homicides for a 5 year period were coded, with roughly 54% ($N = 290$) of these being expressive homicides and 46% ($N = 243$) being instrumental homicides. Surprisingly, however, the results of the study were inconsistent with expectations regarding the normative nature of homicide. Of the total 533 homicides, 40% differed from normative expectations with 9% ($N = 47$) of all homicides being instrumental and occurring among relatives, intimates, and friends, and 31% ($N = 166$) being expressive and occurring among acquaintances or strangers. More specifically, out of the 171 homicides occurring among intimates, 28% (47) had an instrumental motive, homicides that could be classified as "deviant". These results indicate that, even among intimates, the desire to gain material advantage leads to fatal disputes. Furthermore, for secondary relationships, out of a total of 362 homicides, 46% ($N = 166$) had an expressive motive, a far greater proportion than expected. This category consists of murders of non-primary associates over matters that do not lead to material gain, and again is something that is referred to by Decker as "deviant".

Decker (1996) demonstrated that instrumental homicides do not occur exclusively among strangers, nor are expressive homicides confined to those who are well known to each other. While this finding went contrary to the perceived "normative" notion of

homicide and violence, the deviant expressive homicides are less disturbing than those deviant instrumental ones. Why is it that people kill the persons with whom they are intimate and for whom they presumably care a great deal? Traditionally, many cited the relationship between intense emotions and homicidal actions. While many may be shocked to learn of the prevalence of non-stranger homicide, most understand the concept of a crime of passion (Wilson, 1993). In fact, our culture has given credence to the notion that a crime of passion is more understandable and forgivable than are premeditated crimes.

The literature suggests that most instances of murder and violence in the family and other intimate relationships are likely to represent an expression of anger, power, or a defensive response to it, rather than an instrumental means for satisfying some personal objective (Fox & Levin, 2001). Nonetheless, as evident in the study by Decker (1996) “greed knows no limits” (Fox & Levin, 2001, p. 57). There are, indeed, instances in which the murders and violent acts of individuals are calculated and cold-blooded in nature with the underlying motive being some personal gain; and these murders are sometimes even committed by family or friends. It is these acts that we, as a society, have problems understanding, and which provoke even more questions regarding the type of people responsible.

Victim-Offender Relationship, Psychopathy, and Motives for Violence

The entire notion of instrumental violence undoubtedly causes one to question the kind of people there are in society. It is very disturbing to think that one is capable of hurting another for the sole purpose of money or drugs. For this reason, many questions regarding the types of people who do so, and the causes of which, are raised.

While the characteristics of those who commit "normative" instrumentally violent acts have been examined, and psychopathy found to play a large role, the characteristics of those who commit such acts against family members and intimate partners have not. More specifically, the relation of psychopathy to these deviant instrumental events has yet to be examined.

The relation between psychopathy and instrumental homicide has been shown to exist, and suggested to exist due to deficits in empathy and interpersonal relationships. Given this notion, it may be possible that the "deviant" instrumental violent acts that occur are committed mainly by individuals who exhibit extreme psychopathic tendencies and an even more pronounced deficit in empathy and attachment than those who commit instrumental acts of violence against strangers. What more likely individual to commit a cold-blooded violent act against one's own family, than an individual who scores high on psychopathy, lacks the ability to form strong attachments, and exhibits a pronounced deficit in empathy. This is a fascinating area, yet one that remains unstudied to date.

Purpose and Rationale

The construct of psychopathy is an area of much interest and debate, with many implications regarding the study of human behavior and, in particular, violence. The relation between psychopathy and violent behavior is not new. Psychopaths tend to commit more acts of a violent nature than do non-psychopaths (Serin, 1991). In addition, research has demonstrated that there are marked differences between non-psychopaths and psychopaths in terms of the kinds of violence they perpetrate (Cornell et al., 1996; Woodworth & Porter, 2002) and the severity of the violence they perpetrate (Murrie et al., 2004).

Although previous studies have examined the characteristics associated with psychopathy and its relation to violence and instrumental violence in adults (Cornell et al., 1996; Williamson et al., 1987; Woodworth & Porter, 2002), the study of psychopathy in youth is relatively new, with few studies examining the relation between psychopathy and instrumental violence.

Secondly, the characteristics of the victim-offender relationship have often been overlooked in relation to psychopathy and the differing motives underlying violence and homicide. While characteristics of violent acts tend to have a normative nature, studies have demonstrated that "deviant" violent acts also occur. That is, instrumental violence can occur among family members, and reactive violence can occur among strangers (Decker, 1996). While the deviant reactive events are not all that surprising, the "deviant" instrumental events raise many more questions and evoke a much greater reaction.

Although numerous studies have examined the relevance of psychopathy to adult offenders and violence, its relevance in youth is relatively new, and far less clear. Hence, four hypotheses were examined in the present study. First, since research with adults demonstrates that psychopaths are more likely than non-psychopaths to have been convicted for a violent offense (Hare, 1981; Hare & McPherson, 1984), this relation in youth was examined. In addition, research with adults (Hare & McPherson, 1984; Serin, 1991) and youth (Kosson et al., 2002; Murrie et al., 2004) has found that the violent acts of psychopaths are more likely to involve weapons and result in greater victim harm, therefore the severity of past violent offending was examined in relation to psychopathy. As such, it was hypothesized that psychopathy would be associated with higher rates of

violent offending, and that the severity of past violence would be associated with higher scores on psychopathy. Second, it was hypothesized that instrumentally violent offenders would score higher on psychopathy in comparison to those who did not engage in instrumental violence; and also that these offenders would display deficits in empathy and attachment. Third, it was expected that the instrumental rating would be more strongly associated with PCL: YV interpersonal and affective features as compared to behavioral and antisocial features, whereas the reactive rating would be more strongly associated with the behavioral and antisocial features. Finally, as an exploratory analysis, the characteristics of those individuals who perpetrate instrumental violence and homicide against family members or intimate partners were examined in relation to psychopathy, empathy, and attachment. It was hypothesized that these individuals, who have been instrumentally violent against family members or intimate partners, would score higher on psychopathy, and display even more pronounced deficits in empathy and attachment, than those individuals who perpetrate this type of violence against strangers and acquaintances.

Method

Participants

Participants were 51 adolescent males who were incarcerated at a provincial institution in the Ontario Region. Age of the participants ranged from 16 to 20 ($M = 17.1$, $SD = .88$). Thirty-two participants (62%) were Caucasian, 9 (17%) were African-American, 6 (12%) were Aboriginal, 1 (2%) was Hispanic, and 3 (7 %) were identified as other. Of these participants, 22 (42%) were located at Brookside Youth Center, 20 (39%) were at Bluewater Youth Center, and 9 (17%) were incarcerated at the Ottawa-Carleton Detention Center.

Measures

Data for the present study were obtained from three different sources: institutional files, information obtained during a semi-structured interview, and four self-report questionnaires.

Psychopathy Checklist: Youth Version (PCL: YV; Forth et al., 2003; see Appendix A). A 60-90 minute semi-structured interview designed to assess psychopathic traits in a forensic population was conducted with all the participants in order to obtain a measure of psychopathy. The PCL: YV is a modified, age-appropriate version of the PCL-R. Like the PCL-R, it is a 20-item clinical rating scale designed to assess the traditional construct of psychopathy. Each item is scored on a 3-point scale: 2 indicates that the item applies to the individual; 1 indicates that the item may apply, or that it applies to a certain extent; and 0 indicates that it does not apply.

The psychometric properties of the PCL: YV are essentially the same as those of the PCL-R (Forth & Burke, 1998; Forth et al., 2003). The reliability coefficients of the PCL: YV have been demonstrated to be high across all settings, institutional, probation,

and clinic/community, ranging from .90 to .96 (Forth et al., 2003). In addition, the internal consistency for the PCL: YV, the extent to which the items of the scale measure the same construct, has been demonstrated to be acceptable, with Cronbach's alpha ranging from .85 to .94 across each of the settings, this alpha is comparable to that found using the PCL-R with adult male offenders (Forth et al., 2003).

Semi-Structured Motivations Interview (see Appendix B)

A separate interview consisting of questions dealing specifically with the offender's perception of their motive for committing their current offense, as well as questions pertaining to any past offenses committed that may have been of an instrumental nature. This section was added in an attempt to address the shortcomings of previous studies in which offenders were classified as reactive based on their current index offense, however may have committed offenses in the past of an instrumental nature. Also incorporated into the interview are questions pertaining to the victim-offender relationship.

Davis Interpersonal Reactivity Index (IRI; Davis, 1980; see Appendix C)

Linked to ethics and humanistic values, empathy consists of understanding, perceiving and experiencing another person's emotions. More specifically, it is the ability to imagine oneself in the other person's place. Researchers have suggested that a more thorough understanding of empathy can be found only through careful study of the contributions of both cognitive and affective aspects. In order to operationalize empathy as a multidimensional construct, Davis (1980) developed a 28-item questionnaire, the Interpersonal Reactivity Index (IRI), which incorporates both cognitive and affective dimensions.

Initially developed from a bank of 50 items, some taken from existing measures (Mehrvanian & Epstein, 1972; Stotland, Mathews, Sherman, Hansson, & Richardson, 1978) the IRI was employed in a sample of 201 males and 251 females from introductory psychology classes. From this, factor analysis extrapolated four major factors, two cognitive and two affective: fantasy, a cognitive factor measuring the ability to identify with fictitious characters; empathic concern, an affective factor measuring the ability to be compassionate and concerned for others with respect to the difficulties they face; perspective taking, a cognitive measure of the ability to anticipate another person's point of view, among other things; and finally, personal distress, an affective factor measuring a person's ability to feel the discomfort of others.

The IRI (Davis, 1980) is a 28-item instrument that assesses these four dimensions of empathy. Each dimension is composed of 7-items that deal with the respondent's thoughts and feelings in various situations. All of the items are scored on a 5-point Likert scale ranging from 0 (does not describe me well) to 4 (describes me very well). The rating for each one corresponds to the total score from the responses. The theoretical range of scores is from 0 to 28 for each subscale, with a total score of 0-112 and higher scores indicating more empathy. Davis (1980; 1983) reported that all four subscales have satisfactory internal and test-retest reliabilities. Internal reliabilities range from .71 to .77; test-retest reliabilities range from .62 to .71. The instrument has also been used with diverse populations that include junior high school students (Wise & Cramer, 1988), juvenile delinquents (Lee & Prentice, 1988) and conduct disordered youth (Cohen & Strayer, 1996). Refer to Appendix L for scoring instructions.

Inventory of Parent and Peer Attachment: Mother, Father, Peer Version (IPPA; Armsden & Greenberg, 1987; see Appendix D)

The inventory of parent and peer attachment (IPPA) was developed in order to assess adolescents' perceptions of the positive and negative affective/cognitive dimensions of relationships with their parents and close friends, particularly how well these figures serve as sources of psychological security. Three broad dimensions are assessed: degree of mutual trust; quality of communication; and extent of anger and alienation. The development samples for the IPPA were 16 to 20 years of age; however it has been used successfully in several studies with adolescents as young as 12.

The IPPA is a self-report questionnaire with a five-point Likert-scale response format ranging from 1 (never) to 5 (always). The original version (Parent and Peer Attachment) consists of 28 parents and 25 peer items, yielding two attachment scores. The revised version (Mother, Father, Peer Version) is comprised of 25 items in each of the mother, father, and peer sections, yielding three attachment scores, and its use over the original version is recommended by the authors whenever possible. Participants completed this questionnaire based on their attachment to parents and peers one year prior to incarceration, as well as on their current attachment to parent and peers. Since a test of the difference between the two time periods was not significant, the measure of current attachment was the only one used in the analyses. Refer to Appendix M for scoring instructions.

Internal reliabilities for the revised version are: Mother attachment, .87; Father attachment, .89; and Peer attachment, .92 (Armsden & Greenberg, 1987). Regarding the validity of the scale, attachment to parents has been found to discriminate delinquents

from non-delinquents among 12-17 year olds (Redondo, Martin, Fernandez, & Lopez, 1986). Among early to middle aged adolescents, parent attachment, and to a lesser extent, peer attachment, has been found to be associated with less hopelessness and less externally oriented locus of control, and with greater self management (coping) skills (Armsden & Greenberg, 1987).

Paulhus Deception Scale (Paulhus, 1999; see Appendix E)

The Paulhus Deception Scale is designed to measure two major forms of socially desirable responding; Impression Management and Self-Deception Enhancement. The scale consists of 40 self-referential statements that are scored on a 5-point scale ranging from 1 (not true) to 5 (very true), and offers separate subscales to measure these separate aspects of social desirability, in addition to providing a total score. The PDS takes about five-minutes to complete and has been rated as having a fifth-grade reading level.

For purposes of the current study, only the Impression Management subscale of the PDS was utilized. The Impression Management scale represents a well known category of social desirability measures aimed at faking or lying, it measures the degree to which respondents are trying to present themselves in a favorable light. The Impression Management subscale contains 20 items that represent unlikely virtues. Respondents are asked to rate the degree to which they typically perform various desirable, but uncommon behaviors (e.g., “I always obey laws even if I’m unlikely to get caught”). If the respondent claims an over-abundance of these unlikely behaviors they may be exaggerating and purposely trying to impress the administrator. Since the current study relies heavily on self-report information from interviews and questionnaires, a measure of impression management was used to determine whether the youth were

purposely attempting to manage the impression they gave by describing themselves in overly positive terms. Examination of Impression management is useful in that it provides a validity check for the test battery that is administered. Total scores range from 0-20. The impression management subscale of the PDS was utilized in a sample of college students ($M = 5.3$, $SD = 3.5$) (Paulhus, 1999), a sample of inmates from Canadian minimum- and maximum-security prisons ($M = 5.3$, $SD = 3.6$) (Kroner & Weekes, 1996), and with a sample of adolescent offenders ($M = 3.3$, $SD = 3.1$) (Hemphill & Howell, 2000).

The internal reliability (Cronbach's alpha) of the impression management subscale for use with college students and prison entrants has been demonstrated to be excellent (Alpha = .80 and .84). Regarding the convergent validity for the impression management subscale, the IM scale correlates highly with a cluster of measures traditionally known as lie scales (Paulhus, 1999). Furthermore, the IM scale is extremely responsive to demands for impression management. For example, warning subjects that their responses would be verified increased IM scores (Booth-Kewley, Rosenfeld, Edwards, & Alderton, 1992), and anonymous testing has been found to decrease scores on the IM scale (Booth-Kewley et al., 1992; Lautenschlager & Flaherty, 1990)

Violent Offense Scale (Flight, 2004; see Appendix F)

The violent offense scale is a self-report questionnaire that was designed to provide a means for examining past violent behavior and classifying individuals as instrumentally or reactively violent. A total of 11 items examine characteristics of past violent offending such as the amount of planning involved, the reasons for being violent, the victim-offender relationship, and the amount of victim injury caused. In addition,

questions also examine whether or not individuals have ever been instrumentally violent and, if they have, the number of times instrumental violence was used, the reasons for being instrumentally violent, the victim-offender relationship, the amount of victim injury, and the amount of planning involved.

Rating the Violent Offense. The information pertaining to level of reactivity and instrumentality was coded from a combination of the PCL: YV interview, semi-structured motivations interview, and information contained in the institutional files pertaining to the youths' overall history of violent behavior. The youth were not classified as either purely reactive or purely instrumental because research has found that many violent offenders commit a combination of reactive and instrumental offenses (Cornell et al., 1996). Because of this, as in the study by Murrie et al. (2004), priority was given to the presence of any instrumental violent offense; those who had committed at least one instrumentally violent offense were classified as instrumental offenders, despite whether or not they had committed reactive violent offenses; this variable was called instrumental (0 = no, 1 = yes).

Unlike the study by Murrie et al. (2004), the present study went one step farther in its classification of violent offenders. To examine any difference between those offenders who frequently engage in instrumental violence and those who have only engaged in instrumental violence once or twice ever, ratings were also made to distinguish between these two groups. As such, aside from classifying the youth into the instrumental and reactive dichotomy based on the presence of at least one instrumentally violent offense, the youth were also classified based on their level of instrumentality, into categories of never instrumental, once or twice instrumental (occasionally), and

frequently instrumental; this variable was called instrumentality (0 = never, 1 = once/twice, 2 = frequently). Similarly, in an attempt to distinguish between those youth who never engage in reactive violence, those who have seldom engaged in reactive violence, and those who frequently engage in reactive violence, youth were classified based on their level of reactivity into these three categories; this variable was called reactivity (0 = never, 1 = once/twice, 2 = frequently).

A fourth and final classification, involved classifying youth on the basis of being frequently reactive and frequently instrumental, the most extreme group of violent offenders; this variable was called versatility (0 = non-versatile, 1 = frequently reactive/frequently instrumental).

Youth were rated as reactive if there was sufficient evidence indicating that a youth had committed violence only in reaction to an interpersonal dispute or conflict. Youth were classified as instrumental if there was sufficient information suggesting that a youth had committed at least one act of violence for a clearly identifiable purpose other than responding to provocation or conflict (i.e., money, drugs, property, revenge). Each of the youth were given a score for each of the 4 violent variables. Inter-rater agreement was assessed on 20% of the cases.

Procedure

Prior to recruitment of the volunteers, the research proposal underwent ethical approval by both Carleton University and the Ministry of Public Safety and Security ethics committee. The superintendent of the institutions, the deputy wardens, and psychology departmental heads were contacted prior to arrival at the institutions, in order to obtain support for the study. Following permission to proceed, the institutions were

consulted regarding the most appropriate way to elicit volunteers. After consultation with the wardens and psychologists, signs were posted stating that volunteers were needed to participate in a study looking at the relation of various personality characteristics and the differing motives underlying violence and crime (See Appendix G).

Once there was some indication of interest on the part of the offender, they were provided with an information sheet (Appendix H) that outlined in detail the purpose of the study. The participants were told that the purpose of the study was to assess the characteristics of individuals that are associated with different motives underlying different types of crime. They were informed that some personal questions regarding their family life, relationships, history of sexual and physical abuse, employment, education, and criminal history would be asked but that they had the right to skip any questions they did not want to answer. They were also told that the information was for research purposes only and that their participation would in no way influence release decisions. Confidentiality was ensured and the limits clearly explained. Upon obtaining verbal approval to participate, the participants were asked to read and sign the informed consent (Appendix I), the consent to access institutional files, consent to audiotape the interview, and consent to follow up (Appendix J).

Due to time limitations as well as the impact of fatigue from the extensive interview, the assessment was divided into two separate sessions. The first session entailed a two hour PCL: YV and Semi-Structured Motivations interview. The next day, the participant completed the 4 self-report questionnaires.

Once the second session was completed, the participant was provided with a debriefing of the study as well as the names and numbers of contacts should they require any further assistance or experience any discomfort as a result of participating in the study (Appendix K). For the purposes of inter-rater reliability, a random sample of 10 (20%) interviews from those that were audiotaped was rated by a separate rater for PCL: YV scores. In addition, another random sample of 10 (20%) cases were rated by another separate rater for the violence classification.

Results

The results of this study will be presented in several sections. First information pertaining to data screening, the PCL: YV and violent classification distributions, inter-rater reliability, and Impression Management findings will be presented. Second, the psychometric properties (internal consistency estimates) of, and correlations between, the measures employed in the study will be examined.

