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# Rebel Without a Conscience?

Exploring the validity of psychopathic traits as measured  
by the PCL: SV in young, male, violent offenders in Sweden

Antonia Klein & Johanna Nygårdh

Supervisors: Lennart Melin  
Niklas Långström

Chairperson: Bo Ekehammar

## ABSTRACT

The goal of the present study was to contribute to the validation of psychopathy and to conduct an interrater reliability examination of the *Psychopathy Checklist: Screening Version* (PCL: SV). Data from 40 young, male, criminal offenders were collected through semi-structured interviews, files, and client self reports. Three hypotheses specified the expected relations amongst psychopathic traits and three criminogenic variables, using correlation and multiple regression analyses. The interrater reliability was estimated using Pearson's Product Moment Correlation and Intraclass Correlation coefficients (ICC). One hypothesis gained support: psychopathic traits correlated positively with proactive aggression ( $r = .31, p < .05$ ). The remaining two hypotheses showed trends in the expected direction. Concluding, criminogenic variables may be useful in validating psychopathic traits in this sample.

*Key words:* Psychopathic traits, criminogenic variables, young male offenders.

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# REBEL WITHOUT A CONSCIENCE?

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## INTRODUCTION

Even though the notion of psychopathy in young people is a controversial issue, several studies (see e.g., Catchpole, 2003; O'Neill, Lidz & Heilbrun, 2003; Murrie & Cornell, 2002) indicate that some behavioural and emotional features found in antisocial children and adolescents can be successfully explained in terms of psychopathic personality traits. However, most studies have been conducted within the English-speaking community, building solely on file-based data. This has also been the method of choice amongst researchers outside of North America (Moeller & Hell, 2003; Långström & Grann, 2002; Viding, 2004). The present study is, to our knowledge, one of the few to have been based on clinical observations as well as files in a Swedish context. Another feature that differentiates this study from previous research is its emphasis on variables that may be ameliorative in the tailoring of future treatments.

Fuelled by the increasingly worrying situation in society today where, on a macro level, the judicial, mental health and social service systems seem to be fighting an uneven battle against crime rate, and where, on a micro level, individuals are fighting their own battles against inadequate treatments and interventions, this study addresses the issue from a more positive stance. The general assumption for this essay is that a thorough validation of psychopathy will facilitate the correct application of the concept, and that the development of appropriate treatments for the young will follow. The authors would like to see the present study as a modest attempt in this direction.

The most commonly used instrument for the assessment of psychopathic traits is *the Hare Psychopathy Checklist* (PCL). One of the strengths of the PCL approach is that the interviewer conducts a thorough review of the participant's records as well as a clinical interview, and is therefore able to contrast these two sources of information (Murrie & Cornell).

The primary goal of the present study is to contribute to the validation of the concept of psychopathy when applied to the sample in this study: young, male, criminal offenders. More explicitly, we explore the correlations amongst psychopathic traits - as they present themselves on the *Psychopathy Checklist: Screening Version* [PCL: SV] (Hart, Cox, & Hare, 1995) - and three specific criminogenic variables collected from client self-reports. These are *sociomoral reasoning*, *aggression type*, and *cognitive distortions*.

To set the scene this thesis starts with a presentation of the concept of psychopathy and its place in history and in society today. Definitions of terms used in this work follow, as does a presentation of methodology and procedure. Following the results section is a discussion of the findings and implications for treatment.

### **PSYCHOPATHY – A BRIEF HISTORY**

Approximately 200 years ago, the concept of psychopathy was introduced by the French physician and psychiatrist Philippe Pinel (1745-1826). Pinel, often referred to as a pioneer in the development of a more humane psychiatry, used the term *insanity without delirium* to describe behaviour that was marked by remorselessness and lack of anxiety (Salekin, 2002).

In early 19<sup>th</sup> century, Dr. Benjamin Rush took Pinel's work a step further. Rush was the founder of America's first psychiatric facility, the Pennsylvania Hospital. There, he was intrigued by one of his patients who seemed to be "addicted to every kind of mischief" and wickedness. Rush formulated a theory on the causes of these odd cases, namely that they "stemmed from a defective organisation in those parts of the body which are occupied by the moral faculties of the mind" (Pinard & Pagani, 2001).

Some thirty years later, in 1835, Scottish physician James Prichard published his book *Treatise on Insanity and other Disorders Affecting the Mind*. He, too, observed the apparent lack of a regulating moral system in some of his patients. He chose the label *moral insanity* to describe his observations. Although Prichard gained respect for his research, the label did not. Instead, the name that was generally accepted came from German psychiatrists around 1890. A contracted version of *psychological pathology* became *psychopathy* (Pinard & Pagani).

The modern concept of psychopathy, however, was put forward by Dr. Hervey Cleckley. In 1941 Cleckley came up with sixteen traits that, in constellation, formed a specific pattern of

behaviour. Among these interpersonal and affective traits were manipulativeness; irresponsibility; self-centeredness; shallowness, and lack of empathy or anxiety. As later research indicated, offenders sharing these traits were also likely to commit more types of crimes; be more violent; more likely to recidivate, and less likely to respond to treatment than were other offenders (Salekin, 2002).

Although Cleckley's definition of psychopathy was included in the *DSM-II*, subsequent revisions consisted largely of behavioural-based descriptions. With the edition of the *DSM-III* in 1980, psychopathy – renamed *Antisocial Personality Disorder* (ASPD) – lost some of its traditional conceptions (Criteria for ASPD and PCL-psychopathy, respectively, is presented below in Table 1). The equivalent diagnosis for use on children is *Conduct Disorder* (CD).

ASPD was supposed to have covered psychopathy, but failed to do so. One of the reasons was a concern that personality traits are difficult to measure reliably, and that it is easier to agree on the behaviours that typify a disorder, than on latent traits. The result was a diagnostic category with good reliability but dubious validity. Most psychopaths meet the criteria for ASPD, but most individuals with ASPD are not psychopaths (Hare, 1996) and only a subset of children with CD also exhibit the interpersonal and affective characteristics of psychopathy (Frick et al., in Viding, 2004). This led to discontent among many clinicians and scholars, who stated that behavioural classifications alone are too narrow and stressed the importance of a personality component to the assessment of psychopathy. An argument in line with this is that when focusing on only the behavioural symptoms one runs the risk of overdiagnosing the prison population with psychopathy, while non-criminals become underdiagnosed (Viding, 2004). Despite conceptual confusion and debate, there is no real disagreement about the fact that psychopathy – however labelled – is a personality disorder. As such, it is:

an enduring pattern of inner experience and behavior that deviates markedly from expectations of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time and leads to distress or impairment

(American Psychiatric Association [APA], 1994).

Inspired by Cleckley, and by the clinically insufficient definition provided by the APA, Dr. Robert Hare developed his *Psychopathy Checklist (PCL)* in the 1980's. In 1991 he completed the revised version that is used today. Hare's definition of the nature of psychopathy is that it is a construct including both an affective/interpersonal dimension (e.g. grandiosity and deceitfulness) and a behavioural/lifestyle dimension (e.g., impulsivity and poor behaviour controls). Taking also the interpersonal and affective features of psychopathy, such as callousness and shallow affect, into consideration has relevance for treatment development and administration (Viding, 2004).