Following from this, a correlational analysis will be used to examine whether there is a relation between psychopathy and the number of official violent and non-violent charges and convictions. This will be followed by a one-way analysis of variance to examine the hypothesis that those scoring higher on psychopathy engage in violence that results in greater victim injury. Next, several independent t-tests and univariate and multivariate analyses of variance will be conducted to ascertain whether the instrumental and non-instrumental groups differ on psychopathy, and also whether or not they differ on attachment or empathy. To examine the degree to which the instrumental rating is more strongly associated with Factor 1 psychopathy scores, and the reactive rating is more strongly associated with Factor 2 psychopathy scores, a correlational analysis will be conducted. This will be followed by two logistic regressions to examine the relative contributions of Factor 1 and Factor 2 in predicting the degree of instrumentality and reactivity. In an attempt to examine whether those who have been instrumentally violent to family members score higher on psychopathy and lower on empathy and attachment than those who engage in this form of violence against strangers, a one-way multivariate analysis of variance will be conducted. Finally, other exploratory analyses will be examined.

Data Screening

Prior to analysis, all study variables were examined through SPSS for Windows to examine data entry accuracy, missing values, and outliers. Furthermore, during data analysis, all univariate and multi-variate assumptions were tested and tenable.

PCL: YV Scores

Psychopathy was analyzed as a continuous variable, consistent with previous research (Forth et al., 1990; Murrie et al., 2004; Stafford & Cornell, 2003) and the fact that no cut-off score has been established for juveniles (Forth et al., 2003). Furthermore, although support for a 4-factor model of psychopathy in youth has been demonstrated (Forth et al., 2003), the four factors were collapsed into two factors (Affective/Interpersonal and Behavioral/Lifestyle) in order to allow comparison of results with past research (Cornell et al., 1996; Murrie et al., 2003). PCL: YV scores ranged from 6 to 33 ($M = 20.7$, $SD = 8.8$), with Factor 1 scores ranging from 0 to 15 ($M = 7.4$, $SD = 4.3$), and Factor 2 scores ranging from 2 to 18 ($M = 12.0$, $SD = 4.4$). PCL: YV scores were not significantly correlated with age at time of assessment ($r = .20$) or with ethnicity ($r = .09$; Caucasian = 1, other = 2). An independent samples t-test revealed no statistically significant group differences between the Caucasian youth ($n = 32$) versus others (African-American, $n = 9$; Aboriginal, $n = 6$; Hispanic, $n = 1$; other, $n = 2$) on PCL: YV total scores, $t(48) = 0.03$, $p = .98$.

Reliability of Total PCL: YV Scores and Factor Scores

The reliability of the PCL: YV was assessed in terms of inter-rater reliability and internal consistency. For a subsample of 10 offenders (20%), rated by two independent raters, the inter-rater reliability was excellent for total PCL: YV scores, $r = .99$, as well as

for the factor scores Affective ($r = .93$), Interpersonal ($r = .94$), Behavioral ($r = .92$), and Antisocial ($r = .99$). With respect to internal consistency, Cronbach's alpha coefficients based on the entire sample ($N = 51$) were excellent for the PCL: YV total scores (0.93), and acceptable for the factor scores, Affective (0.71), Interpersonal (0.85), Behavioral (0.72), and Antisocial (0.70).

Violent Classifications

The violent classification method employed in the current study, whereby each of the youth were initially rated on instrumentality (0 = never instrumental, 1 = once/twice instrumental, 2 = frequently instrumental) and reactivity (0 = never reactive, 1 = once/twice reactive, 2 = frequently reactive), resulted in the youth initially being placed in 6 different categories. The majority of the youth, 23 (45%) were classified as frequently instrumental and frequently reactive; 12 (23%) were classified as once/twice instrumental and frequently reactive; 7 (14%) were classified as never instrumental and frequently reactive; 6 (12%) were classified as never instrumental and once/twice reactive; 2 (4%) were classified as frequently instrumental and once/twice reactive; and one (2%) was classified as once/twice instrumental and once/twice reactive. No youth were classified as frequently instrumental and never reactive, once/twice instrumental and never reactive, or as never instrumental and never reactive.

These ratings were collapsed to form the 4 distinct categories: instrumental (0 = never instrumental, 1 = engaged in at least one instrumentally violent act), instrumentality (0 = never, 1 = once/twice, 2 = frequently), reactivity (0 = never, 1 = once/twice, 2 = frequently), and versatility (0 = non-versatile, 1 = frequently instrumental/frequently reactive). As a result of these categories, for the dichotomous variable of instrumental,

13 youth were classified as never instrumental and 38 were classified as instrumental; for instrumentality, 13 were classified as never instrumental, 13 were classified as once/twice instrumental, and 25 were classified as frequently instrumental; for reactivity, 9 were classified as once/twice reactive and 42 were classified as frequently reactive; for versatility, 23 were classified as versatile and 28 were classified as non-versatile.

Reliability of the Violent Classification Ratings

In regards to the motivations underlying acts of violence, the reliability of the Violent classifications of the youth was assessed in terms of inter-rater reliability. For a subsample of 10 offenders (20%), an independent rater, different than the inter-rater used for the PCL: YV scores, rated each of the youth on both instrumentality (0 = never instrumental, 1 = once/twice instrumental, 2 = frequently instrumental) and reactivity (0 = never reactive, 1 = once/twice reactive, 2 = frequently reactive). From this, the youth could also be placed into the instrumental (0 = never instrumental, 1 = engaged in at least one instrumentally violent act) and versatility (0 = not versatile, 1 = frequently reactive/frequently instrumental) categories.

In classifying the youth into the instrumentality category (0 = never instrumental, 1 = once/twice instrumental, 2 = frequently instrumental), the two independent raters agreed 80% of the time. The 20% disagreement for instrumentality involved one rater classifying two of the youth as never instrumental while the other rater classified them as once/twice instrumental. As a result of this, in classifying the youth as instrumental (0 = never instrumental, 1 = engaged in at least one instrumentally violent act), there was also 80% agreement between the two raters with the 20% disagreement involving one rater classifying the two youth as instrumental whom the other rater did not. In classifying the

youth into the reactivity category (0 = never reactive, 1 = once/twice reactive, 2 = frequently reactive), there was 90% agreement between the two raters. The 10% disagreement for reactivity involved one rater classifying one of the youth as once/twice reactive whom the other rater classified as frequently reactive. As a result of this, in classifying the youth as versatile (0 = not versatile, 1 = frequently reactive/frequently instrumental), there was also 90% agreement between the two raters. The 10% disagreement was a result of the previous youth who was classified as once/twice reactive by one rater but as frequently reactive by the other (classified by both as frequently instrumental), as such this youth was classified as versatile by one rater but not by the other. The difference in classification between the two raters was never greater than one unit; no youth were classified as “frequently” (reactive or instrumental) by one rater and “never” by the other.

Inter-rater reliability was examined using chi-square contingency tables. Results demonstrated that there was dependency between the two raters in classifying the youth into the instrumentality ($\chi^2 = 11.67, p < .05$), reactivity ($\chi^2 = 4.44, p < .05$), and versatility ($\chi^2 = 6.67, p < .05$) categories, and marginal dependency for instrumental ($\chi^2 = 3.75, p = .05$). Kappa, an index that corrects for chance agreements was also examined. Kappa ranges in value from -1 to +1. A value of +1 for kappa indicates perfect agreement, a value of 0 indicates chance-level agreement, and values less than 0 indicate poorer than chance-level agreement (Green & Salkind, 2003). In order to take into account chance agreement, kappa coefficients were calculated and values of .69, .62, .55, and .80, respectively, indicated that agreement between the two raters in classifying

the youth into the instrumentality, reactivity, instrumental, and versatility categories was better than chance and in the moderate to high levels.

PDS Results

In order to provide a validity check for the constructs measured by the self-report questionnaires, the Impression Management Subscale of the Paulhus Deception Scale (1998) was employed. The manual provides a set of cut-offs, may be invalid (more liberal) and probably invalid (more conservative), outside of which the respondents may be either Faking Good or Faking Bad. For Faking Good, three of the respondents scored above the “may be invalid” cut-off (>8), suggesting that their responses may be invalid; no youth scored above the “probably invalid” cut-off score (>12). For Faking Bad, 6 youth scored below the “may be invalid cut-off (<2), meaning that their responses may be invalid, and two youth scored below the “probably invalid” cut-off (<1) meaning that their responses are probably invalid. It should be noted that although extreme scores might indicate social desirable responding, other interpretations such as maladjustment, confusion, and carelessness are also worthy of careful consideration (Paulhus, 1999). Nonetheless, the 9 youth who scored in the “may be invalid” range were omitted from the analyses utilizing self-report questionnaires due to the fact that their responses were potentially invalid.

Overall, the mean score on the impression management scale from the Paulhus Deception Scale (PDS; Paulhus, 1998) was 4.46. Values on this scale can range between 0 and 20 with higher scores reflecting higher degrees of impression management. Interestingly, correlational analyses revealed that impression management was unrelated

to PCL: YV total scores ($r = -.18$), Factor 1 scores ($r = -.16$) and Factor 2 scores ($r = -.14$) (see Table 4).

In regards to the self report measures, impression management was unrelated to the IRI-total ($r = .09$), mother attachment ($r = .17$), and peer attachment ($r = .02$), but was positively correlated with father attachment ($r = .50, p < .003$) suggesting that higher scores on father attachment are associated with higher levels of impression management (see Table 4).

Descriptives for Measures

Table 3 displays the mean, standard deviation, range and alpha for the measures used in this study. Alpha was adequate for all the measures utilized in the study, ranging from .70 to .96. Table 4 provides the correlations between all the measures utilized in the study. As expected, PCL: YV total score correlated highly with Factors 1 and 2.

Furthermore, PCL: YV total score correlated moderately with empathy total and father attachment. Collapsed Factor 1 scores were moderately correlated with Factor 2 scores and empathy scores. Factor 2 scores also correlated moderately with empathy scores and, in addition, father attachment. Father attachment correlated weakly with empathy total, and moderately with impression management, Factor 2, and total PCL: YV score.

Empathy total scores correlated moderately with PCL: YV total score, Factor 1 and 2, and father attachment. Impression management correlated moderately with father attachment only. Mother attachment and peer attachment did not correlate with any of the other measures employed in the study.

Table 3***Descriptive Statistics for Measures***

Measure	N	Range	<i>M</i>	<i>SD</i>	Alpha
PCL: YV	51	6-33	20.73	8.82	.93
PCL: YV F1	51	0-8	3.42	2.20	.71
PCL: YV F2	51	0-8	3.91	2.59	.85
PCL: YV F3	51	1-10	5.52	2.29	.72
PCL: YV F4	51	1-10	6.30	2.68	.70
PCL: YV (F1+F2)	51	0-15	7.32	4.34	.86
PCL: YV (F3+F4)	51	2-18	11.81	4.42	.79
IPPA (Mom)	42	42-123	89.67	20.80	.93
IPPA (Dad)	33	25-118	75.39	29.24	.96
IPPA (Peer)	41	44-115	95.10	14.85	.87
IRI	42	21-79	53.74	16.60	.88
PDS (IM)	50	0-10	4.46	2.51	.70

Note. PCL:YV = Psychopathy Checklist: Youth Version; PCL:YV F1 = Psychopathy Checklist: Youth Version, Factor 1; PCL:YV F2 = Psychopathy Checklist: Youth Version, Factor 2; PCL:YV F3 = Psychopathy Checklist: Youth Version, Factor 3; PCL:YV F4 = Psychopathy Checklist: Youth Version, Factor 4; PCL:YV (F1+F2) = Psychopathy Checklist: Youth Version, Affective/Interpersonal Factor; PCL:YV (F3+F4) = Psychopathy Checklist: Youth Version, Behavioral/Antisocial Factor; IPPA = Inventory of Parent and Peer attachment; IRI = Interpersonal Reactivity Index total; PDS (IM) = Paulhus Deception Scale, Impression Management.

Table 4***Correlations between measures employed in the study***

Measure	1	2	3	4	5	6	7	8
1. PCL:YV	1.00	.91***	.86***	-.17	-.37*	.12	-.55***	-.18
2. PCL:YV (F1+F2)		1.00	.60***	-.09	-.25	.06	-.42**	-.16
3. PCL:YV (F3+F4)			1.00	-.20	-.43*	.12	-.48**	-.14
4. IPPA (Mom)				1.00	-.22	.13	.26	.17
5. IPPA (Dad)					1.00	.12	.38*	.50**
6. IPPA (Peer)						1.00	-.14	.02
7. IRI – Total							1.00	.09
8. PDS-IM								1.00

Note. PCL:YV = Psychopathy Checklist: Youth Version; PCL:YV FI = Psychopathy Checklist: Youth Version, Factor 1; PCL:YV F2 = Psychopathy Checklist: Youth Version, Factor 2; PCL:YV F3 = Psychopathy Checklist: Youth Version, Factor 3; PCL:YV F4 = Psychopathy Checklist: Youth Version, Factor 4; PCL:YV (F1+F2) = Psychopathy Checklist: Youth Version, Affective/Interpersonal Factor; PCL:YV (F3+F4) = Psychopathy Checklist: Youth Version, Behavioral/Antisocial Factor; IPPA = Inventory of Parent and Peer attachment; IRI = Interpersonal Reactivity Index total; PDS (IM) = Paulhus Deception Scale, Impression Management.

* $p < .05$ ** $p < .01$ *** $p < .001$

Psychopathy Scores and Violent Offending

Violent and non-violent official charges

A correlational analysis was conducted on official violent and non-violent charges and convictions in order to examine whether youth who scored higher on psychopathy had been charged and/or convicted with more violent and non-violent offenses than those scoring lower on psychopathy. Since many of the files of the youth were incomplete (many missing the Phase One portion¹) it was difficult to determine which lists of charges were complete and which were not. The youth for whom it was certain portions of their file was missing were omitted from the analysis ($n = 21$), thus reducing the sample to 30. Results of a correlational analysis failed to reveal statistically significant differences between total PCL: YV scores and official violent charges/convictions ($r = .17$) or official non-violent charges/convictions ($r = .22$).

Severity of Injury

Since past research has demonstrated a relation between psychopathy and severity of violence (Hare & McPherson; Kosson et al., 2002; Murrie et al., 2004), psychopathy in relation to the amount of injury caused, as obtained from question 1i on the Violent Offenses Scale, was examined. Due to the low number of individuals who responded no physical injury ($n = 3$) and slight injury ($n = 3$), these two groups were collapsed into a single group, none/slight injury ($n = 6$).

Results of a correlational analysis revealed that the correlation between PCL: YV total scores and severity of past violence was significant ($r = .43$). In addition, a one-way

¹ The correctional system in Ontario is known as a two-tiered system. Offenders under 16 years of age are referred to as "Phase One" offenders and those between the ages of 16 and 18 are referred to as "Phase Two" offenders.

analysis of variance revealed a statistically significant difference between the most serious self-reported injury ever, none/slight injury ($n = 6$), victim treated in hospital/clinic and released ($n = 18$), and serious injury ($n = 16$), and PCL: YV total, $F(2, 37) = 5.17, p < .05$. Boniferroni pairwise comparisons revealed significant differences on psychopathy between those who had caused none/slight injury ($M = 11.77, SD = 3.86$), and those who resulted in the victim being treated in hospital or clinic ($M = 21.21, SD = 8.45$), and between those who had caused no/slight injury and those who had caused serious injury ($M = 24.00, SD = 8.40$).

Psychopathy and Instrumental Violence

The relation between psychopathy scores and several measures of violent offending was analyzed. With regard to the main hypothesis of the study, whether those who engage in instrumental violence score higher on psychopathy than those who do not, a dichotomous variable, instrumental (yes/no), as in past research (Cornell et al., 1996; Murrie et al., 2004), documenting whether the youth had engaged in at least one instrumentally violent act, was the primary variable of interest. Interestingly, approximately 75% of the youth in this study were classified as instrumental on the basis of having engaged in at least one instrumentally violent act in their past. An independent samples t-test demonstrated statistically significant differences between the two groups on PCL: YV Total, $t(49) = 5.12, p < .001$. As predicted, youth classified as instrumentally violent, scored significantly higher on the PCL: YV than those classified as never instrumental (see Table 5).

Table 5***Means and (Standard Deviations) on Psychopathy, Attachment, and Empathy for Instrumental versus Non-Instrumental Groups***

Measure	Instrumental (<i>n</i> =38)	Never instrumental (<i>n</i> =13)
PCL:YV	23.74 (7.83)	11.92 (4.70)
PCL:YV (F1+F2)	8.81 (3.87)	2.97 (2.21)
PCL:YV (F3+F4)	13.03 (4.01)	8.27 (3.67)
IPPA (Mom)	86.41 (20.82)	89.80 (20.71)
IPPA (Dad)	69.91 (31.10)	85.50 (23.52)
IPPA (Peer)	93.95 (17.54)	99.30 (8.30)
IRI	49.97 (15.77)	63.17 (11.52)

Note. PCL:YV = Psychopathy Checklist: Youth Version; PCL:YV (F1+F2) = Psychopathy Checklist: Youth Version, Affective/Interpersonal Factor; PCL:YV (F3+F4) = Psychopathy Checklist: Youth Version, Behavioral/Antisocial Factor; IPPA = Inventory of Parent and Peer attachment; IRI = Interpersonal Reactivity Index total.

Due to the fact that 75% of the youth in this study were classified as instrumental, and in an attempt to distinguish between those youth who have engaged in many instrumentally violent acts and those who have only done so once or twice, and between those who have done so once or twice and those who have never done so, a second variable, instrumentality (0=never instrumental, 1= once/twice instrumental, 2=frequently instrumental) was examined in relation to PCL: YV total scores. A one-way analysis of variance revealed statistically significant differences between the three groups on PCL: YV Total, $F(2, 48) = 21.56, p < .001$. Bonferonni Pairwise Comparisons of Instrumentality yielded significant differences in psychopathy between all of the groups (see Table 6). The largest mean difference in psychopathy was between those classified as never instrumental and those classified as frequently instrumental, secondly between

those classified as once/twice instrumental and those classified as frequently instrumental, and the smallest, but significant, mean difference was between the never instrumental and once/twice instrumental groups.

Table 6

Means and (Standard Deviations) on Psychopathy, Attachment and Empathy between Instrumentality Groups

Measure	Never (<i>n</i> = 13)	Once/twice (<i>n</i> = 13)	Frequently (<i>n</i> = 25)
PCL:YV	11.92 (4.70)	18.79 (7.85)	26.32 (6.59)
PCL:YV (F1+F2)	2.97 (2.21)	6.77 (3.54)	9.87 (3.66)
PCL:YV (F3+F4)	8.27 (3.67)	11.05 (4.56)	14.05 (3.35)
IPPA (Mom)	89.80 (20.71)	90.00 (16.30)	83.42 (24.26)
IPPA (Dad)	85.50 (23.52)	80.00 (29.64)	61.50 (30.96)
IPPA (peer)	99.30 (8.30)	89.50 (23.12)	97.67 (10.82)
IRI	62.85 (11.52)	63.25 (11.97)	44.32 (16.84)

Note. PCL:YV = Psychopathy Checklist: Youth Version; PCL:YV (F1+F2) = Psychopathy Checklist: Youth Version, Affective/Interpersonal Factor; PCL:YV (F3+F4) = Psychopathy Checklist: Youth Version, Behavioral/Antisocial Factor; IPPA = Inventory of Parent and Peer attachment; IRI = Interpersonal Reactivity Index total.

The most extreme form of violent offenders, the versatile group, those who frequently engaged in instrumental and reactive violence, were examined in relation to PCL: YV total scores. The versatile group was rated as having significantly more psychopathic traits than the non-versatile group, $t(49) = 6.76, p < .001$ (see Table 7).

Table 7***Means and (Standard Deviations) on Psychopathy, Attachment and Empathy for Versatile Group versus Non-Versatile Group***

Measure	Versatile (<i>n</i> = 23)	Non-Versatile (<i>n</i> = 28)
PCL:YV	27.42 (5.29)	15.24 (7.19)
PCL:YV (F1+F2)	10.30 (3.45)	4.88 (3.39)
PCL:YV (F3+F4)	14.51 (2.80)	9.60 (4.30)
IPPA (Mom)	84.82 (24.93)	88.86 (18.32)
IPPA (Dad)	63.36 (31.75)	80.76 (27.11)
IPPA (peer)	98.45 (10.98)	94.14 (17.23)
IRI	42.56 (15.36)	62.13 (12.07)

Note. PCL:YV = Psychopathy Checklist: Youth Version; PCL:YV (F1+F2) = Psychopathy Checklist: Youth Version, Affective/Interpersonal Factor; PCL:YV (F3+F4) = Psychopathy Checklist: Youth Version, Behavioral/Antisocial Factor; IPPA = Inventory of Parent and Peer attachment; IRI = Interpersonal Reactivity Index total.

Instrumental and Reactive Rating in Relation to Psychopathy Scores

Since research with adults suggests that instrumental violence is more strongly associated with Factor 1 (Interpersonal/Affective) psychopathy scores and that reactive violence is more strongly associated with Factor 2 (Behavioral/Antisocial) psychopathy scores (Woodworth & Porter, 2002), a correlational analysis was conducted (see Table 8).

Table 8***Correlations between Instrumental and Reactive Rating and Psychopathy Scores***

Measure	1	2	3	4	5	6
1. PCL:YV	1.00	.91***	.86***	.59***	.69***	.55***
2. PCL:YV (F1+F2)		1.00	.60***	.59***	.66***	.42**
3. PCL:YV (F3+F4)			1.00	.47***	.55***	.59***
4. Instrumental				1.00	.87***	.44**
5. Instrumentality					1.00	.38**
6. Reactivity						1.00

Note. PCL:YV = Psychopathy Checklist: Youth Version; PCL:YV (F1+F2) = Psychopathy Checklist: Youth Version, Affective/Interpersonal Factor; PCL:YV (F3+F4) = Psychopathy Checklist: Youth Version, Behavioral/Antisocial Factor; Instrumental = Dichotomous Instrumental Rating; Instrumentality = Detailed Instrumental Rating; Reactivity = Reactive Rating.

** $p < .01$

*** $p < .001$

Results of a correlational analysis revealed that PCL: YV total score was significantly related to the dichotomous instrumental rating ($r = .59$), detailed instrumental rating ($r = .69$), and the reactive rating ($r = .55$). In addition, consistent with the hypothesis, results revealed that, although significantly related to both, the dichotomous instrumental rating was more strongly associated with the PCL: YV collapsed Factor 1 scores ($r = .59$) than the PCL: YV collapsed Factor 2 scores ($r = .47$). To determine whether this difference was statistically significant, a test of the difference between the two dependent correlation coefficients was examined using the following formula:

$$t = \frac{(r_{12} - r_{13})}{\sqrt{2(1 - r_{12}^2 - r_{13}^2 - r_{23}^2 + 2r_{12}r_{13}r_{23})}} \sqrt{(N-3)(1 + r_{23})}$$

(where r_{12} = correlation between instrumental and Factor 1; r_{13} = correlation between instrumental and Factor 2; r_{23} = correlation between Factor 1 and Factor 2).

Results revealed that the difference between the two correlations was not significant, $t(48) = 1.17, p = .25$.

The correlational analysis also revealed that the more detailed instrumental rating was also more strongly associated with the Factor 1 scores ($r = .66$) than Factor 2 scores ($r = .55$), however results revealed that the difference between the two correlations was also not statistically significant, $t(48) = 1.17, p = .25$

Furthermore, as expected, the reactive rating, was more strongly associated with the Factor 2 scores ($r = .59$) than Factor 1 scores ($r = .42$), however results also revealed that the difference between the two correlations was not statistically significant, $t(48) = 1.64, p = .10$.

To examine the relative contributions of Factor 1 (Affective/Interpersonal) and Factor 2 (Behavioral/Antisocial) in predicting the degree of instrumentality, a logistic regression, with the dichotomous measure of instrumentality as the dependent variable and PCL:YV Factor 1 and Factor 2 scores, entered simultaneously as the predictors, was conducted. The overall model was significant ($\chi^2(2, N = 51) = 24.10, p < .001$), and demonstrated that the set of predictors (Factor 1 and Factor 2) accounted for approximately 42% of the variance in instrumental violence, (likelihood ratio $R_L^2 = 0.42$). In addition, results revealed that the Affective/Interpersonal factor, but not the Behavioral/Antisocial factor, was significant in increasing the odds (odds ratio = 1.65, $p < .01$) of instrumental violence. The odds of instrumental violence increase by 1.65 times with an increase of one unit change in the affective factor score. However, because odds ratios are not a linear function, the change in outcome odds for any change in predictor scores greater than one point must be calculated using the following formula:

$$\text{Odds ratio} = e^{b(\text{score}_1 - \text{score}_2)}$$

where e is the algorithmic function and b is the beta coefficient (0.503 for the affective factor in this analysis).

For example, from the above formula, given a change in affective factor scores from 0 to 4.34 (1 *SD*), the corresponding odds ratio becomes $e^{0.503(4.34 - 0)} = 8.87$; and a change from 0 to 8.68 (2 *SD*) results in an odds ratio of 78.73.

To examine the relative contributions of Factor 1 (Affective/Interpersonal) and Factor 2 (Behavioral/Antisocial) in predicting the degree of reactivity, a second logistic regression, with the dichotomous measure of reactivity (0 = once/twice reactive, 1 = frequently reactive) as the dependent variable and PCL:YV Factor 1 and Factor 2 scores entered simultaneously as the predictors, was conducted. The overall model was significant ($\chi^2(2, N = 51) = 20.62, p < .001$), and demonstrated that the set of predictors (Factor 1 and Factor 2) accounted for approximately 43% of the variance in reactive violence, (likelihood ratio $R_L^2 = 0.43$). In addition, results revealed that the effect of Factor 2 (Behavioral/Antisocial), but not Factor 1 (Affective/Interpersonal), was significant, in increasing the odds (odds ratio = 1.55, $p < .05$) of reactive violence. The odds of reactive violence increase by 1.55 times with an increase of one unit in the behavioral factor score ($b = .435$). A change in the behavioral factor scores from 0 to 4.42 (1 *SD*), results in an odds ratio of 6.84.

Instrumentality, Empathy, and Attachment

Empathy

Since research suggests that the relation between psychopathy and instrumental violence can be accounted for by deficits in empathy and attachment that characterize psychopaths (Woodworth & Porter, 2001), these two constructs were examined separately in relation to instrumentality.

An independent samples t-test demonstrated statistically significant differences in overall level of empathy between those who engaged in at least one instrumentally violent act and those who had not, $t(40) = 2.47, p < .05$ (see Table 5). Similarly, a one-way analysis of variance revealed significant differences in overall level of empathy between the three groups rated on level of instrumentality (0 = never instrumental, 1 = once/twice instrumental, 2 = frequently instrumental), $F(2, 29) = 12.66, p < .001$. Boniferroni pairwise comparisons between the three groups revealed that those who were never instrumental had higher empathy scores than those who were frequently instrumental, as did those classified as once/twice instrumental. The mean difference between those classified as never instrumental and those classified as once/twice instrumental was not significant (see Table 6).

A significant difference on total empathy was also found between the versatile group (those who are both frequently reactive and instrumental) and all non-versatile youth, $t(40) = 4.63, p < .001$ (see Table 7).

In an attempt to examine empathy as a multi-dimensional construct in regards to instrumental violence, several multi-variate analyses of variance were conducted. A significant overall multi-variate analysis of variance demonstrated significant differences

on the set of empathy constructs between those classified as never instrumental and those classified as instrumental, $F(4, 36) = 3.50, p < .05$. Post hoc univariate tests revealed statistically significant differences between the two groups on empathetic concern, $F(1, 39) = 7.27, p < .05$, and perspective taking, $F(1, 39) = 13.55, p < .01$ (see Table 9).

Table 9

Means and (Standard Deviations) for Empathy Constructs as a Function of Never Instrumental versus Instrumental

Construct	Never Instrumental ($n = 12$)	Instrumental ($n = 29$)
Fantasy	15.33 (5.85)	13.52 (5.79)
Empathetic Concern	19.33 (3.37)	14.55 (5.72)
Perspective Taking	17.08 (3.92)	12.17 (3.87)
Personal Distress	11.42 (5.28)	10.72 (4.99)

Not surprisingly, a significant multi-variate analysis of variance demonstrated statistically significant differences on the set of empathy constructs between those classified as versatile and those who were not, $F(4, 36) = 4.86, p < .005$. Post hoc univariate tests demonstrated that these differences were found on all the constructs of empathy: fantasy, $F(1, 39) = 8.46, p < .01$, empathetic concern, $F(1, 39) = 11.64, p < .01$, perspective taking, $F(1, 39) = 15.47, p < .001$, and personal distress, $F(1, 39) = 4.67, p < .05$ (see Table 10).

Table 10

Means and (Standard Deviations) for Empathy Constructs as a Function of Versatile versus Non-versatile

Construct	Versatile (<i>n</i> = 17)	Non-versatile (<i>n</i> = 24)
Fantasy	11.20 (5.46)	16.08 (5.23)
Empathetic Concern	12.82 (5.82)	18.17 (4.22)
Perspective Taking	10.82 (4.04)	15.58 (3.66)
Personal Distress	9.00 (4.51)	12.29 (5.00)

Empathy as a multi-dimensional construct was also examined in relation to the three groups differing on the frequency of instrumentality. A multi-variate analysis of variance revealed statistically significant differences between the never instrumental, once/twice instrumental, and frequently instrumental groups on the set of empathy constructs, $F(8, 72) = 3.46, p < .005$. Univariate tests revealed that these differences in empathy were associated with all of the constructs of empathy: fantasy, $F(2, 38) = 4.78, p < .05$, empathetic concern, $F(2, 38) = 7.09, p < .01$, perspective taking, $F(2, 38) = 11.68, p < .001$, and personal distress, $F(2, 38) = 4.37, p < .05$. Boniferroni pairwise comparisons revealed statistically significant mean differences on fantasy between those youth classified as once/twice instrumental and those classified as frequently instrumental; on empathetic concern between youth classified as never instrumental and those classified as frequently instrumental; on perspective taking between youth classified as never instrumental and those classified as frequently instrumental, and between those classified as once/twice instrumental and those classified as frequently

instrumental; and on personal distress between those classified as once/twice instrumental and those classified as frequently instrumental (see Table 11).

Table 11

Means and (Standard Deviations) for Empathy Constructs as a Function of Instrumentality

Construct	Never Instrumental (<i>n</i> = 12)	Once/Twice (<i>n</i> = 10)	Frequently (<i>n</i> = 19)
Fantasy	15.33 (5.85)	17.50 (4.09)	11.42 (5.51)
Empathetic Concern	19.33 (3.37)	17.60 (5.06)	12.95 (5.50)
Perspective Taking	17.08 (3.92)	14.70 (2.63)	10.84 (3.80)
Personal Distress	11.42 (5.28)	14.20 (4.13)	8.89 (4.47)

Attachment

Multi-variate analyses of variances failed to reveal statistically significant differences between each of the violent classification groups on the measure of mother, father, and peer attachment variables. No significant differences in the measures of attachment predictors was found between those who had engaged in at least one instrumentally violent act and those who had not, $F(3, 28) = 0.82$, $p = .50$; between those classified as never instrumental, once/twice instrumental, and frequently instrumental, $F(6, 56) = 1.29$, $p = .28$; and between those classified as versatile and non-versatile, $F(3, 28) = 1.26$, $p = .31$ (see Tables 5, 6, and 7).

Link between Empathy and Violence

Because significant differences on empathy were demonstrated between those who were instrumentally violent and those who were not, a logistic regression was conducted to determine the extent to which overall empathy predicted instrumental violence beyond psychopathy. The model using only PCL: YV total scores was significant (model $\chi^2 (1, N = 42) = 19.95, p < .001$) and demonstrated that PCL: YV total scores account for approximately 40% of the variance in instrumental violence, (likelihood ratio $R_L^2 = 0.40$). However, adding the total empathy scores at a second step (forward conditional) only explained an additional 2% variance (likelihood ratio $R_L^2 = 0.42$), resulting in a non-significant improvement (step $\chi^2 (2, N = 42) = .014, p = .905$). The resultant model remained significant (model $\chi^2 (2, N = 42) = 19.96, p < .001$), demonstrating that psychopathy increased the odds (odds ratio = 1.26, $p < .01$) of instrumental violence, and that empathy did not increase the odds over that accounted for by psychopathy (odds ratio = .995, $p = .905$). A one unit change in psychopathy scores results in a 1.26 increase in the odds of instrumental violence; a change in PCL: YV total score from 0 to 8.82 (1 *SD*) results in a 7.60 increase in the odds of instrumental violence; a change in PCL: YV total score from 0 to 17.64 (2 *SD*) results in a 57.81 increase in the odds of instrumental violence ($b = 0.23$).

To examine the extent to which psychopathy predicted instrumental violence beyond empathy, another logistic regression analysis was conducted with empathy entered in the first step. The model using only empathy total scores was significant (model $\chi^2 (1, N = 42) = 6.19, p < .05$) and demonstrated that empathy total scores account for approximately 12% of the variance in instrumental violence, (likelihood ratio $R_L^2 =$

0.12). However, adding psychopathy at a second step (forward conditional) explained an additional 28% of the variance, and demonstrated that the set of predictors (Empathy total and PCL: YV total) account for approximately 40% of the variance in instrumental violence, (likelihood ratio $R_L^2 = 0.40$), a statistically improvement (step $\chi^2 (1, N = 42) = 13.78, p < .001$). The resultant model remained significant (model $\chi^2 (2, N = 42) = 19.96, p < .001$) and demonstrated that PCL: YV scores, but not empathy, increased the odds (odds ratio = 1.26, $p < .01$) of instrumental violence.

Instrumental Violence against Family Members and Intimate Partners

In order to determine whether those who are instrumentally violent against family members or intimate partners are a select group within those who engage in instrumental violence, those who had been instrumentally violent to family members were examined in relation to psychopathy, empathy and attachment. This form of violence is considered “deviant” (Decker, 1996), and only 4 youth from the current sample reported to engage in instrumental violence against family members. In order to increase the sample size, youth who had been instrumentally violent to friends, and youth who had been instrumentally violent to family members, were collapsed to form a distinct group. To do so, the two questions on the Violent Offense Scale pertaining to the number of times participants had been instrumentally violent to friends and to family members were collapsed into a single dichotomous variable indicating whether they had ever been violent to friends/family members.

A one-way multi-variate analysis of variance failed to reveal any statistically significant differences between those who were instrumentally violent to family members ($n = 6$) and those who were only instrumental to strangers/acquaintances ($n = 12$) on the

set of psychopathy, mother attachment, father attachment, peer attachment, and empathy predictors, $F(5, 12) = 1.18, p = .37$ (see Table 12).

Table 12

Means and (Standard Deviations) on Psychopathy, Attachment and Empathy for Instrumental to Family vs. Others

Measure	Instrumental to Family/Friends ($n = 6$)	Others ($n = 12$)
PCL:YV	20.82 (8.62)	25.62 (7.11)
IPPA (Mom)	86.00 (19.36)	82.58 (19.40)
IPPA (Dad)	62.67 (24.39)	61.33 (30.77)
IPPA (peer)	83.00 (28.06)	97.17 (11.22)
IRI	57.00 (10.02)	42.92 (15.68)

Note. PCL:YV = Psychopathy Checklist: Youth Version; IPPA = Inventory of Parent and Peer attachment; IRI = Interpersonal Reactivity Index total.

Exploratory Analyses

Severity of Instrumental Violence and Psychopathy

Regarding the most serious instrumental injury, as measured by question 2g on the Violent Offenses Scale, with the none/slight physical injury categories collapsed, a one-way analysis of variance failed to reveal statistically significant differences in psychopathy between those who caused no/slight injury ($M = 25.63, SD = 7.33$), those who caused the victim to be treated in hospital ($M = 24.42, SD = 8.54$), and those who resulted in serious injury ($M = 28.00, SD = 5.52$), during the commission of an instrumentally violent offense, $F(2, 19) = 0.37, p = .70$.

PCL: YV Scores and Attachment

Since the direct relation between psychopathy and attachment has seldom been investigated in the literature, a multivariate regression analysis was conducted with mom attachment, father attachment, and peer attachment entered simultaneously to determine whether a relation exists. The regression equation was marginally significant, $F(3, 28) = 2.88, p = .054$. The set of predictors accounted for approximately 24% of the variance in PCL: YV total scores ($R^2 = .24$). Examination of the regression coefficients revealed that Father attachment ($\beta = -.39$) provided a significant unique contribution to the prediction of PCL: YV total score (see Table 13).

In addition, results of the correlational analysis demonstrated support for this finding, and revealed that father attachment was marginally related to PCL: YV total score ($r = -.37$) (see Table 4). Since father attachment was also correlated with impression management ($r = .50$), a partial correlation between father attachment and PCL: YV total score, with the effect of impression management partialled out, was conducted. Results revealed that the correlation between father attachment and PCL: YV total score increased ($r = -.39$).

Table 13***Regression Coefficients for the set of Attachment Predictors***

	Unstandardized Coefficients		Standardized Coefficients	
	B	Std. Error	Beta	<i>t</i>
(Constant)	27.99	10.22		2.74
Mother attachment	-.11	.08	-.24	-1.37
Father attachment	-.12	.05	-.39	-2.31*
Peer attachment	-.09	.10	.17	.99

Note. * $p < .05$

Psychopathy and Reasons for Past Violence

In an attempt to determine whether the participants differed on psychopathy as a function of the reasons for their past violence, a correlational analysis between PCL: YV total scores, Factor 1 scores, and Factor 2 scores and the reasons for past violent offending (on questions 1a to 1g on the Violent Offense Scale) was examined. Results revealed a significant relation between psychopathy and the role played by money/drugs ($r = .52$) and reacting to provocation ($r = -.40$) in past violent offending. In addition, examination of the correlation coefficients for Factor 1 and Factor 2, in relation to the role each of the 7 reasons played in past violent offending, revealed that Factor 1 ($r = .35$) and Factor 2 ($r = .55$) were both positively related to the role of money/drugs in past violent offending, and that Factor 1 ($r = -.39$) and Factor 2 ($r = -.34$) were both negatively related to the role of reacting to provocation in past violent offending (see Table 14).

Table 14

Correlations between PCL: YV Scores and Reasons for Past Violence
(N = 40)

Measure	PCL: YV	PCL: YV (F1+F2)	PCL: YV (F3+F4)
Anger/Frustration	.14	.20	.07
Power/Status	.16	.18	.09
Substance Use	.00	-.23	.22
Revenge	.28	.21	.30
Money/Drugs	.52**	.35*	.55**
Self-Defense	.00	-.07	.06
Provocation	-.40*	-.39*	-.34*

Note. PCL: YV = Psychopathy Checklist: Youth Version; PCL: YV (F1+F2) = Psychopathy Checklist: Youth Version, Affective/Interpersonal Factor; PCL: YV (F3+F4) = Psychopathy Checklist: Youth Version, Behavioral/Antisocial Factor

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

Discussion

Psychopathy, among adults, has been well documented as a robust predictor of violence (Hare, 2003; Hart, 1998; Hemphill et al., 1998; Serin, 1991). In addition, research with adults has demonstrated a relation between psychopathy and the different motives underlying acts of violence. One such relation exists between psychopathy and instrumental violence, acts of violence carried out in an attempt to serve some self-gratifying goal (Cornell et al., 1996; Williamson et al., 1987; Woodworth & Porter, 2002). Explanations for this relation have focused on a relative lack of well-internalized social standards and associated feelings of concern and responsibility for others, demonstrated by psychopaths, which may otherwise inhibit an offender (Cornell et al., 1996).