Table 1 Criteria for Antisocial Personality Disorder and Psychopathy	
Antisocial Personality (DSM-IV)	Psychopathy (PCL: SV)
FAILURE TO CONFORM TO SOCIAL NORMS	SUPERFICIAL glib jargon
DECEITFULNESS	GRANDIOSE self assured
IMPULSIVITY/FAILURE TO PLAN AHEAD	DECEITFUL manipulative
IRRITABILITY AND AGGRESSIVENESS	LACKS REMORSE apparent lack of capacity for guilt may appear cold and callous, unable to experience strong emotions
RECKLESS DISREGARD OF SAFETY OF SELF AND OTHERS	LACKS EMPATHY little affective bonding with others
IRRESPONSIBILITY	DOES NOT ACCEPT RESPONSIBILITY rationalizing, minimizing or denying harmful actions
LACK OF REMORSE	IMPULSIVE unstable lifestyle
AT LEAST 18 YEARS OF AGE	POOR BEHAVIOR CONTROLS easily angered or frustrated
EVIDENCE OF CONDUCT DISORDER WITH ONSET BEFORE 15 YEARS OF AGE	LACKS GOALS tends to live "day-to-day", not thinking of the future
THE OCCURRENCE OF ANTISOCIAL BEHAVIOR IS NOT EXCLUSIVELY DURING THE COURSE OF SCHIZOPHRENIA OR A MANIC EPISODE	IRRESPONSIBLE causes hardship or puts others at risk, untrustworthy ADOLESCENT ANTISOCIAL BEHAVIOR Serious conduct problems, frequently in trouble with the law ADULT ANTISOCIAL BEHAVIOR Frequent violation of formal, explicit rules and regulations

The 21st century will probably see an increasing amount of psychopathy. Mc. Williams (2004) suggests that society itself is becoming increasingly more nonchalant towards its inhabitants – the notion of the world as a place where nobody cares - and that this is instrumental in the development of psychopathy in certain individuals. Hare (1993) describes how in recent years, there has been an upsurge in the public's exposure to dramatic accounts of violent crimes and financial scandals. The film and publishing industries portray serial killers, con artists and members of organised crime as if they were accurately diagnosed with psychopathy. Many may very well be psychopaths. Many, however, are not, and this important distinction is often lost on the entertainment industry, the news media and the general public. So, whether the increased frequency of the concept is due to an increase in the number of people actually suffering from the disorder, or whether what we are witnessing are effects constructed by the media, a validation of the concept is equally important.

#### **PSYCHOPATHY IN SWEDEN**

The hysteric builds castles in the air, the psychopath lives in them, and the psychiatrist collects the rent.

These words were not found in a fortune cookie or a Christmas cracker, but in a 1960 Swedish textbook (Blomquist, 1960) on psychiatry. During the following decade the dominant view of psychopathy, and psychopathology in general, was that it should be attributed to society. As a result, psychopathy was renamed sociopathy - a label that gained ground amongst the left wing who claimed that the concept of psychopathy was a middle and upper class construction, designed to oppress and control political dissidents and other free thinking individuals (Näslund, 2004).

Thirty-five years on we are once more using the concept of psychopathy, although (luckily) in less cryptic terms. Martin Grann, psychologist and director of the *Centre for Violence Prevention* (Centrum för Våldsprevention, CVP), refers to the psychopaths as the clinical group surrounded by most myths in psychiatric and criminal settings. He also states that the diagnosis of psychopathy may have become the new “label/diagnosis in fashion”; a successor to Borderline, ADHD and Aspergers syndrome. The psychopathic personality disorder is in fact represented by a small group of people, constituting about 15-20% of the population of serious violent offenders within the Swedish forensic psychiatric and criminal settings

(Psykologtidningen, 2004). To date there is no extensive research on the prevalence of psychopathy in a non-clinical population in Sweden. A qualified estimation based on the prevalence of personality disorders in general in this population, is that it would not exceed 1%. Hare cites approximately the same prevalence of psychopathy in Canada as that of schizophrenia, and for the prison population in North America a quarter of the inmates are diagnosed with psychopathy (Lösel, 2004).

Research presently being conducted by the multidisciplinary group at the CVP at Karolinska institutet in Stockholm is centred on the genetic, neurobiological and psychological components of psychopathic personality disorder. The underlying assumption for this group of prominent Swedish researchers is that "psychopathy" consists of a whole range of distinct sub-groups, each with their own genesis, clinical manifestation and need for group-specific treatment methods (Grann, in Näslund, 2004).

## **DEFINITIONS OF CONCEPTS**

### ***Juvenile Antisociality***

Juvenile antisociality is manifested by an individual "without respect for social norms, if they stand in the way of [that] individual's own impulses and desires" (Egidius, 1997). Criminal acts are relatively common in adolescence. Amongst Swedish youth aged 15-16, a majority reports having committed at least one crime during the last year. Regarding *recurring* criminality the individuals who engaged in repeated criminality constitute a distinct minority. Research has shown that around 5% of all Swedish boys who commit crimes at a young age can later be held responsible for 62% of all crimes committed by 30 year olds. They also commit a disproportional part of the serious crimes. Established criminality in adults is rarely seen without early, that is, before adolescence, signs of antisocial behaviour. Within this group only a minority would be classified as harbouring psychopathic personality traits. These traits could be conceptualised as driving antisocial behaviour, that is, antisocial behaviour is not considered a central diagnostic feature of psychopathy, but rather a consequence of these pathological personality traits (Cooke, 2004). Broadening our understanding of the link between antisocial behaviour and psychopathy would improve our ability to divert children from criminal behaviour (Cooke & Johnstone, 2004).

### ***Juvenile Psychopathy***

In his dissertation on antisocial behaviour in adolescents, Andershed (2002) points out the risk of *not* extending the construct of psychopathy to youth. He suggests that by not differentiating between children who exhibit conduct problems or antisocial behaviour in general, and those showing psychopathic tendencies, one implicitly labels the whole group as psychopathic instead of the minority that actually manifest childhood psychopathy.

In accordance with the above-mentioned controversy regarding psychopathy and ASPD in adults, this confusion in diagnosis is applicable also to youth, although when dealing with this population one speaks in terms of psychopathic personality traits and Conduct Disorder respectively.

In a review by Vincent and Hart (2002) research findings are presented which state that retrospective studies of adults have traced the onset of psychopathic symptoms back to childhood, as young as 6 to 10 years of age. Findings like the above have directed attention to the possibility of assessing psychopathy in children and adolescents. In 2002, Seagrave and Grisso predicted that in the near future “juvenile psychopathy measures [will] become one of the most frequently used instruments in forensic assessments of delinquency cases of any kind” (in Petrila & Skeem, 2003). There is recent evidence that psychopathic-like traits may be identifiable in childhood, although it is premature to talk of psychopathic personality in children as more research is needed (Cooke & Johnstone, 2004). Opponents of assessing psychopathy in youth often build their arguments on questions of validity and ethics. Traditionally, formal diagnoses of personality disorder have been limited to people from 18 years of age. Arguments in favour of keeping this restriction have mainly been addressing the concept of personality development. Personality disorder is a contradiction in terms when applied to a young person, who cannot be said to possess a fully developed personality. Even if personality disorder exists in childhood or adolescence, would it manifest in the same ways as for adult psychopaths? Cooke and Johnstone (2004) argue that, even if psychopathic personality disorder *does* exist before adolescence, it would not manifest in the same way as for adults. For this reason, it is important to establish age-appropriate representations of the key traits of the disorder, and to show that they co-vary in a similar pattern as to that found in adults. Another argument against psychopathy assessment in youth is that adolescence is – normally - a period of ‘Sturm und Drang’, or – as Vincent and Hart (2002) put it:

[...] it is normal for adolescents to experience problems adjusting to their new roles and obligations; this has led some people to suggest [...] that all adolescents are – phenotypically and cross-sectionally – psychopathic.

On the other hand, in favour of the assessment of psychopathy in youth, there is evidence suggesting that youth diagnosed as suffering from CD is, in fact, a heterogeneous category (Skeem, Poythress, Edens, Lilienfeld & Cale, 2003). Several scholars have argued that a select group of youth with serious conduct problems will mature into adults with psychopathic personality disorder. Several studies have developed evidence for the construct validity of measures to assess psychopathic characteristics in adolescents (O’Neill et al., 2003).

### ***Labelling***

If used improperly the diagnosis of psychopathy has powerful destructive potential for the misdiagnosed person (Hare, 1993). Not only is the label itself highly stigmatising, it also bears with it a diversity of potential negative consequences for the individual, ranging from diminishing an inmate’s chances for parole to not receiving adequate treatment. Accurately used, the diagnosis can help guide professionals within the judicial system, mental health care and social services in their decision making concerning appropriate treatments, interventions and placements (Hare, 1993). A serious risk on an individual level is not receiving treatment based on the assumption that this particular individual is untreatable. In countries practising capital punishment, a far more serious consequence of ill-fitting and faulty diagnosis is being sentenced to death where in fact treatment may be warranted.

Werlinder (in Näslund, 2004) concludes that the concept of psychopathy has a derogatory value that probably is unavoidable. However, the practical usefulness of the term should not be underestimated, provided that it is clearly defined. Many researchers and clinicians have suggested the use of the term ‘psychopathic characteristics’ instead of ‘psychopathy’ to avoid stigmatising young people already at risk. Lösel (2004) states that when dealing with young people a thorough assessment is of utmost importance and, to avoid labelling the youngster, one should speak in terms of “enhanced probability” of psychopathy/psychopathic traits and/or criminality. In addition, the stigmatising effects of the term psychopathy would decrease with the recognition of psychopathy as a dimensional and not a categorical concept. Although this seems reasonable, there is some debate concerning whether psychopathy is a dimensional or a categorical disorder. However, it can be argued that there is more

compelling evidence that psychopathy is a dimension rather than a taxon (Andershed, 2002; Lösel, 2004).

The possible negative consequences of labelling must be taken into serious consideration. The stigma attached to the concept is, according to Lösel (2004), greater in Europe than in "The New World", due to the misuse of the concept during the Second World War. On the other hand, an under usage of the diagnosis, for fear of stigmatising the patient, could lead to inappropriate, or no treatment. This is particularly true regarding young people (Johnstone, 2004). Research on child psychopathy should be conducted with great care and caution and meet high standards, in an attempt to counteract the devastating consequences of a misuse of the construct (Cooke & Johnstone, 2004). The ultimate treatment for our young with psychopathic characteristics is far from obtainable, but by validating the concept of psychopathy we might improve our diagnostic competence and tailoring of interventions.

## **CRIMINOGENIC VARIABLES**

### ***Sociomoral Reasoning***

Sociomoral immaturity is an example of a variable that maintains offending behaviour. It has been found to be a risk factor for recidivism in serious violent crime (Stevenson, Hall & Innes, 2003). Within the context of morality and psychopathy, the movie-screen image of the callous, non-empathic psychopath is a well-known archetype. However simplified 'the mainstream bad guy' is portrayed, there is evidence that adult psychopaths do not process others' distress normally, neither do they seem to show reduced sensitivity to punishment. One possible explanation is given by Viding (2004) who suggests that this could be due to poor socialisation and reduced functioning of the amygdala. This dysfunction would then play a key role in the development of certain neurocognitive deficits underlying psychopathy. In short, causing harm (or thinking about it) does not trigger the inhibitory mechanism that should stop the individual from acting out. The appropriate moral socialisation process can therefore not be completed and the individual grows up displaying a diminished sense, or total lack of, empathy. The normative sociomoral development leads to the capacity to experience empathy, guilt and remorse. Haan, Aerts and Cooper (in Cooke & Johnstone, 2004) state that empathy may be a meaningful construct in childhood and relevant to the study of psychopathic-like traits in children.

The dominating theory behind the research on sociomoral development is the one first proposed by Kohlberg in 1963. This model of moral development assumes a three-level construction, each level containing two stages. The levels are: *Preconventional Morality* (with stages 1 and 2, *obedience and punishment orientation* and *individualism and exchange*, respectively), *Conventional Morality* (with stages 3 and 4, *good interpersonal relationships* and *maintaining social order*, respectively) and *Postconventional Morality* (with stages 5 and 6, *social contract and individual rights* and *universal principles*, respectively) (Crain, 2000).

Table 2 Kohlberg's levels and stages of moral development.						
LEVEL	PRE- CONVENTIONAL		CONVENTIONAL		POST- CONVENTIONAL	
STAGE	OBE- DIENCE & PUNISH -MENT	INDIVI- DUALISM & EX- CHANGE	GOOD INTER- PERSONAL RELATION- SHIPS	MAIN- TAINING SOCIAL ORDER	SOCIAL CONTRACT & INDIVIDUAL RIGHTS	UNI- VERSAL PRINCI- PLES

In a normal distribution of young non-offenders, the mean lies within stage 3 and 4 (conventional level). Research on young offenders, however, has shown that the majority scores within the preconventional level (stages 1 and 2), thus demonstrating a sociomoral delay. This kind of research has not yet been focused on young offenders with psychopathic traits (Stevenson et al., 2003).

In the present study the concept of sociomoral reasoning is operationally defined as the response to the items that comprise the *Sociomoral Reflections Questionnaire: Short form* [SMR: SF] (Gibbs, Basinger, & Fuller, 1992).

### ***Aggression***

Aggression is physical or verbal behaviour intended to hurt someone (Smith, 1993). This definition covers two distinct types of aggression: reactive and proactive. Reactive aggression springs from anger, while proactive aggression is a means to reach some other end, for example sex or money.

The research on aggression type and psychopathy is gaining interest. The conventional wisdom and existing research support the notion that psychopathic individuals are prone to

proactive (i.e., premeditated and goal-directed) aggression whereas non-psychopathic individuals commit reactive (i.e., impulsive and expressive) acts of violence (CVP, 2003). In an early study, Williamson, Hare and Wong found that the apparent motive of material gain was significantly more prevalent in the offences of psychopaths than non-psychopaths, whereas high levels of emotional arousal predominated more in the offences of non-psychopaths (in Skeem et al., 2003).

Psychopathic traits and aggression type are two factors assumed to have an impact on the outcome of interventions designed to prevent recidivism. There is an ongoing discussion among scholars and practitioners whether psychopathy is treatable at all, and there is still no definite answer to the question of treatability and change. What seems clear, however, is that these variables are important factors when deciding on appropriate treatment designs (CVP, 2003). If the effectiveness of the interventions is sensitive to different forms of aggression, then the assessment of aggression type will be imperative in guiding the choice of treatment on a case-to-case basis. Research suggests that reactive aggression is suited for skills-training techniques, whereas to achieve change in an individual scoring high on proactive aggression, treatment should focus more on the complex interactions that exist between intrapsychological and interpersonal variables (CVP, 2003).

In the present study aggression type is operationally defined as the response to the items that comprise *the Self-Report Scale on Reactive and Proactive Aggression* (Brown, Atkins, Osborne, & Milnamow, 1996).