Recently, there has been a surge in attempts to identify whether the characteristics of psychopathy, found in adults, also extend to youth. Since the field of psychopathy in youth is relatively new, in comparison to that of adults, much research and replication of existing studies in the field is necessary and warranted given the implications and criticisms pertaining to studying psychopathy in youth. The current study attempted to clarify this relation between violence and psychopathy, as identified in youth with the PCL: YV.

The hypotheses of this study were: 1) Those youth who scored higher on psychopathy would have more charges and convictions for violent offenses, and would engage in violence resulting in greater victim harm, 2) instrumentally violent offenders would score higher on psychopathy, and also display deficits in empathy and attachment, in comparison to those who did not engage in instrumental violence, 3) the instrumental rating would be more strongly associated with the interpersonal and affective features of

psychopathy as compared to the behavioral features, whereas the reactive rating would be more strongly associated with the behavioral features, and 4) those who perpetrate instrumental violence against family members or intimate partners are a distinct group within the instrumental category, scoring even higher on psychopathy, and displaying even more pronounced deficits in empathy and attachment, than individuals who perpetrate this type of violence against strangers.

Inconsistent with prior research on psychopathy in adults (Hart, 1998; Hemphill et al., 1998; Serin, 1991) and in youth (Corrado et al., 2004; Murrie et al., 2004), the results of the study failed to reveal a significant relation between psychopathy and number of violent and non-violent charges and convictions. Past research has found that those scoring high on psychopathy tend to have more charges of violence than those scoring low on psychopathy, and to have higher rates of both general and violent recidivism. One potential explanation for the inability of the current study to replicate this past research resides in the lack of confidence that could be placed in the comprehensiveness of the files. It was apparent in comparing the criminal records of the youth to the details provided in the interview that their list of charges and convictions were sometimes incomplete. Often the criminal records for the youth were missing the Phase I portion of their charges and convictions. Although efforts were made to exclude these youth from the study whose records were incomplete, it was impossible for purposes of this study to determine whether the criminal records included in the analysis were indeed complete. In addition to this, the majority of the youth in the sample had engaged in violent offending and this may have had an influence on the results of the correlational analysis.

The relation between psychopathy and severity of violence, in regards to victim injury and assault with a weapon, has been documented in the literature with adults (Hare & McPherson, 1984; Serin, 1991) and youth (Kosson et al., 2002; Murrie et al., 2004). Consistent with past research, the current study demonstrated that a relation exists between psychopathy and the severity of past violent offenses. It was demonstrated that those who had caused no/slight injury scored lower on psychopathy than those who had caused the victim to be treated in a hospital or those who had caused serious injury. In the exploratory analysis examining the relation between psychopathy and severity of instrumental violence, results failed to reveal a significant relation between the two. One potential explanation for this finding is possibly that those who engage in instrumental violence are a distinct subgroup of offenders, those scoring higher on psychopathy, and as such once in the instrumental category groups do not differ on psychopathy as a function of severity of violence since all score higher on psychopathy to begin with.

Consistent with prior research pertaining to psychopathy and the motives underlying violence, the present study supported the second hypothesis, demonstrating that those who engage in instrumental violence score higher on psychopathy than those who do not. In classifying the youth as instrumental, it was important to note that past research suggests that the instrumental and reactive classifications are not mutually exclusive and exhaustive (Cornell et al., 1996; Murrie et al., 2004). Since the distinguishing feature between reactive violence and instrumental violence is not absolute, and there are often cases where reactive offenders plan to carry out violent acts in reaction to some provocation and instrumental offenders act impulsively, the instrumental offenders in this study, as those in research by Cornell et al. (1996) and

Murrie et al. (2004) could be best characterized as offenders who pursued a clearly identifiable goal such as robbing their victim.

As such, the youth were classified as instrumental ($n = 38$) if they had committed at least one instrumentally violent offense in their past, and not instrumental ($n = 13$) if they had never in the past engaged in any form of instrumental violence. Results of the study were consistent with past research, demonstrating that those classified as instrumentally violent scored higher on psychopathy than those who were not instrumental (see table 5). Furthermore, the magnitude of the relation between psychopathy and instrumental violence ($r = .59$) was consistent with that demonstrated in the literature by Murrie et al. ($r = .36$) and Woodworth and Porter ($r = .45$).

During classification of the youth into the instrumental and non-instrumental categories, it was apparent that some youth who engaged in instrumental violence only once or twice in their lives were placed in the same category as youth who engaged in instrumental violence frequently. In an attempt to differentiate these two categories of youth, a second classification, instrumentality, was developed. This variable allowed for the differentiation between those youth who never engaged in an instrumentally violent act ($n = 13$), those who did so once or twice ($n = 13$), and those who do so frequently ($n = 25$). Results revealed significant differences in psychopathy scores between all of the groups. Participants who had never been instrumentally violent had lower psychopathy scores than those who had been instrumentally violent once, and those who had been instrumental once/twice had lower psychopathy scores than those who had been frequently instrumental, as did the never instrumental group (see Table 6). This finding was interesting in that it demonstrated that while there are differences in psychopathy

scores between youth who frequently engage in instrumental violence and those who have only done so one or twice, there are even differences between youth who only engage in instrumental violence once or twice and those who never do.

A final violent classification of the youth was made on the basis of combined reactivity and instrumentality. A versatile group was classified on the basis of being frequently reactive and frequently instrumental, representing a more extreme form of violent offender. Results revealed that those youth classified as versatile ($n = 23$) scored higher on psychopathy than those who were not versatile ($n = 28$) (see Table 7).

One of the benefits of the current study, in its classification of youth into the violent categories, is that it took into account the youths' past history of violent offending as opposed to their most current violent offense as done in some of the previous studies (Loper et al., 2001; Woodworth & Porter, 2002). As a result of coding based on their past history of violent offenses, they could be placed into categories that were representative of their pattern of offenses, as opposed to current offense only. This has a tremendous advantage since, apparent in the results, many instrumental offenders also engage in reactive violence. Classification based on the most recent violent offense risks classifying many youth as reactive when they should be classified as instrumental.

Clearly the relation between instrumental violence and psychopathy, demonstrated in research with adults, also pertains to youth. In addition to psychopathy being related to the instrumentally violent classifications, exploratory analysis examining psychopathy in relation to the role several different motives played in the past violent offending of the youth also demonstrated a significant relation. More specifically, as psychopathy scores increased the role money or drugs played in the violent offending of

the youth in the sample also increased ($r = .52$), and the role of reacting to provocation decreased ($r = -.40$).

In the literature, the relation between psychopathy and instrumental violence has been explained by citing an affective deficit, characteristic of psychopathy, as an explanation. Woodworth and Porter (2002) stated that it is “unlikely that people without the affective deficit associated with psychopathy would seriously consider such acts, and even fewer would carry them out” (pp. 442). In an attempt to determine whether an affective deficit could indeed account for the tendency of the youth in the study to engage in instrumental violence, the contributions of Factor 1 (affective/interpersonal) and Factor 2 (behavioral/antisocial) in predicting the degree of instrumentality was examined. Results supported the third hypothesis, and were consistent with that found in adults (Woodworth & Porter, 2002). The logistic regression demonstrated that Factor 1 (Affective/Interpersonal) but not Factor 2 (Behavioral/Antisocial) contributed to an increased likelihood for instrumental violence. A correlational analysis supported the logistic regression, revealing that although the instrumental ratings were related to both Factor 1 and Factor 2 scores instrumentality was more strongly, although not significantly stronger, associated with Factor 1 scores. These findings lend support for the notion that instrumentally violent acts are committed by those with an affective deficit, and support and explain the relation of psychopathy to instrumental violence. While the correlation between the instrumental rating and Factor 1 scores was not statistically different from that between the instrumental rating and Factor 2 scores, it was indeed stronger. The lack of significance between the two correlations could simply be

due to the small sample size utilized in the study, or to the high inter-correlations demonstrated between Factor 1 and Factor 2.

As researchers, we tend to rely on the outcome of statistical analyses to support our hypotheses regarding different phenomena in society. While the results of statistical analyses can offer much support for our hypothesis, as above, often times simply observing and listening can also lend support. The relation between psychopathy and instrumental violence accounted for by affective deficits characterizing those scoring high on psychopathy has been supported by statistical analyses such as those presented in the current study and other studies (Woodworth & Porter, 2002). Nonetheless, support for this notion is also evident in examining the words from the youth themselves. Below are some of the quotations from the youth when asked about the seriousness of their crimes or if they feel remorse for the things they have done.

“Probably can’t be too good, doesn’t bother me...they know what the world is like, it’s the way things are, I’m not sorry” [on remorse/seriousness -armed robbery]

“Guy came up nagging for weed...I walked up to him with fists clenched, knocked him down and stomped on him few times...knocked him out like 3 times (laughs) stole his chain, weed, and money...his legs were broke because my other friends were kicking his legs” [on most serious injury- charged with armed robberies and assaults]

“Love is not my forte...its not something that’s important to me on any level...something that ain’t real, not what I feel” [on whether he has strong emotions-charged with sexual assault]

“I’m sympathetic, evil because of money, after I feel bad because I deal people bad (laughs) ...I’ll steal your stuff and sell it back to you” [on seriousness of actions- charged with armed robberies and assaults, claims to sometimes rob 10 people a day]

“I have a conscience but I shut it off to do what I have to do” [on whether feels remorse for offenses- charged with sex assaults and armed robberies, beat guy up resulting in brain damage to get his fur jacket]

“Never really thought about it...maybe emotionally scared, doesn’t affect me...I can’t relate, I can only guess, I try not to lose sleep over it” [on effect of actions on others- charged with armed robbery]

“(Laughs) I said some shit like ‘imagine how the bullet will feel going into your head’, she probably doesn’t sleep at night” [On effect on others regarding armed robberies]

While instrumentally violent acts have been explained by affective deficits, as evident above, reactive violence, on the other hand, has been explained by deficits in anger management, impulsivity, and poor behavioral controls. The results of the logistic regression predicting reactivity from Factor 1 and 2 psychopathy scores supported this notion, and the third hypothesis of the study. It was demonstrated that Factor 2 (Behavioral/Antisocial) scores but not Factor 1 (Affective/Interpersonal) scores were significant in predicting the odds of reactive violence. Similarly, a correlational analysis demonstrated that the reactive rating was more strongly, although not significantly, associated with Factor 2 scores than Factor 1 scores. Given the items that comprise Factor 2, it is not surprising that an individual who is impulsive and has poor anger controls would be more likely to give in to the provocation and intense emotional arousal that characterize reactive violence.

Because deficits in attachment and empathy have been cited in the literature as possible explanations for instrumental violence, their relation in regards to instrumentality was examined. Those who engaged in instrumental violence, and in varying degrees, differed significantly on overall levels of empathy. It was demonstrated that the more instrumental participants were, the lower their total empathy score was. More specifically, when empathy was viewed as a multi-dimensional construct, taking into account the cognitive and affective components of empathy, it became apparent that the groups differed primarily on the affective construct of empathetic concern and the cognitive construct of perspective taking. It seems as though deficits in the ability of the participants to empathize and put themselves in “another’s shoes” and to think about

things from another's perspective was related to an increased tendency for instrumental violence. Below are some quotations taken from the youth when asked if they feel remorse for the victims of their crimes, robberies and armed robberies:

"Probably affected others, not my problem"

"Don't give a crap, don't know the person....wish I cared, but I don't"

"I don't think about the victims"

Since there was a significant difference between the groups on overall empathy, the ability of empathy to predict instrumental violence over that predicted by psychopathy was examined. Results demonstrated that empathy accounted for no extra variance in predicting instrumentality above that accounted for by psychopathy. It seems as though deficits in affective characteristics besides the construct of empathy, found in the construct of psychopathy, are responsible for instrumental violence.

Attachment is another construct that, like empathy, has been linked to violence. Hirschi (1969) argued that criminality is often controlled by an individual's attachments to others and society, and contended that many people refrain from engaging in violent behavior because they fear losing their relationships with significant others. Similarly, Bowlby (1979) contended that a person with deficits in attachment figures would be predisposed to the development of emotional coldness. Since emotional coldness, or deficits in empathy, has been shown to differentiate those who engage in instrumental violence from those who do not, and these deficits linked to attachment, the relation between attachment and the violent classifications was examined.

No significant differences were found between the violent classification groups on attachment to mother, father or peers despite the fact that a lack of attachment to others has been used to explain the relation between psychopathy and instrumental violence (Williamson et al., 1987). While attachment has often been linked to violent behavior

(Hirschi, 1969; Kesner & Mckenry, 1998; Laible, Carlo, & Raffaelli, 1999), it is important to point out that there are many inconsistencies in this area of research with other studies demonstrating lack of a relation between attachment and crime and violence (Bowlby, Ainsworth, Boston, & Rosenbluth, 1956; West, 1982). As a result of these inconsistencies in the literature, it is quite possible that the current study failed to reveal differences between the violent groups on level of attachment simply because no differences exist. Alternatively, the limitations of a retrospective approach to the study of attachment cannot be discounted. Beyond describing current attachment in a sample of adolescent offenders, possibly what holds greater value is a measure of early childhood attachment and its link to later adolescent violence. Moreover, examination of attachment based only on level of attachment may also have been a potential limitation. It is possible that a failure to take into account the different attachment styles such as secure, avoidant, and ambivalent, proposed by Ainsworth, Blehar, Waters, & Wall (1978), results in a failure to examine the precise relation that attachment plays in violent behavior.

Since the violent classification groups did not differ on level of attachment, the relation between attachment and psychopathy was examined. This relation, although suggested to account for certain violent behaviors, has seldom been investigated directly (Kosson et al., 2002; Laroche & Toupin, 1996; Marshall & Cooke, 1995) and results have been inconclusive. Examination of the relation between attachment and psychopathy revealed that the set of attachment predictors was marginally related to psychopathy. More specifically, father attachment, but not mother or peer attachment uniquely predicted PCL: YV total score. This finding was supported by a marginally significant

correlation between father attachment and PCL: YV total ($r = -.37$) and PCL: YV Factor 2 ($r = -.43$). Those youth who scored higher on psychopathy, and on PCL: YV Factor 2, tended to have lower father attachment ratings. It is important to note that this finding must be interpreted with care as the results are not causal, and the correlations are relatively small and only marginally significant. Nonetheless, the finding suggests that a lack of attachment to a father figure, for juvenile male offenders, may be related to higher ratings on psychopathy and, more specifically, antisocial and behavioral characteristics. This finding suggests that further exploration of the importance of a father figure for young boys, and the link it plays in relation to psychopathy and antisocial behavior, is greatly warranted.

The final hypothesis of the study, suggesting that those who are instrumentally violent against family members are a distinct group within the instrumental classification, was not supported. It was predicted that those who were instrumentally violent against family members (as assessed through the Violent Offenses Scale) would score higher on psychopathy, and demonstrate even more pronounced deficits in attachment and empathy, than those who were instrumentally violent to strangers. Results revealed that the two groups did not differ on psychopathy, empathy, or attachment. In addition, although not significant, the empathy, psychopathy, and mother and father attachment scores were in the opposite direction than was expected. That is, those who were instrumentally violent to friends and family scored lower on psychopathy and higher on empathy and mother and father attachment than those who were instrumentally violent to strangers.

Although this hypothesis was an exploratory one, it is important to point out that there are many limitations in its analysis, and as such the results should be interpreted with caution. First, the sample of the youth who engaged in instrumental violence to family members was too small in order to perform any meaningful statistical analyses, and as such had to be combined with those youth who engaged in instrumental violence against friends in an attempt to examine whether they differed from those instrumental to strangers. Despite this, the combined sample was also extremely small ($n = 6$). Secondly, it is possible that those who are instrumental to family are a discrete class of individuals from those who are instrumental to friends and strangers, and combining the two groups contributed to a finding of non-significance for the attachment, empathy, and psychopathy scores. Third, reliance on self-report for assessing this group of individuals has many limitations inherent, several youth failed to answer these questions addressing whom they were instrumental to, and their reasons for doing so are unknown. Despite these limitations, failure to obtain significance may be a significant finding in and of itself. It is possible that no differences were demonstrated, simply because no differences exist. Once an individual scores high on instrumental violence, and as such psychopathy, the distinction between who they are instrumentally violent to, whether it be family or strangers, may become less clear than it is for those scoring lower on psychopathy. More specifically, the “normative” feature of violence that is discussed by Decker (1996) may not apply to those individuals who score high on psychopathy and engage in frequent instrumental violence, perhaps all become “fair game”. Nonetheless, this remains a fascinating area pertaining to violence and motivations for violence, that has been studied relatively little.

Summary

In summary, the relation between psychopathy and instrumental violence, found in research with adults, was demonstrated in this study with youth. More specifically, those youth who engaged in instrumental violence scored higher on psychopathy than those who did not. Similarly, an exploratory analysis examining the motives for past violence indicated that as psychopathy scores increased, the role money and drugs played in the past violence of the youth in this study increased ($r = .52$). Explanations for these findings, cited in research with adults, involve an affective deficit that is characteristic of psychopathy. This explanation received further support in the current study. While obtaining money or some other form of personal gratification might be somewhat appealing to most individuals in society, affective characteristics, such as empathy and a general concern for others, inhibit most from acting violently to obtain this gratification. It seems as though those scoring high on psychopathy, however, lack these inhibitory mechanisms and, as a result, are more willing to harm others to obtain what they want.

Limitations

One obvious limitation in the design of the current study resides in the number of youth classified as instrumental ($n = 38$) in relation to never-instrumental ($n = 13$), approximately 75%. Past research has demonstrated that the percentage of instrumental/non-instrumental or reactive to be much lower. Cornell et al. (1996) classified only 17 of the 35 (49%) offenders in their study as instrumental and Murrie et al. (2004) classified 38 (46%) youth as instrumentally violent versus 44 as reactively violent. The issue pertains to why such a large percentage of the youth in this study were classified as not only instrumentally violent (approximately 76%) but as violent in

general; as no youth in the current study were classified as not violent. To explain this, it is important to recognize that the large percentage of instrumentally violent youth takes into account adolescents who had engaged in at least one form of instrumental violence as well as those who had engaged in frequent instrumental violence. Although significant differences in psychopathy were found between the never instrumental and instrumental groups, it is important to note that perhaps the more detailed classification of youth based on frequency of instrumentality provides a more appropriate means for examining differences between the groups.

In relation to this, classification of the youth in the current study utilized the PCL: YV interview and semi-structured motivations interview in addition to the admission summaries, social histories, background records, current institutional records, mental health records, and presentencing investigation records that have been utilized by past researchers (Murrie et al., 2004). Several questions on the PCL: YV deal specifically with past violent offending and, in addition, the semi-structured motivations interview was designed specifically for the purpose of examining past instrumental violence; given this, it is possible that the use of the two interviews, in addition to the other sources, provided a more sensitive means for determining past violent acts, and more specifically past instrumentally violent acts, and allowed the classification of several youth in the current study as violent who may not have been by other researchers (Murrie et al., 2004).

Furthermore, in addition to the multi-method classification approach, the implementation of the new Youth Criminal Justice Act may offer another explanation for why such a large percentage of youth in this study were classified as violent and, in

particular, instrumentally violent. The new act, which came into effect on April 1, 2003, results in many more chances for youth before they are sentenced to time in jail and, as such, youth convicted of crimes such as petty theft, B & E's, or drugs, are often given probation before receiving a custodial sentence. In turn, it is quite possible that this new act influenced the sample of youth that was obtained. More specifically, as a result of less youth receiving a custodial sentence, those who do receive a custodial sentence often are convicted of more serious crimes, such as armed robbery and aggravated assaults. For this reason, it is possible that the percentage of violent youth in this sample was much higher than that demonstrated in previous research because there is a tendency in the criminal justice system to sentence the more violent and serious offenders to custody. As such this explanation also offers support for the high proportion of youth that were classified as instrumentally violent.