### ***Cognitive Distortions***

Black (1999) describes cognitive distortions as “a set of distorted beliefs and attitudes that interfere with an individual's functioning or success in achieving his or her goals”. Our emotions are directly related to what we believe about the situation to which we attribute our emotion (Lundh, Montgomery, & Waern, 1992). Changing our beliefs about the situation will thus affect our emotions. In his description of various cognitive distortions, Aaron T. Beck suggests that the ability to choose our beliefs ultimately gives us complete control over our emotions (Smith, 1993).

In the *How I Think* (HIT) questionnaire (Barriga, Gibbs, Potter, & Leau, 2001), used in the present study, cognitive distortions are subdivided into one or more of four categories:

Assuming the Worst; Blaming Others; Minimizing/Mislabelling and Self Centeredness (Barriga & Gibbs, 1996). When studying an antisocial population, some common cognitive distortions present as *justification*, or the person's belief that his desires are adequate grounds for his actions; *personal infallibility*, the idea that he can do no wrong; and *the impotence of others*, the belief that everyone else's views are irrelevant unless they directly affect the person's immediate circumstances (Black, 1999). The same cognitive distortions, under various labels, are found in the traditional descriptions of the psychopathic personality.

In the present study the concept of cognitive distortions is operationally defined as the response to the items that comprise the HIT questionnaire.

#### TREATMENT AND PREVENTION

"We simply *must* treat. We are duty bound as professionals". These emphatically spoken words of Dr. Stephen Hart (2004) leave no room for hesitation or doubt on the matter. Where there is more disagreement - and to date lack of extensive research - is regarding what treatment to administer.

According to studies by Wong (2004), the wrong treatment will make the psychopathic patient worse. Treatment does not appear to increase empathy in psychopaths and they do not benefit from therapeutic programmes currently on offer (Viding, 2004). In fact, some interventions may well be contra-therapeutic in that psychopaths may well develop better ways of manipulating, deceiving and using people through insight-oriented therapy (Hare, 1993).

In his meta-analysis, Salekin (1999) found that there is little scientific evidence that psychopathy is an untreatable disorder. Results show that the overall proportion of successful intervention for all treatment studies was .62. More than half of the treatments were analytical in their approach. Average success rates of 59% were found. These findings were consistent across age - the patients ranging from 8-55 years - which is interesting given the view that some early analysts had that personality remains relatively stable after the ages of 5-6. Insight oriented therapies may in other words decrease psychopathic traits and the individuals may gain some insight through this approach. Interestingly, the eclectic therapies that *combine* Cognitive Behavioural Therapy (CBT) and insight oriented therapy were the most effective, producing success rates of 86%. This suggests that augmenting CBT with insight therapies

may be optimal. For pure CBT therapies the success rate averaged 62%, giving just a 3 % difference to analytic approaches.

A factor that seems to have effect on outcome is the psychologist-patient contact. This is absent in therapeutic communities and not surprisingly the effects were poor for this type of treatment (25%). A treatment program designed in 1970 addresses psychopathic symptomatology in youth and demonstrated high success rate (88%). Staff involved in this program was selected on their training and ability to deal with this specific age group. When coded for subject age, results showed that a greater proportion of youth benefited from treatment than did adults (.96/.63). Duration classification showed that short term (< 6 months) benefited less than long term (> 6 months). More than 1 year and 4 times/week produced the best result (91%).

Wong (2004) also emphasises the importance of the therapeutic alliance when treating psychopaths and suggests a “risk-reduction” approach, in which programmes are tailored according to the patient’s risk profile, responsivity and needs. Hart (2004), too, advocates individualised treatment programmes – as psychopaths present a heterogeneous symptomatology; differing in age, culture, intelligence etc. and often having comorbid disorders on both Axis I and II – although from a “good lives approach”. The main objective of treatment should be, accordingly, to improve the individual’s quality of life.

Regarding adolescence, when psychopathy seems to be emerging in an adult-like form, there is sparse literature examining treatment efficacy. The few studies that are reviewed suffer from methodological problems, such as poor construct definition, and diverse and often subjective outcome measures. However, the literature on the development of personality and personality disorders suggests that the personality features of psychopathy may not be as ingrained in adolescence as they appear to be in adulthood. One expects a greater degree of plasticity of personality in adolescence. Some research gives indirect evidence for the hypothesis that there is a greater possibility for change and successful intervention for adolescents than adults (Catchpole, 2000). In his recent meta-analysis, Salekin (2002) found that a greater percentage of psychopathic youth benefited from therapy than did adults. Interventions that specifically target criminogenic factors, rather than focusing on general issues, have shown to be more effective in reducing criminal recidivism (Catchpole, 2000). The goal of treatment must, however, be for the individual to lead better life, not only to

reduce the risk of harm to others (Hart).

Little systematic attention has been given to reviewing the evidence for effectiveness of treatment, especially for those who might be presumed to be among the most resistant to treatment (Loeber, 1998). However, between the 8<sup>th</sup>-9<sup>th</sup> of November 2004, the Bergen International Conference on the treatment of Psychopathy was held. Dr. Friedrich Lösel, one of the conference speakers, pointed out that:

[...] ten years ago there would not have been a need for an international conference on the topic, like the one held in Bergen, Norway, in November 2004, where the focus is on the assessment and treatment of the disorder. Today however there is optimism within the practising and academic world concerning treatment of psychopathy [...]

Lösel (2004) suggests that adolescence may be an adequate age for treatment and that intervening earlier may not necessarily be more successful. Prevention and treatment of antisocial behaviour will benefit from knowing the mechanisms of risk for and protection from psychopathy. Targeted treatment for different subtypes of individuals with antisocial behaviour will maximise the chances of successful outcome and ensure that scarce resources are allocated most effectively (Viding, 2004).

#### **THE IKBT+ PROJECT**

In co-operation with *The National Board of Institutional Care* (Statens Institusjonsstyrelse, SiS), researchers from CVP are investigating how the support for young criminal offenders can be improved. During 2004-2005 a new individual treatment program, IKBT+, is being tested on a randomised sample of young men aged 15-22, sentenced to institutional care according to *Closed Institutional Youth Care* (Lagen om Sluten Ungdomsvård, LSU). A research question posed by the IKBT+ researchers is whether the degree of psychopathic traits will modify the outcome of treatment. In this project, tailored cognitive behavioural therapy is paired with interventions geared towards creating a supporting network around the young person on return to his community setting. This network may include family and other relations, teachers, social workers etc.

Our contribution to the project was to conduct a formal interrater reliability examination of the PCL: SV and SAVRY. The authors consider the subjects of risk assessment and the use of

SAVRY to be outside the scope of the present study, hence those results are not reported here.

### **THE SiS INSTITUTIONS**

In Sweden there are six special homes for young people that provide so called *special secure units* for young offenders who have been sentenced by the district courts to secure institutional treatment. Prior to January 1<sup>st</sup> 1999, this group of young delinquents would have served a prison sentence, but to counteract the negative consequences of such a penal environment the sanction system for young offenders was changed. The emphasis within the secure institution is on care and treatment. Five of these homes (in italics) are participating in the project – *Bärby*, Uppsala; *Fagered*, Gothenburg; *Johannisberg*, Kalix; *Klarälvsgården*, Karlstad and *Sundbo*, Fagersta.

Examples of treatments offered by SiS institutions are: Cognitive Behavioural Therapy (CBT), treatments focusing on the development and practising of more functional ways of thinking and acting; Aggression Replacement Training (ART), a program including social skills training, anger management and moral education; Multisystemic Therapy, a program designed for children and adolescents with antisocial behaviour; Functional Family Therapy, a technique in working with unmotivated parents; Insight Oriented Therapy, aiming to increase the client's self-knowledge and relations to others; and Environmental Therapy, focusing on developing and maintaining a stable and nourishing social structure (Näslund, 2004).