While the PCL: YV interview was utilized in the current study to classify the youth into violent categories, due to many useful questions in the interview that address past violence, it is important to note that while this approach has its benefits, it also has its limitations. Although an independent rater, with very limited knowledge of psychopathy and none of the hypotheses of the study, classified 20% of the youth into the violent categories, it is possible that raters may still be somewhat biased after learning about the youths personality and their presence or lack of empathy, remorse, and affect. One suggestion in this avenue is for future researchers to develop an in-depth interview format that deals solely with all past violent behavior, the youth can recall, in an attempt to prevent raters from gaining insight into the youths' affective features and personality.

Another limitation of the current study pertains to the classification method of the youth according to frequency of instrumentality and, more specifically, the jump from once/twice instrumental to frequently instrumental. While this coding allowed a more in-depth investigation than that offered by the dichotomous variable instrumental, the frequently instrumental group could potentially be broken down further into subgroups differing on the frequency of instrumental violence. For example, placing all youth who engaged in more than one or two instrumental acts into the same category blurs the distinction between those, for example, who have engaged in ten instrumental acts within the past year only, possibly due to environmental circumstances, and those who have over the last few years consistently and daily engaged in instrumental violence. In relation to this, classification of the youth into the violent categories also failed to take into account the role played by substance use and abuse as well as the varying degrees of involvement each youth had in the violence that was perpetrated. Nonetheless, a clear relation between psychopathy and instrumental violence was demonstrated between the three groups of never instrumental, once/twice instrumental, and frequently instrumental, and this relation was in the expected direction.

Directions for Future Research

Building upon the limitations of the current study, one suggestion for future research is to take substance intoxication and extent of involvement into account, when classifying youth into the instrumental and non-instrumental classifications, in an attempt to determine whether differences exist based on these factors. Failure to do so was a limitation of the current study and as such it was impossible to determine whether differences exist between those youth who have only been instrumentally violent while

under the influence of alcohol or drugs, and those youth who have been instrumentally violent while not under the influence of such substances. In addition, classification of the youth failed to take degree of involvement into account and as such youth who directly inflicted violence may potentially have been placed in the same category as those who were only indirectly involved in the crime, in the case of armed robbery for example the youth who held the gun and threatened the clerk may have been placed into the same category as the one who was an accomplice and only indirectly involved; as a result of this it is impossible to determine whether there are differences between these two youth.

Second, while classification of the youth in the present study was based on their overall past violent history, looking solely at current offenses may also hold some utility. More specifically, as in the study by Woodworth and Porter (2002), it allows the classification of youth into violent or homicidal categories in detailed rather than dichotomous fashion. In addition, while the characteristics of youth who engage in different kinds of violence has been examined in relation to psychopathy, demonstrating findings similar to those found in research with adults, the link between psychopathy and the motives underlying homicide have not been investigated in youth. This is an interesting avenue for future research to determine whether the findings with instrumental and reactive homicidal adults, also extend to youth.

Future research should examine in-depth the relation between attachment and violent behavior. Attempts should be made to clarify the relation, or lack of one, that exists between attachment and violent behavior and, more specifically, between attachment and instrumental violence. In addition to the level of attachment, research should focus on the different attachment styles, and also on the quality of this attachment.

For example while an adolescent may demonstrate a current secure attachment to a mother or father figure, it should also be examined whether this attachment figure is a pro-social or anti-social role model. Secondly, future research needs to examine the relation between attachment and psychopathy that was demonstrated in the study. An in-depth investigation needs to examine whether, for adolescent boys, father attachment plays a role in the development of psychopathic traits and antisocial behavior. Such research holds the potential to offer intervention and treatment options in that attachment to a father figure could be a protective factor in the onset and development of psychopathy.

Finally, because studies of psychopathy in children are sparse (Johnstone & Cooke, 2004), for purposes of early intervention, attempts should be made to examine the relation between psychopathic traits and violence in children. More specifically, research could investigate whether bullying in childhood, a form of instrumental violence and a pervasive and growing problem in society, is related to psychopathic traits. In the current research, although no statistical analyses were conducted, many of the youth who engaged in adolescent instrumental violence reported having engaged in bullying as a child. For purposes of the study, no measures were in place to investigate a relation between the two; however, in hindsight, this relation was apparent.

Conclusion

The present study demonstrated that the construct of psychopathy, as seen in adults, can provide useful information when applied to youth. A clear relation was demonstrated in the study between psychopathy and the motives and severity of violent acts carried out by the youth in this study. The implications of such findings suggesting

that the construct of psychopathy can reliably be applied to youth are enormous, however the malleability and stability of the psychopathic traits in adolescence is still relatively unknown and the subject of much debate.

It is important to note that evidence suggesting psychopathic traits, as assessed in youth, represent a stable personality pattern that continues into early adulthood is only indirect at present (Harpur & Hare, 1994). Moffit's (1993) distinction between "life course persistent" and "adolescent limited" antisocial behavior causes some concern that the antisocial behavior observed in youth today will desist later in life.

Nonetheless, Vincent et al. (2003) attempted to identify whether traits of psychopathy can identify a subgroup of persistent and serious offenders. Their results demonstrated that while the behavioral features of psychopathy provided no discrimination between these two classes of offenders, the interpersonal and affective features hold promise for identifying youth who persist in offending past adolescence. This finding offers much support for the importance of examining psychopathy in youth.

In relation, the present study found that youth who engage in a more callous form of violence, instrumental, not only score higher on psychopathy, but that this relation is due to the affective and interpersonal deficits that characterize psychopaths. This finding, in addition to that by Vincent et al. (2003) offers support for the importance of examining psychopathy in youth. Specifically, such research suggests that if we wish to intervene and help deter those youth who will go on to display a more pronounced and callous form of violence, and later become "persistent" offenders, it is not the behavioral features that we need to isolate in this population but instead the affective ones. It seems as though there is a tendency in society to focus on the "louder" problems and to ignore the

“quieter” problems. The demonstrated relation between psychopathy and violence, and psychopathy and persistent offending, could highlight a potential problem that many youth may not be receiving the necessary treatment and, as such, by providing anger management training for example, we may be failing to address the root of the problem.

One of the main reasons for the surge of interest in the area of psychopathy in youth was to identify options for intervention and prevention. Frick, Kimonis, Dandreaux, and Farell (2003) suggested that psychopathic traits are more stable than other problems in adjustment experienced by youth and are comparable in stability to personality traits assessed in adults. This offers support for the validity of examining psychopathy in youth; however, their results also indicated that some change in a child’s level of these traits is possible over time. Given this finding, research on psychopathy in youth, although it must be approached cautiously, has tremendous value for the long-term treatment and prevention of tomorrow’s serious and persistent violent offenders.

References

- Achenbach, T.M. (1991). *Integrative Guide for the 1991 CBCL/4-18, YSR, and TRF Profiles*. University of Vermont, Department of Psychiatry: Burlington, VT.
- Ainsworth, M.D.S., Blehar, M.C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.
- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders (4th edn.)* Washington, DC: Author.
- Anderson, C.A., & Bushman, B.J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27-51.
- Armsden, G., & Greenberg, M. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth Adolescence*, 16, 427-454.
- Bandura, A. (1983). Psychological mechanisms of aggression. In R.G. Green & E.I. Donnerstein (Eds.), *Aggression: Theoretical and empirical reviews: Vol. 1* (pp. 1-40). New York: Academic Press.
- Bauer, D. (1999). *Psychopathy in incarcerated adolescent females: Prevalence rates and individual differences in cognition, personality and behavior*. Unpublished doctoral dissertation, Finch University of Health Sciences/The Chicago Medical School, North Chicago, IL.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106(1), 59-73.
- Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. Temple University Press: Philadelphia, PA.

- Block, R. (1981). Victim-offender dynamics in violent crime. *The Journal of Criminal Law and Criminology*, 72(2), 743-761.
- Block, R., & Block, C.R. (1992). Homicide syndromes and vulnerability: Violence in Chicago community areas over 25 years. *Studies on Crime and Crime Prevention*, 1, 61-87.
- Booth-Kewley, S., Edwards, J.E., & Rosenfeld, P. (1992). Impression management, social desirability, and computer administration of attitude questionnaires: Does the computer make a difference? *Journal of Applied Psychology*, 77, 562-566.
- Borum, R., Bartel, P., & Forth, A. (2002). *Manual for the Structured Assessment of Violence Risk in Youth*. Tampa, FL: University of South Florida.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Bowlby, J., Ainsworth, M.D., Boston, M., & Rosenbluth, D. (1956). The effects of mother-child separation: A follow up study. *British Journal of Medical Psychology*, 29, 211-247.
- Brandt, J. R., Kennedy, W. A., Patrick, C. J., & Curtin, J. J. (1997). Assessment of psychopathy in a population of incarcerated adolescent offenders. *Psychological Assessment*, 9, 429-435.
- Caldwell, M. F. & van Rybroek, G. J. (2000). *Correlates of serious victim injury among juvenile delinquents*. Unpublished manuscript.
- Campbell, M.A., Porter, S., & Santor, D. (2004). Psychopathic traits in adolescent offenders: An evaluation of criminal history, clinical, and psychosocial correlates. *Behavioral Sciences and the Law*, 22, 23-47.
- Cleckley, H. (1964). *The mask of sanity*(4th ed). Saint Louis: C.V. Mosby Company.

- Cohen, D., & Strayer, J. (1996). Empathy in conduct-disordered and comparison youth. *Developmental Psychology*, 32, 988-998.
- Cook, P.J. (1987). Robbery violence. *Journal of Criminal Law and Criminology*, 78, 357-376.
- Cooke, D.J. & Michie, C. (2001). Refining the construct of psychopathy: Towards a hierarchical model. *Psychological Assessment*, 13, 171-188.
- Cooke, D.J., Kosson, D.S., & Michie, C. (2001). Psychopathy and ethnicity: Structural, item, and test generalizability of the Psychopathy Checklist-Revised (PCL-R) in Caucasian and African American Participants. *Psychological Assessment*, 13, 531-542.
- 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, 783-790.
- Corrado, R.R., Vincent, G.M., Hart, S.D., & Cohen, I.M. (2004). Predictive validity of the psychopathy checklist: Youth Version for general and violent recidivism. *Behavioral Sciences and the Law*, 22, 5-22.
- Crick, N.R., & Dodge, K.A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74-101.
- Crick, N.R., & Dodge, K.A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development*, 67, 993-1001.
- Cruise, K. R., Rogers, R., Neumann, C. S., & Sewell, K. W. (2000, March). *Measurement of adolescent psychopathy: Testing the two-factor model in juvenile*

- offenders*. Paper presented at the biennial conference of the American Psychology-Law Society, New Orleans, LA.
- Cruise, K.R., Colwell, L.H., Lyons, P.M., & Baker, M.D. (2003). Prototypical analysis of adolescent psychopathy: Investigating the juvenile justice perspective. *Behavioral Sciences and the Law*, 21, 829-846.
- Daly, M., & Wilson, M. (1982). Homicide and kinship. *American Anthropologist*, 84, 372-378.
- Davis, M.H. (1980). A multidimensional approach to individual differences in empathy. JSAS. *Catalog of Selected Documents in Psychology*, 10, 85.
- Davis, M.H. (1983). Measuring individual differences in empathy: evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113-126.
- Decker, S.H. (1996). Deviant homicide: A new look at the role of motives and victim-offender relationships. *Journal of Research in Crime and Delinquency*, 33(4), 427-449.
- Dempster, R.J., Lyon, D.R., Sullivan, L.E., Hart, S.D., Smiley, W.C., & Mulloy, R. (1996, August). *Psychopathy and instrumental aggression in violent offenders*. Paper presented at the 104th Annual Convention of the American Psychological Association, Toronto, Ontario, Canada.
- Dodds, L. D. (1999). *Legislative exclusion statutes and psychopathy: Balancing rehabilitation ideals and retribution goals with juvenile offenders*. Unpublished doctoral dissertation, Medical College of Pennsylvania and Hahnemann University, Philadelphia, PA.

- Dodge, K.A. (1980). Social cognition and children's aggressive behavior. *Child Development, 51*, 162-170.
- Dodge, K.A. (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.), *Minnesota Symposium on Child Psychology* (Vol. 18, pp. 77-125). Hillsdale, NJ: Erlbaum.
- Dodge, K.A. (1990). The structure and function of reactive and proactive aggression. In D. Pepler & K.H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 201-218). Hillsdale, NJ: Erlbaum.
- Dodge, K.A., & Coie, J.D. (1987). Social information-processing factors in reactive and proactive aggression in children's playgroups. *Journal of Personality and Social Psychology, 53*, 1146-1158.
- Dodge, K.A., & Crick, N.R. (1990). Social information processing bases of aggressive behavior in children. *Personality and Social Psychology Bulletin, 53*, 1146-1158.
- Dodge, K.A., & Frame, C.L. (1982). Social cognitive biases and deficits in aggressive boys. *Child Development, 55*, 163-173.
- 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.
- Feldman, E., & Dodge, K.A. (1987). Social information processing and sociometric status: Sex, age, and situational effects. *Journal of Abnormal Child Psychology, 15*, 211-227.

- Flight, J.I. (2003). *Violent Offenses Scale*. Ottawa, Ontario, Canada: Carleton University.
- Forth, A.E. (1995). *Psychopathy and young offenders: Prevalence, family background, and violence*. Program Branch Users Report. Ottawa, Ontario, Canada: Ministry of the Solicitor General of Canada.
- Forth, A.E. (2002, March). *Reliability and validity of the SAVRY in samples of incarcerated young offenders and community youth*. Paper presented at the biannual meeting of the American Psychology and Law Society, Austin, Texas.
- 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). Netherlands: Kluwer Academic Publishers.
- Forth, A.E., Hart, S.D., & Hare, R.D. (1990). Assessment of psychopathy in male young offenders. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 2(3), 342-344.
- Forth, A.E., Kosson, D.S., & Hare, R.D. (2003). *The Psychopathy Checklist: Youth Version manual*. Multi-Health Systems: Toronto.
- Fox, J.A., & Levin, J. (2001). *The will to kill: Making sense of senseless murder*. Needham Heights, MA: Allyn & Bacon.
- Frick, P.J. (1998). Callous-unemotional traits and conduct problems: Applying the two-factor model of psychopathy to children. In D.J. Cooke, R.D. Hare, & A.E. Forth (eds.) *Psychopathy: Theory, research and implications for society*, (pp. 161-187). Netherlands: Kluwer Academic Publishers.

- Frick, P. J., & Hare, R. D. (2002). *The Antisocial Process Screening Device*. Toronto, ON: Multi-Health Systems.
- Frick, P.J., Kimonis, E.R., Dandreaux, D.M., & Farell, J.M. (2003). The 4 year stability of psychopathic traits in non-referred youth. *Behavioral Sciences and the Law*, 21, 713-736.
- 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.
- Hare, R.D. (1981). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences*, 1, 111-119.
- Hare, R.D. (1991). *The Hare Psychopathy Checklist-Revised*. Multi-Health systems: Toronto, ON.
- Hare, R.D. (1993). *Without Conscience: the disturbing world of the psychopaths among us*. New York: Pocket Books.
- Hare, R.D. (1999). Psychopathy as a risk factor for violence. *Psychiatric Quarterly*, 70, 181-197.
- Hare, R.D. (2003). *The Hare Psychopathy Checklist-Revised*. 2nd Edition. Toronto, ON: Multi-Health Systems.
- Hare, R. D., Clark, D., Grant, M., & Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences and the Law*, 18, 623-645.
- Hare, R.D. & McPherson, L.M. (1984). Violent and aggressive behavior by criminal psychopaths. *International Journal of Law and Psychiatry*, 7, 35-50.

- Hare, R.D., Harpur, T.J., Hakstian, A.R., Forth, A.E., Hart, S.D., & Newman, J.P. (1990).
The Revised Psychopathy Checklist: Reliability and factor structure.
Psychological Assessment: A Journal of Consulting and Clinical Psychology, 2,
338-341.
- Harpur, T.J., & Hare, R.D. (1994). Assessment of psychopathy as a function of age.
Journal of Abnormal Psychology, 103(4), 604-609.
- Harpur, T.J., Hakstian, R., & Hare, R.D. (1988). Factor structure of the Psychopathy
Checklist. *Journal of Consulting and Clinical Psychology*, 56(5), 741-747.
- Hart, S.D., Cox, D.N., & Hare, R.D. (1995). *Manual for the Psychopathy Checklist:
Screening Version (PCL: SV)*. Toronto, ON: Multi-Health Systems.
- Hart, S.D., & Dempster, R.J. (1997). Impulsivity and psychopathy. In C.D. Webster &
M.A. Jackson (Eds.), *Impulsivity: Theory, assessment, and treatment* (pp. 212-
232). New York: Guilford Press.
- Hart, S.D. (1998). The role of psychopathy in assessing risk for violence: Conceptual
and methodological issues. *Legal and Criminological Psychology*, 3, 123-140.
- Hemphill, J.F., & Hare, R.D., Wong, S. (1998). Psychopathy and recidivism: A review.
Legal and Criminological Psychology, 3, 139-170.
- Hemphill, J.F., & Howell, A.J. (2000). Adolescent offenders and stages of change.
Psychological Assessment, 12, 371-381.
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley: University of California Press.
- Hoge, R. D., & Andrews, D. A. (2002). *The Youth Level of Service/Case Management
Inventory and Manual*. Toronto, ON: Multi-Health Systems.

- Hubbard, J.A., Dodge, K.A., Cillessen, A.H.N., Coie, J.D., & Schwartz, D. (2001). The dyadic nature of social information processing in boys' reactive and proactive aggression. *Journal of Personality and Social Psychology*, 80(2), 268-280.
- Johnstone, L. & Cooke, D.J. (2004). Psychopathic-like traits in childhood: Conceptual and measurement concerns. *Behavioral Sciences and the Law*, 22, 103-125.
- Joreskog, K.G., & Sorbom, D. (1984). *LISREL VI: Analysis of linear structural relations*. Chicago, IL: National Educational Resources.
- Kelly, K.D., & Totten, M. (2002). *When Children Kill*. Peterborough, ON: Broadview Press.
- Kesner, J.E., & McKenry, P.C. (1998). The role of childhood attachment factors in predicting male violence toward female intimates. *Journal of Family Violence*, 13, 417-432.
- Kingsbury, S.J., Lambert, M.T., & Hendrickse, W. (1997). A two-factor model of aggression. *Psychiatry*, 60, 224-232.
- Kosson, D. S., Cyterski, T. D., Steuerwald, B. L., Neumann, C. S., & Walker-Matthews, S. (2002). Reliability and validity of the Psychopathy Checklist: Youth Version (PCL: YV) in nonincarcerated adolescents males. *Psychological Assessment*, 14, 97-109.
- Kosson, D. S., Steuerwald, B. L., Forth, A. E., & Kirkhart, K. J. (1997). A new method for assessing the interpersonal behavior of psychopaths: Preliminary validation studies. *Psychological Assessment*, 9, 89-101.

- Kroner, D.G., & Weekes, J.R. (1996). Socially desirable responding: Factor structure, reliability, and validity with an offender population. *Personality and Individual Differences, 21*, 323-333.
- Laible, D.J., Carlo, G., & Raffaelli, M. (1999). The differential relations of parent and peer attachment to adolescent adjustment. *Journal of Youth and Adolescence, 29*, 45-59.
- Laroche, I., & Toupin, J. (1996, August). *Psychopathic delinquents: A family contribution?* Paper presented at the XXVI International Congress of Psychology, Montreal, Quebec, Canada.
- Lautenschlager, G.J., & Flaherty, V.L. (1990). Computer administration of questions: More desirable or more social desirability? *Journal of Applied Psychology, 75*, 310-314.
- Lee, M., & Prentice, N.M. (1988). Interrelations of empathy, cognition, and moral reasoning with dimensions of juvenile delinquency. *Journal of Abnormal Child Psychology, 16*, 127-139.
- Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in noncriminal populations. *Journal of Personality Assessment, 66*, 488-534.
- Loper, A.B., Hoffschmidt, S.J., & Ash, E. (2001). Personality features and characteristics of violent events committed by juvenile offenders. *Behavioral Sciences and the Law, 19*, 81-96.

- Lynam, D. (1996). Pursuing the psychopathy: Capturing the fledgling psychopath in the nomological net. *Journal of Abnormal Psychology, 106*, 425-438.
- Mailloux, D. L., Forth, A.E., & Kroner, D. G. (1997). Psychopathy and substance use in adolescent male offenders. *Psychological Reports, 81*, 529-530.
- Marshall, L.A., & Cooke, D.J. (1999). The childhood experiences of psychopaths: A retrospective study of familial and social factors. *Journal of Personality Disorders, 13*, 211-225.
- McBride, M. (1998). *Individual and familial risk factors for adolescent psychopathy*. Unpublished doctoral dissertation, University of British Columbia, Vancouver, British Columbia.
- McCrae, R.R., Costa, P.R., Ostendorf, F., Angleitner, A., Hrebickova, M., Avia, M.D., et al. (2000). Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology, 78*, 173-186.
- McEachran, A. (2001). *The predictive validity of the PCL:YV and the SAVRY in a population of adolescent offenders*. Unpublished master's thesis, Simon Fraser University, Burnaby, British Columbia.
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality, 40*, 525-543.
- Millon, T. (1993). *Millon Adolescent Clinical Inventory Manual*. National computer Systems : Minneapolis, MN.
- Moffit, T.E. (1993). Adolescence-limited and life-course persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*, 674-701.

- 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., Kaplan, S., McConville, D., & Levy-Elkon, A. (2004). Psychopathy scores and violence among juvenile offenders: A multi-measure study. *Behavioral Sciences and the Law*, 22, 49-67.
- Myers, W. C., Burket, R. C., & Harris, H. E. (1995). Adolescent psychopathy in relation to delinquent behaviors, conduct disorder, and personality disorders. *Journal of Forensic Sciences*, 40, 436-440.
- O'Neill, M.L., Lidz, V., & Heilbrun, K. (2003). Adolescents with psychopathic characteristics in a substance abusing cohort: Treatment process and outcomes. *Law and Human Behavior*, 27, 299-313.
- Patrick, C.J., & Zempolich, K.A. (1998). Emotion and aggression in the psychopathic personality. *Aggression and Violent Behavior*, 3, 303-338.
- Paulhus, D.L. (1999). *Paulhus Deception Scales (PDS): The Balanced Inventory of Desirable Responding-7*. Toronto, ON: Multi-Health Systems Inc.
- Pinel, P.H. (1962). *A treatise on insanity*. New York: Hafner Publishing Company.
- Poythress, N. G., Edens, J. F., & Lilienfeld, S. O. (1998). Criterion-based validity of the Psychopathic Personality Inventory in a prison sample. *Psychological Assessment*, 10, 426-430.
- Quinsey, V.L., Harris, G.T., Rice, M.E., & Cormier, C.A. (1998). *Violent Offenders: Appraising and managing risk*. American Psychological Association: Washington, D.C.

Redondo, L.M., Martin, A.L., Fernandez, J.S., & Lopez, J.M. (1986). *An examination of the relationship between family environment and juvenile delinquency.*

Unpublished manuscript, University of Santiago, Chile.

Rice, M.E., Harris, G.T., & Cormier, C.A. (1992). An evaluation of a maximum-security therapeutic community for psychopaths and other mentally disordered offenders. *Law and Human Behavior*, 16, 399-412.

Ridenour, T. A. (1996). *Utility analyses of the Psychopathy Checklist, Revised and Moffitt's taxonomy for a rehabilitation program for juvenile delinquents.*

Unpublished doctoral dissertation. Bell State University, Muncie.

Rogers, R., Johansen, J., Chang, J. J., & Salekin, R. T. (1997). Predictors of adolescent psychopathy: Oppositional and conduct-disordered symptoms. *Journal of the American Academy of Psychiatry and the Law*, 25, 261-271.

Rojek, D. & Williams, J. (1993). Interracial vs. interracial offenses in terms of the victim/offender relationship. In A.V. Wilson (Ed.). *Homicide: The victim/offender connection.* (pp. 249-266). Cincinnati, OH: Anderson.

Rowe, R. (2002). *Predictors of criminal offending: Evaluating measures of risk/needs, psychopathy, and disruptive behaviour disorders.* Unpublished doctoral dissertation, Carleton University, Ottawa, Ontario.

Salekin, R. T., Rogers, R., & Sewell, 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, 203-215.

- Seagrave, D., & Grisso, T. (2002). Adolescent development and the measurement of juvenile psychopathy. *Law and Human Behavior*, 26, 219-239.
- Serin, R.C. (1991). Psychopathy and violence in criminals. *Journal of Interpersonal Violence*, 6(4), 423-431.
- Serin, R.C. (1996). Violent recidivism in criminal psychopaths. *Law and Human Behavior*, 20, 207-217.
- Serin, R.C., Peters, R., & Barbaree, H.E. (1990). Predictors of psychopathy and release outcome in a criminal population. *Psychological Assessment*, 2, 419-422.
- Smith, A. M., Gacono, C. B., & Kaufman, L. (1997). A Rorschach comparison of psychopathic and nonpsychopathic conduct disordered adolescents. *Journal of Clinical Psychology*, 53, 289-300.
- Smithmyer, C.M., Hubbard, J.A., & Simons, R.F. (2000). Proactive and reactive aggression in delinquent adolescents: Relations to aggression outcome expectancies. *Journal of Clinical Child Psychology*, 29, 86-93.
- Statistics Canada. (2004). Ottawa, Ontario: Author.
- Stotland, E., Mathews, K., Sherman, S., Hansson, R., & Richardson, B. (1978). *Empathy, fantasy, and helping*. Beverly Hills: Sage Publications.
- Vincent, G.M., Vitacco, M.J., Grisso, T., & Corrado, R.R. (2003). Subtypes of adolescent offenders: Affective traits and antisocial patterns. *Behavioral Sciences and the Law*, 21, 695-712.
- Weinshenker, N.J., & Siegel, A. (2002). Bimodal classification of aggression: Affective defense and predatory attack. *Aggression and Violent Behavior*, 7, 237-250.
- West, D.J. (1982). *Delinquency: Its roots, careers, and prospects*. London: Heinemann.

- Whalen, J. P. (1999). *Reliability and validity of the Psychopathy Checklist: Youth Version (PCL: YV) in predicting behavior of adjudicated adolescents in an institutional setting*. Unpublished doctoral dissertation, University of Wisconsin-Madison, Madison, WI.
- Williamson, S., Hare, R.D., & Wong, S. (1987). Violence: Criminal psychopaths and their victims. *Canadian Journal of Behavioral Science*, 19(4), 454-462.
- Wilson, A.V. (1993). *Homicide: The Victim/Offender Connection*. Cincinnati, OH: Anderson Publishing Co.
- Wise, P.S., & Cramer, S.H. (1988). Correlates of empathy and cognitive style in early adolescence. *Psychological Reports*, 63, 179-192.
- Woodworth, M., & Porter, S. (2002). In cold blood: Characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology*, 111, 436-445.

Appendix A**PCL:YV: Interview Guide**
(Rev. 05/02/03)**Case Information**

ID: _____ Date of Birth: ____/____/____
Day Month Year

Age: _____ Sex: M F Race: _____

Interviewer Information

Interviewer: _____ Location: _____

Interview dates: ____/____/____ Length: _____
Day Month Year

Interview dates: ____/____/____ Length: _____
Day Month Year

Interview dates: ____/____/____ Length: _____
Day Month Year

Interview Recording: No Audio Video

Current Status (if institutionalized)

1. How long have you been in here?
2. What has it been like for you?
3. Have you been having any problems in here?

School History and Adjustment

I am going to start with your school. The questions refer to when you were a child which means when you were 10 years old or younger.

4. How would your teachers have described you as a child?
5. How often did you skip school as a child? [Where did you go when you skipped?]
6. Were you a troublemaker in school as a child? [What kind of things did you do? Did you disturb the class? Did you come to school drunk or stoned? Did you steal things at school? What type of punishment did you receive for getting into trouble?]
7. Did you get into any physical fights at school as a child? [Was anyone hurt in these fights? Why were you fighting?]
8. Were you ever suspended or expelled from school as a child? [How many times? What happened?]

The next set of questions ask about school from when you were 11 years old until right now.

9. What was the last grade you completed? Are you currently attending school?
10. What has school been like for you? [How do you feel about school now? Is school more about friends, getting an education or something else? Do you find it boring? Do you find it difficult to pay attention in class?]
11. How would your teachers describe you? [What would they say about the way you act at school? What would they say about your attitude towards school? What do you think about their impressions?]
12. How do/did you get along with other kids at school? [How well respected are you at school? What is your reputation at school? What kind of crowd do you hang out with? Do you have any close friends at school? Tell me about them. What do you do together?]

13. What has your attendance been like? [How often have you skipped school? What makes you want to skip out? What do you do when you skip school?]
14. What kind of grades do/did you usually get in school? [Did you ever fail a grade? When? What happened? What are your grades like now?]
15. Have you gotten into trouble for not completing your homework or school assignments? [How often does this happen?]
16. Have you ever convinced other students or your siblings to do your homework or assignments for you? What happened?]
17. How much time do you spend preparing for exams at school? [Have you ever intentionally missed school on the day of an exam? What happened?]
18. When you do not do well on an exam who or what is to blame?
19. Have you ever cheated on a test or exam? [How many times? What happened?]
20. How often do you get into physical fights? [At what ages? How do these fights start? Were the people older or younger than you? Have you ever hurt anyone during a fight at school? What happened?]
21. Has anyone ever called you a bully at school? [Why have they said this? Do you ever bully anyone?]
22. Have you been having problems in school? [What type of problems? Have you got into a lot of trouble at school for disturbing the class? Stealing? Coming to school drunk or stoned? How many times?]
23. Were you ever suspended? [How many times? Why were you suspended?]
24. Were you ever expelled? [How many times? Why were you expelled?]
25. Did you graduate from high school? [Why was graduating important to you? *If has not graduated, ask:* How important is it for you to graduate from high school? Why is graduating important to you? What will it get you? *If graduating is not important, ask:* Tell me about why you feel it is not important. What are your plans?]
26. Have you ever quit school? [How long did you about quitting before you did? What did you do while not in school?]

Work History and Money

The next questions ask about your work history and money.

27. Have you ever done any volunteer work? [Why did you volunteer? Would you be interested in volunteering?]
28. Have you ever been required by court to do volunteer or service work? [Did you complete the court order?]
29. Have you ever had a part-time or full-time job where you got paid? [What did the job involve? How many different jobs have you had? What were your duties? Why did these jobs end? What was the longest job you had?]
30. How would your boss have described your work performance? [How would you have described your boss?]
31. Have you ever quit a job? [What happened? Did you tell your boss you were quitting?]
32. Have you ever left a job because you knew you were going to be fired? [Which ones?]
33. How often would you come in late to work? [Why? What would happen when you did?]
34. Have you ever intentionally missed work when you were not sick? [What happened?]
35. Did you ever use drugs or alcohol at work or come to work drunk or stoned?
36. Did you ever get into trouble with not obeying the rules or regulations? [What did you do?]
37. How have you supported yourself when you are not working? (e.g., social assistance, parents, crime)
38. Have you ever relied on someone other than your parents for food, money or lodging? [At what age? For how long? Why did you need to stay with them]
39. How often do your parents or friends help you out financially? [What do you need the money for? Did you ever lie to them about what you needed the money for?]
40. Have you ever owed people money and not paid them back? [How many times? What happened? Have you ever had drug debts?]

41. Have you ever had to pay bills like rent, telephone, or electricity? Did you ever fail to pay these bills?

Career Goals

I would like to talk about your future plans.

42. What would you like to do in the future? [How worried are you about the future?]
43. Is having a job important to you? [Why/Why not?]
44. Is there any job or occupation you would like to have? [How long have you wanted to do this? Have you planned or prepared for this trade/occupation? What training would you need in order to obtain this trade/occupation?]
45. What are your long-term goals? [What would you like to be doing 5 years from now?]
46. Do you think you will have any problems accomplishing your goals? [What impact will your criminal history have on accomplishing your goals?]

Family Life

I am going to now ask you about your family.

47. Tell me about your family? [Who raised you? What was life like at your home? How would you describe your mother/father/caregiver? How well did you get along with your parents/caregiver? How close were you to your parents/caregiver?]
48. Did your parents get along? [Did they argue much? Did they ever have physical fights? Did they ever separate? What was that like?]
49. Did you ever live with anyone else (step/adoptive/foster family, group home, etc.)? Were you ever removed from your home because of problems at school or home? [At what age(s)? How did you come to live there? What was it like?]
50. Do you have any brothers or sisters? How did you get along with them? [How often did you make them do your chores for you? Did you ever physically threaten or beat up your siblings? Did you ever sexually abuse your siblings?]
51. I am going to ask you some questions about your behavior as a child (age 10 or younger). Did you ...
- Get into trouble for not obeying the rules?
 - Run away from home overnight? Longer periods?
 - Lie a lot to your parents?

- Steal from your parents/caregiver?
- Treat your parents/caregivers or siblings badly? [Threatened to hurt them?]

The next set of questions refer to your behavior since you turned 11 years old until right now.

52. How strict are things at your house? What kind of rules are there? [How much trouble do you have following these rules? How is your behavior as compared to your brothers and sisters?]
53. How often did people in the neighborhood complain to your parent/caregiver(s) about the trouble you caused in the neighborhood? [What happened? What did you parents do?]
54. When you go out do your parents/caregiver know where you are? [How often did you stay out at night against your parent's wishes?]
55. Have you ran away from home overnight or for longer periods? [Did you contact your parents?]
56. Have you stolen anything from your parents or siblings?
57. Have you ever threatened to hurt your parents/caregivers or hit your parents/caregivers? [What happened? How did it make you feel?]
58. How old were you when you left home? [What was happening? What did you do?]
59. What is your relationship with your family like now? [How often do you have contact with them? Would you like more contact? What are they doing now? How are they?]

Peer/Sexual Relationships and Interpersonal Traits

Let's talk about your friends and relationships.

60. How many friends do you have? [How long have you been friends with them? What separates a friend from an acquaintance? How do they provide you with support when you going through "tough" times? How do you provide them with support?]
61. Do you change friends often? [Why does this happen?]
62. Who are you closest to now? [How important is that person to you? How would you feel if you could never see that person again?]
63. What age did you start dating? [What attracts you to a girl/boyfriend?]

64. Have you ever had a girlfriend or boyfriend? Do you have a girl/boyfriend right now? [Excluding your current girl/boy friend, how many girl/boy friends have you had? *If relevant, ask: Why do you think you have had so many relationships?*]
65. *If there are more than 2 relationships, ask the questions below about the 2 longest, most significant, or most recent relationships:* What were they like? [What did you like about them? What did you not like about them? Did you ever live together? How often did you argue? Did you ever physically fight with them? How long were you together? How did the relationship end? How long did it take you to get over him/her?]
66. Tell me about your current girl/boy friend? What is she/he like? [What did you like about her/him? What did you not like about her/him? Are you or have ever live together? How often do you argue? Have you ever physically fight with her/him? Are you in love with her/him? How long have you been together? Have you ever break up? If you did break up how long would it take for you to get over her/him?]
67. Have you ever been deeply in love? With who? What was that like?
68. How old were you when you first had a sexual relationship? [Was it with a stable partner, or a casual acquaintance?]
69. How many different sexual partners have you had? [How many were casual acquaintances ("one night stands")? Have you ever had sex with a prostitute?]
70. Have you ever had relationships with more than one person at the same time? [Tell me about it. Did they know about each other?]
71. Have you ever been unfaithful to any of your partners? [How often? Did your partner ever find out? How did your partner react? *If no, ask: How do you feel about cheating on someone? Have you ever been cheated on? What did you do? How did you react?*]
72. Do you have any children or step-children? [Who was the mother? How long did you know her? How many? How old are they? What are their birthdates? What grade are they in at school? How is your relationship with your children? How often do you have contact with them? In what ways do you take care of them? Have anyone said you do not take proper care of them? Why have they said that?]
73. How good are you at getting what you want from your parents, partners, friends or others? [What do you do when you really want your own way?]
74. Has anyone told you that you can talk your way out of anything? [Has anyone ever accused you of being manipulative? Have you ever lead a double life? How do you fool others?]

75. How often do you lie to your parents, partners, friends or others? [Have people said that you lie a lot? What do you lie about?]

76. Have you ever taken on a fake identity? [Have you used an alias?]

Substance Use and Lifestyle

I would like to ask about alcohol and drug use.

77. How many cups of coffee or tea do you drink daily?

78. How old were you when you started drinking? [How often and how much do you drink alcohol? Why do you drink?]

79. How old were you when you started to use drugs? [How often and much? How many different types of drugs have you tried? Why do you use drugs? What do you like about them? Do they affect your life in anyway? Do you have any plans to stop taking drugs? Have you ever gone through withdrawal (become sick because you stopped using drugs)?]

80. Have you ever used alcohol or drugs while institutionalized (e.g.,detention center, hospital)?

81. Do you ever do anything dangerous or get into trouble when you are stoned or drunk?

82. Do you drive? Do you have a driver's license? [Do you like to speed or take chances when you drive? Have you ever been stopped by the police for speeding or reckless driving? Have you ever driven while stoned or impaired? How often?]

83. What do you do with your free time? [What sort of sports and hobbies do you do? How long have you done them?]

84. How often do you get bored? [What bores you most? What do you do when you get bored?]

85. Do you enjoy taking risks? What kind of crazy or dangerous things have you done? [What is the riskiest thing you have done?]

86. When you have to make a decision, how long do you think about the pros and cons? [Do you get into trouble for decisions you have made?]

87. Would your parents, partner or friends describe you as reliable? [Do you follow through on plans you have made?]

88. Other than being on vacation, have you ever traveled without knowing where you were going to stay? [At what age(s)? What was the longest time you were gone? Where did you go? What did you do? Did you tell anyone you were going?]
89. Have you ever done anything that has made you feel guilty or that you were really sorry you had done? [How long did you feel this way?]

Emotions and Intervention Programs

I would like to talk now about your emotions.

90. How often do you get angry? [What kinds of things get you angry? What do you usually do when you are angry? When was the last time you got really angry? What did you do? How long does it take you to calm down?]
91. Has anyone told you that you have a “bad temper”? [What have they said this?]
92. How often do you get into physical fights? [Are you good at fighting? Who starts these fights?]
93. Have you ever “lost control”? [What was the worse injury you caused someone? How did you feel afterward?]
94. Are you the kind of person that has strong feelings? [Do you sometimes pretend you are upset or sad because other people expect you to?]
95. What is the saddest you have felt? [What was happening to make you feel this way?]
96. What is the happiest you have felt? [What was happening to make you feel this way?]
97. Is there anyone in your life whose death would really upset you? [Who? How would their death affect you? How long would it take you to get over it?]
98. Have you seen a doctor/psychologist/counselor because of behavior problems at home, school or in the community? [How old were you? What happened?]
99. Has a doctor/psychologist/counselor ever recommend any intervention or treatment programs for you either in an institution or in the community? [Do you think you needed the treatment they recommended? What were they? Did you participate in any treatment programs? Did you complete these programs?]