### **THE AIM OF THE PRESENT STUDY**

If a measure has high construct validity, it is assessing some theoretical construct well. In order to check the construct validity of a measure it is necessary to make the construct explicit. Further evidence of construct validity can be provided if the measure shows links with tests of related constructs (convergent construct validity) and differs from measures of unrelated constructs (divergent construct validity). In designing the present study, the authors have attempted to make the concept of psychopathic traits in young male violent offenders in Sweden more explicit. In this our ambition, we have examined the degree of psychopathic traits in relation to the three criminogenic variables described above, thus making possible the manifestation of any convergent or divergent results contributing to the understanding and validity of the concept.

The specific variables we have chosen to investigate more closely are *criminogenic*, that is, they are variables that maintain offending behaviour. The three criminogenic variables used in the present study are: sociomoral reasoning, type of aggression, and cognitive distortion, as they manifest themselves in client self-reports. There is research (e.g. Stevenson, et al., 2003; CVP, 2003; Black, 1999) supporting the hypothesis that these factors are linked to the development of criminal behaviour. The authors intend to investigate how these factors correlate with the factors measured by the PCL-SV, indicating psychopathic traits.

It is our belief that there is more to be said on the matter and our hope that early interventions and tailored treatment programs could be a reality not that far from today. By an enhanced validation of the concept, we could get a more nuanced - and hopefully less stigmatising – diagnostic instrument for children and adolescents.

In the present study a formal interrater reliability test of PCL: SV was carried out. To be able to decrease the risk of misdiagnosing and in order to facilitate the design and administration of specific and appropriate treatment programmes for young people with psychopathic traits, it is of great importance to find instruments to aid in these procedures.

## **RESEARCH QUESTIONS AND HYPOTHESES**

Based on previous research concerning sociomoral reasoning (see for example Stevenson, Hall & Innes, 2003); aggression type (see for example Skeem et al., 2003) and cognitive distortions ( see for example Lundh et al, 1992) the following hypotheses were formulated in order to test the research questions posed in this study:

1. What are the relations between the criminogenic variables, measured by the client self-reports, and the psychopathic traits, measured by the PCL: SV?

H 1 There is a negative relation between level of sociomoral reasoning and psychopathic traits.

H 2 There is a positive relation between level of proactive aggression and psychopathic traits.

H 3 There is a positive relation between cognitive distortions and psychopathic traits.

2. What relations are there between the criminogenic variables measured by client self-reports and cognitive, moral and affective groups of items in the PCL: SV?
3. What is the interrater reliability of the PCL: SV in this population of young male violent offenders in Sweden, for total score and factor-wise?

## **METHOD**

The sample size used for answering the first and second research questions was  $N = 40$ . Because of the relatively small sample size, we chose to treat psychopathy unidimensionally when testing the hypotheses, instead of treating psychopathy as a two-factor construct (affective and behavioural). However, when answering our third research question correlation coefficients were calculated on both the total score and the two factors. For this analysis a sample size of  $n = 25$  was used.

The three criminogenic variables chosen from the self-reports are not explicitly measured by the PCL: SV. Therefore, they do not constitute confounding variables and it should be possible to analyse the relations between them and psychopathy. Spearman's rho was used to estimate the correlation between the criminogenic variables and scores of psychopathic traits. Multiple regression analysis was applied to investigate the contribution of the criminogenic variables to the PCL: SV scores.

To answer our second research question, we categorised the PCL: SV items into three groups consisting of "cognitive items", "moral items" and "affective items". We wanted to see how the criminogenic variables correlated with psychopathy scores when only the PCL: SV items that we regarded as possibly measuring the same three areas covered by the three criminogenic variables were extracted and used in the correlation. As we found no empirical foundation for this investigation, we created a "logical model" based on our current understanding of our variables. It was thought that these results would add to the convergent or divergent validity of the concept of psychopathy, as measured by the PCL: SV. As the number of items in each group differed, the mean correlation was calculated for each group, which allowed comparisons of the three groups to be made.

In order to answer our third research question Pearson's Product Moment Correlation (Clarke-Carter, 1997), was calculated, as was Intraclass Correlation [ICC] (SPSS, 2004).

As there is the possibility of overlap amongst the predictor variables (the criminogenic variables) it is not possible to discern merely through correlational analysis to what extent they contribute to the criterion variable (psychopathic traits). Therefore, a multiple regression analysis was conducted to estimate the portion of the variance in psychopathy (PCL: SV) explained by the predictor variables Sociomoral Reasoning, Aggression type, and Cognitive distortion. To estimate the unique contribution to the explained variance offered by each variable, we used the backward deletion technique, thereby investigating the effect of the variable/s when removing the one/s with the least explaining power one at a time.

The  $\beta$  (*beta coefficient* or *standardised regression coefficient*) values are the regression coefficients for the variables after *z*-transformation, that is, converted from their original distribution into one that has  $M = 0$  and  $SD = 1$ . The *R Square* is the overall explanatory power, that is, the amount of variation in the dependent variable explained by the joint variation in all predictor variables. *Adjusted R Square* values indicate the estimated R Square in the population, taking into account the sample size and number of predictor variables (Clark-Carter, 1997; Fleming & Nellis, 2000).

Statistics were computed using the *Statistical Package for the Social Sciences* (SPSS) software programme and a Swedish manual (Aronsson, 1994).

### ***Design***

The present study is based on a correlational design and its sample, a so-called *purposive sample*, consists of the first 40 young men of the baseline assessment to have been completed so far. The authors participated in interviews with 25 of these young men, during a six-month long period in 2004. Those 25 interviews constituted the data used in the interrater reliability test. Data from an additional 15 participants, from the same population (incarcerated young men in Sweden) were obtained from CVP, thus constituting the sample for the first and second research question. This gave a total sample size of  $N = 40$  for the correlation and multiple regression analyses.

A planned 88 young male criminal offenders will take part in the randomised control trial of IKBT + during 2004-2005. The participants are recruited while they are in care at one of five SiS institutions participating in the study. All participants receive the standard treatment offered by the respective institutions. In addition to this treatment, they are individually randomly assigned into the treatment or the control group *after* an initial interview has taken place - the rationale for this being that the standard treatments offered by the institutions vary to a considerable extent. Hence the sample in the present study and in the treatment project (of which the present study is a limited part) consists of young offenders from all five institutions.

### ***Procedure***

During the years of 2004-2005, 88 subjects who fulfilled the criteria listed below were asked by a member of staff at the institution where they were in care if they would like to participate in the ongoing treatment-project. On agreement to participation in the study, written consent was required from the young men themselves and, for those not yet 18 years of age, also from their parents or guardians. The participant then completed the self-report questionnaires that made up the self-report battery used in the study (presented below). If help was required, a member of staff assisted the young man in filling out the questionnaires.

On completion of this stage the young man then met with the research assistant and one of the authors for an interview in which a violence risk assessment and an assessment for psychopathy were conducted using SAVRY and the PCL: SV. Prior to this meeting the raters – the research assistant and one of the authors - collected relevant information about the participant from written documentation available at the institution. This usually included the registration form filled out on admittance to the institution: the ADAD (Adolescent Drug Abuse Diagnosis), court order/s and various files (see below for detailed descriptions).

One of the authors was present at these interviews, independently conducting the same assessment as the research assistant, to measure the interrater reliability of SAVRY (the Swedish version of the instrument had not yet been validated). In the present study, however, interrater reliability based on the PCL: SV was calculated.