Childhood/Adolescent Antisocial Behaviors

I would like to ask about some specific things you may have done in the past.

100. Have you ever been scratched by a cat or has a dog ever bitten you? What did

you do? [If you did pick up a cat and it scratched you what would you do? If you reached down to pat a dog and it bite you what would you do?]

101. Have you ever hurt animals on purpose? [What did you do? How do you feel about it?]
102. How old were you when you first started doing crime? [What kinds of things did you do? Did you ever commit crimes and not get caught? What?]
103. As a child (before age 11) did you ever get in trouble with the police? [What for?]
104. Since you were aged 11 have you ever
Number of times

Deliberately destroyed other people's property?	No	Yes: _____
Escaped or fail to show up for court?	No	Yes: _____
Committed a fraud?	No	Yes: _____
Possessed or sold drugs?	No	Yes: _____
Stolen anything worth more than \$50?	No	Yes: _____
Broken into a building, house or school?	No	Yes: _____
Stolen a car?	No	Yes: _____
Given a false name to the police or lied in court?	No	Yes: _____
Possessed a weapon (e.g, gun, knife, excluding pocket knife)	No	Yes: _____
Driven a car while intoxicated or stoned?	No	Yes: _____
Threatened someone with a weapon?	No	Yes: _____
Set fires on purpose to cause serious damage?	No	Yes: _____
Robbed someone?	No	Yes: _____
Assaulted someone?	No	Yes: _____
Forced anyone to engage in sex with you?	No	Yes: _____

105. Have you ever been arrested? [At what age(s)? If I looked at your criminal record how many charges or convictions would you have on it? Can you tell me what they were about?]
106. Do you think your criminal record will have any effect on your life?
107. What sort of court sanctions/sentences have you received? [What do you think about these?]

If the youth admits to any antisocial or criminal behaviors ask the questions below:

108. What is it that you like about engaging in these kinds of activities? [Why did you think you do these things? How do you feel while it is happening (e.g., scared, excited, nervous)? What about when it is over?]
109. Are your criminal activities usually planned or "spur of the moment"?
110. How serious do you think these things are? [What effect have they had on other people? How do you feel about that?]
111. What is the most serious aggressive act you have done? [What happened? Why do you think you did this? How do you feel about it? Would you do it again? If the victim were here, what would you say to him/her?]
112. What happened in your most current offence? [Why do you think you did this? Would you do it again?]
113. Who or what is to blame for your criminal activities? [What could you have done to avoid committing these crimes?]
114. Have you ever felt guilty/remorse for the crimes you have committed? [Why/why not? What does it feel like?]
115. Do you regret having committed these acts? [Why/why not?]
116. What effect do you think they had on the victims? [How do you feel about the effect on the victims? How often do you think about the victims?]
117. What things would help keep you out of trouble in the future? [What kinds of things have you done in the past to stay out of crime? What is the longest period of time you have been in the community and been crime-free?]

Satisfaction and Traits

I want to ask you about your opinions and how you feel about yourself.

118. Have other people ever told you that you have too high an opinion of yourself? Why have they said this?]
119. Are there anybody's opinions that you value? [Whose opinion is important to you?]
120. What do you think about the police? [How do you feel about the law? Do you believe in obeying the law?]
121. How would you say you compared to your friends or other students in terms of intelligence? [How do you compare to others in terms of your other abilities or skills (street smarts, making money, getting what you want etc)?]
122. Some people are skillful at using others or taking advantage of them to get what they want. [Are you able to do this?]
123. Have you ever tried to control other people by being verbally or physically threatening?
124. Have others ever told you that you are not concerned about others or how they feel? [Why have they said this?]
125. Are you satisfied with your life if it were to stay the way it is? [What would you change?]
126. What would you describe as your main failures?
127. What are your main accomplishments?
128. Have other people ever told you that you have too high an opinion of yourself? [Why have they said this?]
129. What would you say is your biggest problem? [Are you concerned about this problem? How do you plan to deal with this problem?]
130. How do you feel about yourself? [Rate how you feel about yourself on a scale of 1 to 10, with 1 being really bad and 10 being really good.]
131. If you could go back and change what you have done, what would you change?
132. Are there things that we didn't talk about today, that you think it is important for people to know about you?

Interview Notes

Rate the clarity and coherence of the youth's responses during the interview:

- ☐ Responses clear and coherent
- ☐ Some mild problem understanding responses
- ☐ Some moderate problems understanding responses
- ☐ Responses almost totally unclear or incoherent

Rate consistency of the individual's responses during the interview:

- ☐ Responses were consistent
- ☐ Some mild inconsistencies were apparent
- ☐ Some moderate inconsistencies were apparent
- ☐ Responses were almost totally inconsistent

Describe any aspects of the youth's demeanor and behavior during the interview that seem important, such as style of speech, nonverbal behaviors, interpersonal style, or self-image.

Appendix B

SEMI-STRUCTURED MOTIVATIONS INTERVIEW:

The next set of questions will focus on the period before your current offense, the one that you are currently in here for, as well as on previous offenses. As much as possible, I'd like you to recall what was happening prior to these offenses. Specifically we will focus on the motives involved, as well your relationships with the victim.

Remember: Only talk about those acts that are known to authorities.

A. Current Offense Information.

The next set of questions will focus on your current offense (the one you are currently serving time for).

Tell me about your current offense (the one you are in here for)?

What were you charged with?

Did you plead guilty or not guilty?

What were you convicted for/what was your role?

When did this offense take place (how long ago, date)?

What was your relationship with the victims?

Mother/Father

Sister/Brother

Daughter/Son

Spouse/girlfriend

Other Relative

Friend

Casual acquaintance

Stranger

Other (specify)

How close would you say you were to the victim in the past/prior to the offense?

Then Probe:

About a year prior to offense:

On a scale from 1 to 5 , how close were you to the victim?

1	2	3	4	5
Unknown	Not close	Moderately close	very close	Extremely close

The week prior to the offense:

On a scale from 1 to 5 , how close were you to the victim?

1	2	3	4	5
Unknown	Not close	Moderately close	very close	Extremely close

What do you think are the reasons for your current offense? (If participant denies the offense, go to the next section)

After participant answers, probe him with following question:

I'm going to read out a list of possible motives for an offense and I'd like you to tell me how important a role you think each of these played in your offense.

-----1-----	-----2-----	-----3-----	-----4-----	-----5-----
No role	Indirect role	Small role	Moderate role	Main role

- ___ Emotional state- general anger or frustration
- ___ Emotional state - depressed or anxious
- ___ Boredom, need for excitement
- ___ Power/Control/Status
- ___ Opportunity was there
- ___ Substance Intoxication
- ___ Rejection
- ___ Escape abuse
- ___ Sexual gratification
- ___ Jealousy
- ___ Just happened
- ___ Material gain (money, drugs)
- ___ Revenge
- ___ Other _____

What was the degree of physical injury to the victim (Check one)?

- ___ None
- ___ Slight injury
- ___ Victim treated in clinic and released
- ___ Victim hospitalized at least one night
- ___ Victim death
- ___ Not known

How much planning did you do? Tell me about this.

When did you first think about doing this?

- ☐ None/ it was spur of the moment
- ☐ Yes (How much)
 - ☐ Within 24 hours of the offense
 - ☐ Within 48 hours of the offense
 - ☐ One week prior to the offense
 - ☐ Two weeks prior to the offense
 - ☐ One month prior to the offense
 - ☐ Two months prior to the offense
 - ☐ More than two months prior to the offense
 - ☐ Not applicable (says not guilty)

Now I'd like to get an idea of how you were feeling in the time before the offense took place.

What was your emotional state like in the weeks or months before the event?

Three months before the offense, what kind of **strong** emotional feelings did you have?

One month before the offense, what kind of strong emotional feelings did you have?

The day of the offense, what kind of strong emotional feelings did you have?

Okay I'd now like you to rate each of the following emotions based on how frequently you experienced these 3 months before the event, 1 month before the event, and the day of the event.

1	2	3	4	5
never	sometimes	quite often	most of the time	always

Three months prior to the event, how often would you say you experienced the following?

- ☐ Hopelessness/depression
- ☐ Anxiety/worry/fear
- ☐ Loneliness/sadness
- ☐ Moody/stressed
- ☐ Anger/frustration/sexual frustration
- ☐ Boredom
- ☐ Feel nothing
- ☐ Guilt
- ☐ Positive/happy/excited
- ☐ Other

1 2 3 4 5
 never sometimes quite often most of the time always

One month prior to the event, how often would you say you experienced the following?

___ Hopelessness/depression
 ___ Anxiety/worry/fear
 ___ Loneliness/sadness
 ___ Moody/stressed
 ___ Anger/frustration/sexual frustration
 ___ Boredom
 ___ Feel nothing
 ___ Guilt
 ___ Positive/happy/excited
 ___ Other

1 2 3 4 5
 never sometimes quite often most of the time always

The day of the event, how often would you say you experienced the following?

___ Hopelessness/depression
 ___ Anxiety/worry/fear
 ___ Loneliness/sadness
 ___ Moody/stressed
 ___ Anger/frustration/sexual frustration
 ___ Boredom
 ___ Feel nothing
 ___ Guilt
 ___ Positive/happy/excited
 ___ Other

Did any major changes take place in your life prior to the event? Such as a divorce, death in the family?)

B. Past Offense Information.

Okay now I'd like you to focus on the past, things you did prior to the offense that you are in here for. The next set of questions will focus on your past offenses, those that you were and were not caught for. Remember, everything you tell me is strictly confidential.

Have you ever in the past used force or violence to get money, drugs, property, sex, or status?

If NO: Thank you for your time, that is all the questions that I have.

If YES: Approximately how many times in the past? _____

What were your goals in these instances?

What was your relationship to the victims in these instances? _____

How often that you can remember did you do this to:

Family/relatives _____

Intimate partners _____

Friends _____

Acquaintances _____

Strangers _____

Probe:

Have you ever done this to family members or intimate partners?

Ask the following questions for each of these offenses:

Tell me a little about the first time you used violence for this purpose.

How long ago did this take place?

What was your relationship with the victims?

Mother/Father

Sister/Brother

Daughter/Son

Spouse/girlfriend

Other Relative

Friend

Casual acquaintance

Stranger

Other (specify)

How close would you say you were to the victim in the past/prior to the offense?

Then Probe:

About a year prior to offense:

On a scale from 1 to 5 , how close were you to the victim?

1	2	3	4	5
Unknown	Not close	Moderately close	very close	Extremely close

The week prior to the offense:

On a scale from 1 to 5 , how close were you to the victim?

1	2	3	4	5
Unknown	Not close	Moderately close	very close	Extremely close

What do you think were the reasons for you doing this?

After participant answers, probe him with following question:

I'm going to read out a list of possible motives for an offense and I'd like you to tell me how important a role you think each of these played in your offense.

-----1-----	-----2-----	-----3-----	-----4-----	-----5---
No role	Indirect role	Small role	Moderate Role	Main role

- ___ Emotional state- general anger or frustration
- ___ Emotional state - depressed or anxious
- ___ Boredom, need for excitement
- ___ Power/Control/Status
- ___ Opportunity was there
- ___ Substance Intoxication
- ___ Rejection
- ___ Self-defense/ Escape abuse
- ___ Sexual gratification
- ___ Jealousy
- ___ Just happened
- ___ Material gain (money, drugs)
- ___ Revenge
- ___ Other _____

What was the degree of physical injury to the victim (Check one)?

- ___ None
- ___ Slight injury
- ___ Victim treated in clinic and released
- ___ Victim hospitalized at least one night
- ___ Victim death
- ___ Not known

How much planning did you do? Tell me about this.

When did you first think about doing this?

- ___ None/ it was spur of the moment
- ___ Yes (How much)
- ___ Within 24 hours of the offense

- ___ Within 48 hours of the offense
- ___ One week prior to the offense
- ___ Two weeks prior to the offense
- ___ One month prior to the offense
- ___ Two months prior to the offense
- ___ More than two months prior to the offense
- ___ Not applicable (says not guilty)

Now I'd like to get an idea of how you were feeling in the time before the offense took place.

What was your emotional state like in the weeks or months before the event?

Three months before the offense, what kind of **strong** emotional feelings did you have?

One month before the offense, what kind of strong emotional feelings did you have?

The day of the offense, what kind of strong emotional feelings did you have?

Okay I'd now like you to rate each of the following emotions based on how frequently you experienced these 3 months before the event, 1 month before the event, and the day of the event.

1	2	3	4	5
never	sometimes	quite often	most of the time	always

Three months prior to the event, how often would you say you experienced the following?

- ___ Hopelessness/depression
- ___ Anxiety/worry/fear
- ___ Loneliness/sadness
- ___ Moody/stressed
- ___ Anger/frustration/sexual frustration
- ___ Boredom
- ___ Feel nothing
- ___ Guilt
- ___ Positive/happy/excited
- ___ Other

1	2	3	4	5
never	sometimes	quite often	most of the time	always

One month prior to the event, how often would you say you experienced the following?

- ☐ Hopelessness/depression
- ☐ Anxiety/worry/fear
- ☐ Loneliness/sadness
- ☐ Moody/stressed
- ☐ Anger/frustration/sexual frustration
- ☐ Boredom
- ☐ Feel nothing
- ☐ Guilt
- ☐ Positive/happy/excited
- ☐ Other

1	2	3	4	5
never	sometimes	quite often	most of the time	always

The day of the event, how often would you say you experienced the following?

- ☐ Hopelessness/depression
- ☐ Anxiety/worry/fear
- ☐ Loneliness/sadness
- ☐ Moody/stressed
- ☐ Anger/frustration/sexual frustration
- ☐ Boredom
- ☐ Feel nothing
- ☐ Guilt
- ☐ Positive/happy/excited
- ☐ Other

Did any major changes take place in your life prior to the event? Such as a divorce, death in the family?)

Appendix C

INTERPERSONAL REACTIVITY INDEX-EMPATHY: DAVIS (1980)

Please read each statement below and circle the ONE number that tells how true the statement is of you. Feel free to leave out any questions you do not feel comfortable answering.

---0-----1-----2-----3-----4---
Strongly agree Disagree Undecided Agree Strongly Agree

1. I daydream and fantasize, often, about things that might happen to me.	0	1	2	3	4
2. I often have tender, concerned feelings for people less fortunate than me.	0	1	2	3	4
3. I sometimes find it difficult to see things from the "other guy's" point of view.	0	1	2	3	4
4. Sometimes I don't feel very sorry for other people when they are having problems.	0	1	2	3	4
5. I really get involved with the feelings of the characters in a novel.	0	1	2	3	4
6. In emergency situations, I feel unsure and ill at ease.	0	1	2	3	4
7. I am usually objective when I watch a movie or play and I don't often get completely caught up in it.	0	1	2	3	4
8. I try to look at everybody's side of a disagreement before I make a decision.	0	1	2	3	4
9. When I see someone being taken advantage of I kind of feel protective towards them.	0	1	2	3	4
10. I sometimes feel helpless when I am in the middle of a very emotional situation.	0	1	2	3	4
11. I sometimes try to understand my friends better by imagining how things look from their perspective.	0	1	2	3	4

12. Becoming extremely involved in a good book or movie is somewhat rare for me.	0	1	2	3	4
13. When I see someone get hurt, I tend to remain calm.	0	1	2	3	4
14. Other people's misfortunes do not usually disturb me a great deal.	0	1	2	3	4
15. If I'm sure I'm right about something I don't waste time listening to other people's arguments.	0	1	2	3	4
16. After seeing a play or movie, I have felt as though I were one of the characters.	0	1	2	3	4
17. Being in a tense emotional situation scares me.	0	1	2	3	4
18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.	0	1	2	3	4
19. I am usually pretty effective in dealing with emergencies.	0	1	2	3	4
20. I am often quite touched by things I see happen.	0	1	2	3	4
21. I believe that there are two sides to every question and I try to look at them both.	0	1	2	3	4
22. I would describe myself as a pretty softhearted person.	0	1	2	3	4
23. When I watch a good movie, I can very easily put myself in the place of a leading character.	0	1	2	3	4
24. I tend to lose control during emergencies.	0	1	2	3	4
25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.	0	1	2	3	4
26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.	0	1	2	3	4
27. When I see someone who badly needs help in an emergency, I go to pieces.	0	1	2	3	4
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.	0	1	2	3	4

Appendix D

INVENTORY OF PARENT AND PEER ATTACHMENT (IPPA) Armsden & Greenberg (1987)

This questionnaire asks about your relationships with important people in your life; your mother, your father, and your close friends. Please read the directions to each part carefully. If there are any questions that you do not feel comfortable answering or do not wish to answer please feel free to omit.

Part I

Some of the following statement asks about your feelings about your **mother** or the person who has acted as your mother. Answer the questions based on how you were feeling before you committed the offense, and now. If you have more than one person acting as your mother (e.g. a natural mother and a step-mother) answer the questions for the one that you feel has most influenced you.

Please read each statement and circle the ONE number that tells how true the statement was of you **one year before your offense**, and is of you **now**.

---1----- 2-----3-----4-----5-----
Almost Never Not Very Sometimes Often Almost Always
Or Never Often True True or Always
True True True

Prior to offense						Now				
1	2	3	4	5	1. My mother respects my feelings.	1	2	3	4	5
1	2	3	4	5	2. I feel my mother does a good job as my mother.	1	2	3	4	5
1	2	3	4	5	3. I wish I had a different mother.	1	2	3	4	5
1	2	3	4	5	4. My mother accepts me as I am.	1	2	3	4	5
1	2	3	4	5	5. I like to get my mother's point of view on things I'm concerned about.	1	2	3	4	5
1	2	3	4	5	6. I feel its no use letting my feelings show around my mother.	1	2	3	4	5
1	2	3	4	5	7. My mother can tell when I'm upset about something.	1	2	3	4	5
1	2	3	4	5	8. Talking over my problems with my mother makes me feel ashamed or foolish.	1	2	3	4	5
1	2	3	4	5	9. My mother expects too much from me.	1	2	3	4	5
1	2	3	4	5	10. I get upset easily around my mother.	1	2	3	4	5
1	2	3	4	5	11. I get upset a lot more than my mother knows about.	1	2	3	4	5
1	2	3	4	5	12. When we discuss things, my mother cares about my point of view.	1	2	3	4	5

1	2	3	4	5	13. My mother trusts my judgements.	1	2	3	4	5
1	2	3	4	5	14. My mother has her own problems so I don't bother her with mine.	1	2	3	4	5
1	2	3	4	5	15. My mother helps me to understand myself better.	1	2	3	4	5
1	2	3	4	5	16. I tell my mother about my problems and troubles.	1	2	3	4	5
1	2	3	4	5	17. I feel angry with my mother.	1	2	3	4	5
1	2	3	4	5	18. I don't get much attention from my mother.	1	2	3	4	5
1	2	3	4	5	19. My mother helps me to talk about my difficulties.	1	2	3	4	5
1	2	3	4	5	20. My mother understands me.	1	2	3	4	5
1	2	3	4	5	21. When I am angry about something, my mother tries to be understanding.	1	2	3	4	5
1	2	3	4	5	22. I trust my mother.	1	2	3	4	5
1	2	3	4	5	23. My mother doesn't understand what I'm going through these days.	1	2	3	4	5
1	2	3	4	5	24. I can count on my mother when I need to get something off my chest.	1	2	3	4	5
1	2	3	4	5	25. If my mother knows something is bothering me, she asks me about it.	1	2	3	4	5

Part II

This part asks about your feelings about your **father**, or the man who has acted as your father. If you have more than one person acting as your father (e.g. natural and step father) answer the question for the one that you feel has most influenced you.