The assessment interview itself typically took around two hours to complete and was conducted in a visiting room in the respective institutions. Due to logistic and ethical reasons – more specifically: to avoid creating a sense of crowding from the participant's point of view

– only one of the authors was present during this semi-structured interview, along with the research assistant. When the necessary information had been collected the participant received 100 SEK and was informed that he would receive an additional 100 SEK after his participation in the larger study is fully completed. After the interview the raters completed the SAVRY and PCL: SV scoring, blind to each others' ratings and to the client self-reports, drawing on the information given from the young man during the interview and the information extracted from the written documentation provided.

Participants were notified the following day as to whether they had been assigned to the experiment or the control group.

### ***The Control Group***

The treatment offered to the participants in the control condition consists of the standard treatment offered by the institutions.

### ***The Experiment Group: The IKBT+ Treatment***

The treatment consists of the standard treatment plus one 45 minute one-to-one session per week for 15-20 weeks during which three specific areas are covered: motivation, social problem solving, and cognitive restructuring. An additional three to five follow-up sessions are offered after release. The treatment is implemented towards the end of the young man's sentence to bridge the gap between the institutional setting and his return to the challenges of everyday life.

On discharge the participant is required to once again complete the self-report questionnaires administered at the on-set of his participation in the project. SAVRY and the PCL: SV are not included in this post-treatment assessment. On completion he receives 100 SEK.

### ***Measures***

All instrument used in the project are listed below. The ones used in the present study are described in more detail, that is, examples of items are given.

## CLIENT SELF-REPORTS

### **Sociomoral Reflections Questionnaire – Short Form [SMR: SF]** (Gibbs et al., 1992)

The SMR: SF is an 11-item questionnaire where the participant is presented with 11 social and moral situations and asked to answer questions about the importance of different ways of acting. The participants are also asked to motivate their answers. The questionnaire builds on Kohlberg's theory, but does not include stages 5 and 6 (Postconventional level). Gibbs et al. (1992) report acceptable levels of reliability and validity for the instrument. Examples of items are:

*"Think about an occasion when you made a promise to a friend. How important is it to keep your promises, when possible?"*

*"Generally speaking, how important is it that people tell the truth?"*

*"How important is it that people abide by the law?"*

### **Self-Report Scale on Reactive and Proactive Aggression** (Brown et al., 1996)

A 21-item questionnaire where the participant is asked to choose one of three alternatives (Never/Sometimes/Very Often) concerning 21 different statements. The instrument yields information about two forms of aggressive behaviour (reactive and instrumental) across situations. For example:

*"Fight without reason"*

*"Create disturbance undetected"*

*"Change rules in order to win"*

### **“How I Think” [HIT]** (Barriga et al., 2001)

HIT is a 54-item self-report concerning cognitive distortions. The participant is asked to choose one of 6 alternatives (Do not agree at all/Do not agree/Do not fully agree/Agree a little/Agree/Totally agree) when presented with 54 statements about empathy, aggression, ethics, etc. For example:

*"It's no big deal to lie - everybody does it"*

*"Rules are for other people"*

*"You should offend others before they offend you"*

**Aggressive Behaviour – Sage Baseline Survey** (Flewelling, Paschall, & Ringwalt, 1993).

This is a 16-item questionnaire where the participant is asked to choose one of five alternatives (last month/1-6 months ago/6 months-1 year ago/Over a year ago/Never) concerning different forms of aggressive behaviour across time.

**Youth Self Report [YSR]** (Achenbach, 2001).

A 111-item self-report where the participant is asked to choose one of three alternatives (Not True/Sometimes True/Often True) based on the present situation and 6 months back. The instrument is designed to capture (dimensionally) emotional and behavioural problems.

**Social problem-Solving Inventory for Adolescents** (Frauenknecht & Black, 1995).

A 30-item questionnaire where the participant is asked to choose one of five alternatives (True/Sometimes True/Often True/Very true/Extremely True) concerning social problem-solving skills.

#### ASSESSMENT INSTRUMENTS

**Structured Assessment of Violence Risk in Youth – SAVRY** (Borum, Bartel, & Forth, 2002).

SAVRY is a checklist for structured professional assessments of the risk of violence recidivism. It helps the rater to focus on relevant data from interviews and files in a way that makes the assessment well founded by the best available research. SAVRY builds on an empirical foundation and is based on protocols for violence risk assessment among adults, but the factors are particularly focused on risk among youth. Three areas - historical, social/contextual and individual - cover the 24 risk factors that comprise the instrument. The factors are derived from published research and literature on adolescent development as well as on violence and aggression in youth. Each risk factor is assessed and rated on a three-level scale - low/medium/high - with specific criteria. There are also six 'protective factors': pro-social engagement; strong social support; strong attachments to others; positive attitude to treatment and authorities; strong motivation towards education; and resilient personality, all of which are rated on a 'yes'/'no' basis. The construct validity is good (Långström, 2003).

**The Hare Psychopathy Checklist: Screening Version – the PCL: SV** (Hart et al., 1995).

In 1991, Hare published 'The Psychopathy Checklist-Revised' (PCL-R). The PCL: SV,

published in 1995, is an abbreviated version of the PCL-R that was created to make screening easier and less time-consuming. It is validated for use on both males and females over the age of 16 and can be used in both forensic and non-forensic settings. It is highly correlated with – and has a high validity and reliability similar to - the complete PCL-R. The Hare PCL: SV is a 12-item scale, each assessed individually based on available background information and a semi-structured interview. Each of the 12 items is assessed on a three-level scale (0/1/2). The assessment yields a unidimensional total score, which can be used to help assess the degree to which an individual matches the prototypical psychopath. The instrument also yields two separate scores, based on the assumption that the total score can be further divided into an affective/interpersonal (factor 1) and a behaviour/lifestyle (factor 2) factor (see Attachment). Both reliability and validity have been found to be acceptable (Hart et al., 1995).

#### **OTHER SOURCES OF DATA**

##### **Adolescent Drug Abuse Diagnosis [ADAD]**

The ADAD is a structured interview and registration form that is filled out on admittance to the SiS institution. The interview is meant to provide information about the individual's current situation and problems within nine specific areas: physical health, school, occupation, social life, family, mental health, crime, and use of alcohol and narcotics. The interview also covers earlier placements, background information, and treatment history. On a national and organisational level, the ADAD provides data necessary to describe the group admitted to treatment. On an institutional level, the ADAD serves as a guiding instrument in assessment and treatment planning. On an individual level the ADAD is thought to give the youth increased influence on their own treatment. (www.stat-inst.se, 2004).

##### **Various Documentation**

All available information, which on a minimum level consists of court order/s; various documentation of previous investigations, treatments and placements from local authorities are also used in the assessment.

### ***Participants***

Subjects who fulfil the following criteria are eligible for participation in the ongoing treatment project:

- 1 male
- 2 15-22 years (15-18 at the time of the index crime)
- 3 conviction for any of the following acts of violence: homicide, aggravated assault, robbery, assaulting an officer.
- 4 sentence of at least six months care under the *LSU* act
- 5 four to six months remaining on their sentence (to allow ample time for treatment)

The rationale for the sample selection was that, even though there is considerable need for research concerning young people who commit violent crimes in general, the participants selected for this study are contained within an institutional setting. This allows a sufficiently long period of time for treatment to be implemented, as opposed to the young criminals who are sentenced to more open forms of care or care in the community.

### ***Demographics***

The sample consisted of 25/40 participants aged 16-20 years of age, with an average age of 17 years. The sample formed two relatively equal groups regarding birthplace: 24 were born in Sweden, 16 abroad. This was also true for the distribution of first and second generation Swedes. As is evident from Figure 1 below, the distribution of PCL: SV scores in the sample did not represent a normal curve. This had methodological consequences in terms of statistical methods available to us. See Table 3-4 and Figure 1, respectively, for a numeric and graphical description of demographics.

Age	Frequency	Percent
16	6	15%
17	20	50%
18	12	30%
19	1	2.5%
20	1	2.5%

$M = 17.28, SD = 0.85$

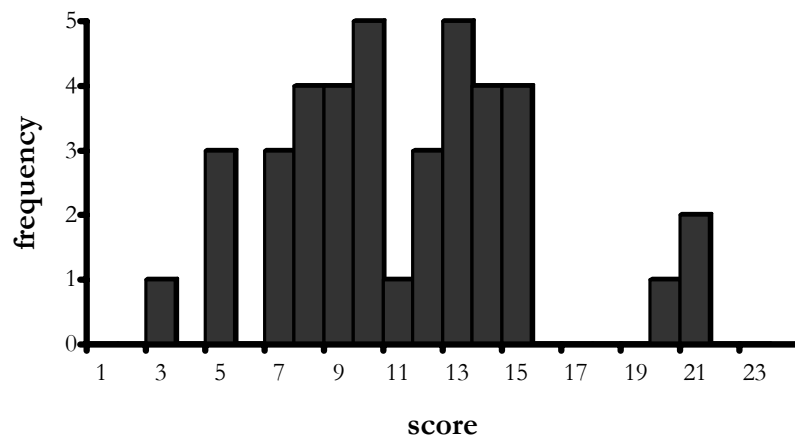


Figure 1. PCL: SV scores.

Index crime *	Frequency	Percent
ASSAULTING AN OFFICER	2	3,5 %
AGGRAVATED ASSAULT	22	38,6 %
ROBBERY	33	57,9 %
HOMICIDE	0	0 %
SUM OF INDEX CRIMES ( $N = 40$ )	57	100 %

\*An index crime is an illegal act for which a participant is sentenced to incarceration.

### ***Exclusion Criteria***

In the original research plan learning disability was not considered a general hindrance to participation. However, as the study proceeded it was decided that varying degrees of learning disability was, in fact, a necessary ground for exclusion. Young female delinquents were not included in the study as there are not sufficiently many in LSU care for it to be meaningful from a research point of view. This does not however reflect the urgency for also this group of youngsters to be recognised and appropriately helped. One area where it is suggested that further research is particularly warranted, is regarding our assessment instruments, as they are

often validated for a male population only and, similarly to what has become evident in recent years within the field of medicine, the symptomatology for a specific diagnosis is often different for men and women (Logan, 2004).

## RESULTS

In order to answer the first research question – what relations exist between the three criminogenic variables specified in the hypotheses and level of psychopathic traits – a set of analyses were performed. To begin with, Spearman rank correlations ( $\rho$ ) were computed. These results are presented in Table 5.

Table 5 Spearman's rho correlations between criminogenic factors and PCL: SV score.		
CRIMINOGENIC FACTORS	PCL: SV	df (n-1)
Sociomoral Reasoning	.01	20
Aggression (Rea+Pro)	.38**	37
Cognitive distortion	.17	39
Proactive Aggression	.31*	37
Reactive Aggression	.25	37

\* $p < .05$  (one-tailed), \*\* $p < .01$  (one-tailed)

The following section will present the results from a series of multiple regression analyses, in terms of significance levels, standardised regression coefficients ( $\beta$ ),  $R$  square, and adjusted  $R$  square. The results are presented numerically below, in Tables 6-9.

Table 6					
Selected results from a standard multiple regression using criminogenic variables as predictor variables and PCL: SV as criterion variable.					
VARIABLE	B	Sig.	$R^2$	Adjusted $R^2$	df (n-1)
Aggression type	.45	.02*	.17	.09	37
Sociomoral reasoning	.12	.46			20
Cognitive distortions	.06	.76			39

As Table 6 shows, aggression type stands for the only significant value. With a standardised coefficient of .45, aggression type is the main explaining variable of the 16.7% that is accounted for by all three criminogenic variables.

Table 7					
Selected results from a statistical multiple regression using backward deletion technique. Cognitive distortions extracted.					
VARIABLE	$\beta$	Sig.	$R^2$	Adjusted $R^2$	df (n-1)
Aggression type	.42	.01*	.16	.12	37
Sociomoral reasoning	.13	.41			20

When removing the smallest contributor (cognitive distortion), aggression type still holds a significant value. The total percentage of explained variance has decreased with 0.3 %.

Table 8					
Selected results from a statistical multiple regression using backward deletion technique. Cognitive distortions and Sociomoral reasoning extracted.					
VARIABLE	$\beta$	Sig.	$R^2$	Adjusted $R^2$	df (n-1)
Aggression type	.38	.02*	.15	.12	37

When deleting the next smallest contributor (sociomoral reasoning), aggression type maintained a significant value. The total percentage of explained variance, however, decreased by 1.6%. This indicates that sociomoral reasoning could be a modest, but nonetheless a less important, contributor to the explained variance in PCL: SV scores.

Presented below (Table 9) is the separate multiple regression analysis made for aggression type, dividing the variable into the two subtypes: proactive and reactive aggression.

Table 9					
Selected results from a multiple regression using Proactive and Reactive Aggression type as predictor variable and PCL: SV as criterion variable.					
VARIABLE	$\beta$	Sig.	$R^2$	Adjusted $R^2$	df (n-1)
Proactive Aggression	.09	.26	.11	.06	37
Reactive Aggression	.67	.23			

As is evident from Table 9, proactive aggression got the highest  $\beta$ -value. However, none of the variables reached significance.

As Tables 5 to 9 show, only one of the three hypotheses (H2) was accepted. In other words, our data suggests a positive relation between psychopathic traits and level of proactive aggression. The correlation coefficient of .31 is significant at the .05 level. With regards to the two remaining hypotheses, these were rejected. Thus, that there is a negative relation between psychopathic traits and level of sociomoral reasoning (H1), gave a non-significant negative correlation of .01. Further, that there is a positive relation between psychopathic traits and cognitive distortions (H3), gave a non-significant positive correlation of .17. Worth mentioning, though, is that all correlations (however non-significant) follow the expected direction.

A final correlational matrix was created, building on the logical assumption that criminogenic factors would reveal some convergent and divergent validity properties of the PCL: SV when correlated with specific items. This was done in an attempt to discern patterns indicating

convergent and/or divergent validity. Results show significant correlations between: sociomoral reasoning and moral items and cognitive items, respectively; proactive aggression and moral items and affective items, respectively; reactive aggression and moral items and affective items, respectively; and cognitive distortions and affective items. Significance levels have been relaxed to the 0.10 level (www.statsoft.com, 2004). These results are presented below, in Table 10.

Table 10  
Spearman’s rho correlations: Specific PCL: SV items and criminogenic variables.

CRIMINOGENIC FACTORS	PCL: SV ITEMS										
	MORAL ITEMS <sup>1</sup>			r/3	AFFECTIVE ITEMS <sup>2</sup>		r/2	COGNITIVE ITEMS <sup>3</sup>		r/2	df (n-1)
	3	4	5		7	8		2	6		
<b>SOCIOMORAL REASONING</b>	.281	.130	.292	<b>.23</b>	.177	.044	<b>.11</b>	.237	.297	<b>.27**</b>	<b>20</b>
<b>PROACTIVE AGGRESSION</b>	.177	.312	.254	<b>.25</b>	.261	.294	<b>.28**</b>	.181	.102	<b>.14</b>	<b>37</b>
<b>REACTIVE AGGRESSION</b>	.190	.270	.212	<b>.22</b>	.145	.307	<b>.22</b>	.248	.072	<b>.16</b>	<b>37</b>
<b>COGNITIVE DISTORTIONS</b>	.127	.122	.203	<b>.15</b>	.350*	.192	<b>.27**</b>	.115	.088	<b>.10</b>	<b>39</b>

\*\* $p < .05$ .