Please read each statement and circle the ONE number that tells how true the statement was of you **one year before your offense** and is of you **now**.

---1-----2-----3-----4-----5---
 Almost Never Not Very Sometimes Often Almost Always
 Or Never Often True True or Always
 True True True

Prior to offense						Now				
1	2	3	4	5	1. My father respects my feelings.	1	2	3	4	5
1	2	3	4	5	2. I feel my father does a good job as my father.	1	2	3	4	5
1	2	3	4	5	3. I wish I had a different father.	1	2	3	4	5
1	2	3	4	5	4. My father accepts me as I am.	1	2	3	4	5
1	2	3	4	5	5. I like to get my father's point of view on things I'm concerned about.	1	2	3	4	5
1	2	3	4	5	6. I feel its no use letting my feelings show around my father.	1	2	3	4	5
1	2	3	4	5	7. My father can tell when I'm upset about something.	1	2	3	4	5
1	2	3	4	5	8. Talking over my problems with my father makes me feel ashamed or foolish.	1	2	3	4	5
1	2	3	4	5	9. My father expects too much from me.	1	2	3	4	5
1	2	3	4	5	10. I get upset easily around my father.	1	2	3	4	5
1	2	3	4	5	11. I get upset a lot more than my father knows about.	1	2	3	4	5
1	2	3	4	5	12. When we discuss things, my father cares about my point of view.	1	2	3	4	5
1	2	3	4	5	13. My father trusts my judgements.	1	2	3	4	5
1	2	3	4	5	14. My father has his own problems so I don't bother him with mine.	1	2	3	4	5
1	2	3	4	5	15. My father helps me to understand myself better.	1	2	3	4	5
1	2	3	4	5	16. I tell my father about my problems and troubles.	1	2	3	4	5
1	2	3	4	5	17. I feel angry with my father.	1	2	3	4	5
1	2	3	4	5	18. I don't get much attention from my father.	1	2	3	4	5
1	2	3	4	5	19. My father helps me to talk about my difficulties.	1	2	3	4	5
1	2	3	4	5	20. My father understands me.	1	2	3	4	5
1	2	3	4	5	21. When I am angry about something, my father tries to be understanding.	1	2	3	4	5
1	2	3	4	5	22. I trust my father.	1	2	3	4	5

1	2	3	4	5	23. My father doesn't understand what I'm going through these days.	1	2	3	4	5
1	2	3	4	5	24. I can count on my father when I need to get something off my chest.	1	2	3	4	5
1	2	3	4	5	25. If my father knows something is bothering me, he asks me about it.	1	2	3	4	5

Part III

This part asks about your feelings about your relationships with your **close friends**. Please read each statement and circle the ONE number that tells how true the statement was of you **one year before your offense** and is of you **now**.

---1-----2-----3-----4-----5---						---1-----2-----3-----4-----5---				
Almost Never Or Never True						Not Very Often True				
						Sometimes True				
						Often True				
						Almost Always or Always True				
Prior to offense						Now				
1	2	3	4	5	1. I like to get my friends point of view on things I'm concerned about.	1	2	3	4	5
1	2	3	4	5	2. My friends can tell when I'm upset about something.	1	2	3	4	5
1	2	3	4	5	3. When we discuss things, my friends care about my point of view.	1	2	3	4	5
1	2	3	4	5	4. Talking over my problems with friends makes me feel ashamed or foolish.	1	2	3	4	5
1	2	3	4	5	5. I wish I had different friends.	1	2	3	4	5
1	2	3	4	5	6. My friends understand me.	1	2	3	4	5
1	2	3	4	5	7. My friends encourage me to talk about my difficulties.	1	2	3	4	5
1	2	3	4	5	8. My friends accept me as I am.	1	2	3	4	5
1	2	3	4	5	9. I feel the need to be in touch with my friends more often.	1	2	3	4	5
1	2	3	4	5	10. My friends don't understand what I'm going through these days.	1	2	3	4	5
1	2	3	4	5	11. I feel alone or apart when I am with my friends.	1	2	3	4	5
1	2	3	4	5	12. My friends listen to what I have to say.	1	2	3	4	5
1	2	3	4	5	13. I feel my friends are good friends.	1	2	3	4	5
1	2	3	4	5	14. My friends are fairly easy to talk to.	1	2	3	4	5
1	2	3	4	5	15. When I am angry about something my friends try to be understanding.	1	2	3	4	5
1	2	3	4	5	16. My friends help me to understand myself better.	1	2	3	4	5
1	2	3	4	5	17. My friends care about how I am feeling.	1	2	3	4	5
1	2	3	4	5	18. I feel angry with my friends.	1	2	3	4	5
1	2	3	4	5	19. I can count on my friends when I need to get something off my chest.	1	2	3	4	5
1	2	3	4	5	20. I trust my friends.	1	2	3	4	5
1	2	3	4	5	21. My friends respect my feelings.	1	2	3	4	5
1	2	3	4	5	22. I get upset a lot more than my friends know about.	1	2	3	4	5
1	2	3	4	5	23. It seems as if my friends are irritated with me for no reason.	1	2	3	4	5

1	2	3	4	5	24. I can tell my friends about my problems and troubles.	1	2	3	4	5
1	2	3	4	5	25. If my friends know something is bothering me, they ask me about it.	1	2	3	4	5

Appendix E

PDS

Instructions

Read each statement, and circle the number that best describes you, from (1) *Not True* to (5) *Very True*

1.	I sometimes tell lies if I have to.	1 2 3 4 5
2.	I never cover up my mistakes.	1 2 3 4 5
3.	There have been occasions when I have taken advantage of someone.	1 2 3 4 5
4.	I never swear.	1 2 3 4 5
5.	I sometimes try to get even rather than forgive and forget.	1 2 3 4 5
6.	I always obey laws, even if I'm unlikely to get caught.	1 2 3 4 5
7.	I have said something bad about a friend behind his or her back.	1 2 3 4 5
8.	When I hear people talking privately, I avoid listening.	1 2 3 4 5
9.	I have received too much change from a salesperson without telling him or her.	1 2 3 4 5
10.	I always declare everything at customs.	1 2 3 4 5
11.	When I was young, I sometimes stole things.	1 2 3 4 5
12.	I have never dropped litter on the street.	1 2 3 4 5
13.	I sometimes drive faster than the speed limit.	1 2 3 4 5
14.	I never read sexy books or magazines.	1 2 3 4 5
15.	I have done things that I don't tell other people about.	1 2 3 4 5
16.	I never take things that don't belong to me.	1 2 3 4 5
17.	I have taken sick-leave from work or school even though I wasn't really sick.	1 2 3 4 5

18.	I have never damaged a library book or store merchandise without reporting it.	1 2 3 4 5
19.	I have some pretty awful habits.	1 2 3 4 5
20.	I don't gossip about other people's business.	1 2 3 4 5

Appendix F

Violent Offenses Scale

1. In the past when I have been violent to others it has been mostly

_____ Planned
 _____ Not Planned

Circle the role the following reasons have played in your violent past behaviour:

a. Anger/Frustration:

1	2	3	4	5
No role	Indirect role	Small role	Moderate role	Main role

b. Power/Status:

1	2	3	4	5
No role	Indirect role	Small role	Moderate role	Main role

c. Alcohol/Drugs:

1	2	3	4	5
No role	Indirect role	Small role	Moderate role	Main role

d. Revenge:

1	2	3	4	5
No role	Indirect role	Small role	Moderate role	Main role

e. Money/drugs/property:

1	2	3	4	5
No role	Indirect role	Small role	Moderate role	Main role

f. Self-defence:

1	2	3	4	5
No role	Indirect role	Small role	Moderate role	Main role

g. Reacting to provocation:

1	2	3	4	5
No role	Indirect role	Small role	Moderate role	Main role

h. The victims of my past violence have been mostly (check those that are most common):

- ☐ strangers
- ☐ acquaintances
- ☐ friends
- ☐ family members
- ☐ intimate partners

i. What is the most serious injury you have done in the past to someone? (check)

- ☐ No physical injury
- ☐ Slight injury (bruised, black eye)
- ☐ Victim treated in hospital/clinic and released same day
- ☐ Serious injury (eg. Victim hospitalized)

2. Have you EVER intentionally planned to use force or violence on someone to get money, drugs, property, revenge or status?

- ☐ No (Thank you for your time, Stop here)
- ☐ Yes

a. Approximately how many times in the past have you done this (check one)

- ☐ Once or twice
- ☐ Less than 5 times
- ☐ 5-10 times
- ☐ More than 10 times

b. What have been your reasons? (check)

- b1. ☐ Money
- b2. ☐ Drugs
- b3. ☐ Property
- b4. ☐ Status
- b5. ☐ Revenge

When I have planned to use force or violence to get Money, Drugs, Property, Revenge or status in the past, my victims have been:

2 c. strangers:

0	1	2	3	4
Never	Once or twice	2-5 times	5-10 times	More than 10 times

2 d. Acquaintances:

0	1	2	3	4
Never	Once or twice	2-5 times	5-10 times	More than 10 times

2 e. Friends:

0	1	2	3	4
Never	Once or twice	2-5 times	5-10 times	More than 10 times

2 f. Family:

0	1	2	3	4
Never	Once or twice	2-5 times	5-10 times	More than 10 times

2 g. What is the most serious injury you have caused for this purpose (money, drugs, etc)? (check)

- ☐ No physical injury
- ☐ Slight injury (bruised, black eye)
- ☐ Victim treated in hospital/clinic and released same day
- ☐ Serious injury (eg. Victim hospitalized)

2 h. For this offence how much planning did you do beforehand?

- ☐ very little planning
- ☐ same day of offence
- ☐ 48 hours prior to offence
- ☐ 1 month prior to offence
- ☐ 3 months or more

During this incident I felt:

2 i. Angry: a lot a little not at all

2 j. Frustrated: a lot a little not at all

2 k. Jealousy: a lot a little not at all

2 l. Nothing, usually just wanted the money, drugs, etc: Yes No

Appendix G
(Sample recruitment sign)

VOLUNTEERS NEEDED FOR RESEARCH PROJECT

Volunteers needed to participate in a study looking at the relationship between personality characteristics and the motives for crime and violence. This study is being done by Jillian, under the supervision of Dr. Adelle Forth, in the Department of Psychology at Carleton University. This research project is a requirement for the completion of a Master's degree in psychology and your participation would be greatly appreciated.

If you are interested in volunteering, or want more information, please sign your name below and I will contact you to set up an appointment.

Appendix H

Information Form

Personality, Motives for Crime and Violence, and Victim-Offender Relationships

This sheet is to provide you with information regarding the study on "personality, motives for crime and violence, and victims" being conducted by Jillian. This study will examine different personality characteristics (how impulsive you are, your concern for others, anger problems, and ability to manipulate others) and how they are related to the different motivations for crime and violence, and to the victims of crime. This study is being conducted under the direct supervision of Dr. Adelle Forth at the Department of Psychology, Carleton University.

Those who agree to volunteer to do this study will be asked to participate in two sessions. The first session will take approximately 2 hours, you will complete an interview that will contain questions regarding your childhood, educational history, personal relationships, family life, and your history of antisocial behavior including why you engage in violence. You will also be asked questions about how you interact with others and how you feel in a variety of situations. In the second session, you will complete 5 questionnaires dealing with things such as your antisocial behavior, prosocial behavior, attachment to others, and your ability to put yourself in "others shoes".

Furthermore, the interviews will be audiotaped in order for one other researcher to review portions of the tape, but will not be available to any institutional staff and will not contain any information from which you may be identified. Removing your name from all documents and replacing it with codes identifiable by the primary researcher will ensure confidentiality. It is guaranteed that all information will be securely stored at

Carleton University and under no circumstance will the police or corrections have access to this information without your written consent. Also, all completed interviews and tapes will be removed from the institution.

Due to the fact that some of the questions ask you to reveal information that is personal and potentially distressful, measures have been put in place that may help you. For instance, the prison psychologist will be available to meet with you immediately upon your request or you may choose to contact one of the community resources listed below. It is extremely important that you know that at any time during the interview you may skip any questions that you do not wish to answer, or to withdraw from the study altogether. Should you choose to do this, your decision will in no way influence the manner in which you are treated by your caseworkers or by the institution.

If you would like more information on the study, you can either discuss it with me personally, or contact my supervisor, Dr. Adelle Forth (613-520-2600 ext.1267). If you have any ethical concerns regarding how this study was conducted, you may contact the Chair of the Carleton Research Ethics Committee for Psychological Research (Dr. Mary Gick) at 613-520-2600 ext. 2664 or the chair of the Department of Psychology (Dr. John Logan) at 613-520-2600 ext. 2648.

Contact Numbers

Crisis Lines:

Ottawa Distress Center

Information- (613) 238-3311

Crisis Line – (613) 238-1089

Centers for Abused youth:

Sexual Assault Support Center

(613) 234-2266

Addictions Services:

Al-Anon & Alateen

(613) 234-5511

Appendix I

INFORMED CONSENT

Project: An examination of personality characteristics related to motives for crime and violence, and the victims involved.

Research Personnel: This research is being conducted for the purposes of a Master of Arts Thesis in Psychology at Carleton University in Ottawa, Ontario. Jillian is the principal investigator and Dr. Adelle Forth is the faculty supervisor.

The purpose of an informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. The informed consent must provide enough information such that you have the opportunity to determine whether you wish to participate in this study. Please ask the researcher to clarify any questions that you may have.

I have been told that an interview will cover the following areas: education, family background, substance use, relationships, and criminal activities. I also understand that there will also be 5 questionnaires to complete that will cover areas of my antisocial and prosocial behavior, attachment with parents and peers, and ability to "put myself in another's shoes". I understand that I am not required to answer any questions that I do not wish to and that I may withdraw from this study at any time without any impact on the way I am treated by the Provincial Correctional Services or this institution.

I further understand that under no circumstances will any of the information I give be released to anyone without my signed consent. The information shared will be used for research purposes only and I will not be identified by name (i.e. a coded number will be used). I understand that there is a limit to my confidentiality. If I disclose information regarding *specific* plans to harm myself or others, *specific* information concerning any unknown physical or sexual abuse of children, or *specific* information regarding unknown sexual abuse by a health professional, the researcher is obligated to break my confidentiality. Also, I understand that should I reveal my involvement in criminal acts that have not previously been known to authorities, the researcher is required to report these activities to the appropriate authorities. I may talk about these issues in a general sense but should I begin to disclose specifics I will be reminded of the researchers obligations to report this information.

Should I require further information regarding this study I can contact:
Dr. Adelle Forth, Faculty Advisor, 613-520-2600, ext. 1267

Should I have any ethical concerns regarding this study I can contact:
Dr. Mary Gick, Chair of the Carleton University Research Ethics Committee for
Psychological Research, 613-520-2600, ext. 2664
Dr. John Logan, Chair of Dept. of Psychology, 613-520-2600, ext. 2648

My signature below indicates that I have read the above and agree to take part in this study.

Name: _____ **I.D.#** _____ **Date:** _____

Signature (subject): _____ **Signature researcher:** _____

Appendix J

CONSENT TO ACCESS INSTITUTIONAL FILES

I give permission to Jillian/Krista to access my institutional and medical files for the purposes of research only.

Name: _____ ID#: _____ Date: _____

Signature (Participant): _____

Signature (Researcher): _____

CONSENT TO AUDIOTAPE THE INTERVIEW

I give permission to Jillian/Krista to tape the interview I am participating in. I understand that the tape will be used for research purposes only, and will not contain any information (e.g., name, etc...) that may identify me.

Signing this form indicates my agreement for this interview to be **audiotaped**:

Researcher's signature: _____

Participant's signature: _____

Date: _____

I.D. #: _____

CONSENT TO FOLLOW UP

I agree to allow the researchers to obtain access to my criminal record for up to 15 years following this study.

Researcher's signature: _____ Date: _____

Participant's signature: _____ Date: _____

Appendix K

DEBRIEFING

As researchers we are obligated to do our best to ensure that participants are not harmed in any way by participating in our study. This issue was addressed by allowing you the right to limit what you disclose, ensuring that resources are available for you to access following your participation, and by providing you with this written debriefing.

As previously mentioned, the purpose of this research was to examine the personality characteristics related to the different motivations for crime and violence, and to the victims involved. During this study you participated in an interview that was designed to assess a variety of personality characteristics. Also you completed five questionnaires, examining your pro-social and antisocial behavior, attachment to parents and peers, and your ability to "put yourself in another's shoes". Much of the research examining crime and violence in adults has demonstrated that different personality characteristics are related to different types of violence, and different victims involved. For example some types of crime are highly thought out whereas others are more spontaneous and spur of the moment. Some research has also shown that different characteristics are related to these different types of crime among different victim-offender relations. The present study attempted to examine whether these findings exist in adolescents. Research in this area is important so that we can examine why people do the things they do, in an attempt to treat those involved and prevent further events of the sort from occurring in the future.

I would like to take this opportunity to thank you very much for agreeing to participate in this study. Your time, effort, and honesty are greatly appreciated.

If you would like further information about this study please contact:

Jillian, B.Sc.
Department of Psychology
Carleton University

Adelle Forth, PhD
Department of Psychology
Carleton University
Ottawa, Ontario
K1S 5B6
613-520-2600, ext.1267

Should you have any ethical concerns about this study please contact:

John Logan, PhD
Chair, Department of Psychology
Department of Psychology
Carleton University
Ottawa, Ontario
K1S 5B6
613-520-2600, ext.2648

Mary Gick, PhD
Chair, Carleton University
Research Ethics Committee
for Psychological Research
Department of Psychology
Carleton University
Ottawa, Ontario
K1S 5B6
613-520-2600, ext.2664

Appendix L**INTERPERSONAL REACTIVITY INDEX- CODING
DAVIS (1980)**

The index consists of four sub-scales. The rating for each one corresponds to the total score from the responses.

Fantasy	1, 5, 7, 12, 16, 23, 26
Empathic Concern	2, 4, 9, 14, 18, 20, 22
Perspective Taking	3, 8, 11, 15, 21, 25, 28
Personal Distress	6, 10, 13, 17, 19, 24, 27

Appendix M

INVENTORY OF PARENT AND PEER ATTACHMENT: (MOTHER, FATHER, AND PEER VERSION)

SCORING INSTRUCTIONS

Mother, Father, and Peer Attachment scores are calculated by reverse-scoring the items whose numbers are listed below and summing the 25 items for each scale.

<u>Attachment Scale</u>	<u>Items to be reverse-scored</u>
Mother	3, 6, 8, 9, 10, 11, 14, 17, 18, 23
Father	3, 6, 8, 9, 10, 11, 14, 17, 18, 23
Peer	4, 5, 9, 10, 11, 18, 22, 23

Subscales

	Direct-scored items	Reversed-scored items
Parent Trust	1, 2, 4, 12, 13, 20, 21, 22	3, 9
Parent Communication	5, 7, 15, 16, 19, 24, 25	6, 14
Parent Alienation	8, 10, 11, 17, 18, 23	
Peer Trust	6, 8, 12, 13, 14, 15, 19, 20, 21	5
Peer Communication	1, 2, 3, 7, 16, 17, 24, 25	
Peer Alienation	4, 9, 10, 11, 18, 22, 23	

Authors: Mark T. Greenberg, Ph.D., and Gay C. Armsden, Ph.D
Department of Psychology, University of Washington
Seattle, WA 98195-1525