<sup>1</sup> PCL: SV items 3: *Deceitful*; 4: *Lacks Remorse*; 5: *Lacks Empathy*.

<sup>2</sup> PCL: SV items 7: *Impulsive*; and 8: *Poor Behavior Controls*.

<sup>3</sup> PCL: SV items 2: *Grandiose*; and 6: *Does not Accept Responsibility*.

To clarify the results in Table 10, sociomoral reasoning and proactive/reactive aggression all appear to correlate with “moral items”. Note, though, that since the alpha level was relaxed to .10, there is a somewhat higher risk of making Type-1 errors.

Regarding “affective items”, all variables seem to correlate significantly, except for sociomoral reasoning. “Cognitive items” received the fewest significant results, correlating solely with sociomoral reasoning.

Regarding the third research question - the interrater reliability of PCL: SV, both total score and factor-wise – we found ICCs of .81 for total score, .81 for factor 1 and .68 for factor 2. All of these results were significant at the .001 level (see Table 11).

Table 11				
Intraclass correlation coefficients and Pearson <i>r</i> for interrater reliability. PCL: SV total score.				
	ICC	sig	<i>r</i>	df (n-1)
Total score	.81	.001	.86	39
Factor 1	.81	.001		39
Factor 2	.68	.001		39

## DISCUSSION

The overall results of this study indicate that: a) proactive aggression correlates positively with psychopathic traits, and explains a relatively small, but significant, portion of the variance; b) both sociomoral reasoning and cognitive distortions present trends when correlated with psychopathic traits; c) High agreement was achieved for interrater reliability scores, both for total and factor scores.

### *Sociomoral Reasoning*

Regarding the first hypothesis; that there is a negative correlation between sociomoral reasoning and psychopathic traits, the results were not significant, hence the hypothesis was rejected. There are a number of possible explanations for this result. Firstly, the non-significant result could quite simply be due to a faulty hypothesis. Secondly the small sample size – a speculation that received support when a low power was calculated. As literature on statistics suggests (see for example Fleming & Nellis, 2000; www.statsoft.com, 2004), it could very well be that weak correlational results like these present trends would be statistically significant if based upon a large enough sample.

The attrition in this particular test was relatively high (as opposed to the other self-reports, where there was none) which may also have weakened the results. Thirdly, self-reports may not be the ideal measure for this variable in this sample, where factors other than psychopathy, such as low motivation, low attention span, difficulties in literacy skills, and plain boredom, may contribute to the low frequency of scorable reports. This may be relatively easily corrected by well-informed staff assistance to the participant. In a standard multiple regression, sociomoral reasoning was the second largest contributor to PCL: SV scores.

The multiple regression analysis showed that a substantial portion of the variance in psychopathic traits can be explained by the presence of sociomoral reasoning, although this variable showed a weak correlation with PCL: SV scores (.01).

The correlation matrix yielded significant results when correlating sociomoral reasoning with the group *moral items*. This is hardly surprising and may add to the convergent validity of the PCL: SV. What is harder to explain is the even more robust correlation of this variable with the items grouped together as *cognitive items*. We speculate that this could be due to the low validity of the cognitive item group. The items in this group (item 2; *egocentric and grandiose* and item 6; *lack of responsibility*) may not be adequate measures of cognitions.

### ***Aggression type***

We hypothesised that a high degree of psychopathic traits would correlate positively with a high degree of proactive aggression. The results yielded statistically significant support for the hypothesised positive relation between psychopathic traits and proactive aggression: the higher the score on the PCL: SV, the higher the score on proactive aggression. These results support previous research; proactive aggression is an important feature of the psychopathic makeup. Our strong results may also be accounted for by the fact that this sample may find it easier to report their own overt behaviour, rather than their cognitive and emotional schemas. As expected, the multiple regressions showed that aggression type was the strongest predictor of psychopathic traits.

When comparing reactive and proactive aggression we found that in accordance with previous research (CVP) proactive aggression is a larger component of psychopathy than is reactive aggression. In order to examine eventual collinearity between the two, proactive and reactive aggression were entered as the predictor variables. Not surprisingly, it came out as the largest contributing predictor variable to psychopathic traits in this study. When correlations were computed between the two predictor variables reactive and proactive aggression, respectively, and the three groups both variables correlated significantly with the moral items and the affective items groups.

Although no directionality is proposed for the correlations in the matrix, aggression type could be seen as the sole overt behaviour amongst the three criminogenic variables, and as such, could possibly be driven by underlying moral, affective or cognitive processes and/or

functions. If this assumption is correct, the low correlations seen in the cognitive items group are somewhat surprising; a person's cognitions would surely play an important role in the planning and execution of, at least, proactive aggression.

Reactive aggression, on the other hand, could be expected to correlate stronger with the affective items group, as this group consists of two items that describe overt behaviours; item 7—*impulsivity* and item 8—*poor behaviour controls*, although, in this particular sample, this did not receive support. Neither of the aggression types correlated significantly with the cognitive items group, which leads to speculations concerning treatment targets.

Several of the participants expressed frustration over that they did not feel that they were receiving any treatment whilst incarcerated. This was somewhat surprising as *all* the participants received, at a minimum, the standard treatment offered by the institution. Such treatment could for example include anger management programmes, in which there is a focus on the conscious, cognitive processes that precede overt expressions of the individual's feelings of anger. As this sample's overt and often violent expressions of anger correlate to a higher degree with items thought to measure manifestations of affect rather than cognitions, maybe anger management programmes should target the emotional components behind violence, as well as the thoughts that accompany them? Maybe the view of psychopathy as "untreatable" stems from treating aggression as a unity, when – as is evident from a body of literature – it is, in fact, two distinct categories, each with its own qualities. Perhaps a focusing on more specific variables and the development of more targeted interventions would improve treatment outcomes?

### ***Cognitive distortions***

The correlation between psychopathic traits and cognitive distortion was found to be non-significant, but positive: the higher the degree of psychopathic traits, the higher the degree of cognitive distortions. Accordingly, this hypothesis was rejected, although, just as with sociomoral reasoning, there seems to be a trend in the hypothesised direction. It could be that cognitive distortions, as measured by HIT, are not particularly important for the understanding of psychopathic traits. The multiple regression analysis revealed that cognitive distortion was indeed the weakest predictor of PCL: SV scores. The limited data do not permit us to draw conclusions as to whether this is due to methodological issues - such as small sample size and choice of statistics - or to the variable *per se*. In the correlation matrix, low

effect sizes were produced for correlations between cognitive distortions and the “moral” – and “cognitive items” groups. As mentioned earlier, the expected direction of these relationships have not been specified, but in line with cognitive and behavioural theories, cognitions are thought to drive and regulate emotions and behaviours; a line of reasoning that could add to the understanding of the strong correlation between cognitive distortions and affective items.

### ***Interrater Reliability***

The results showed that the individual raters’ use of the psychopathy checklist is similar. That is, the scores are around .80. What is somewhat surprising is that the scores of the behavioural aspects of psychopathy received lowest agreement (.68) as the behavioural qualities, comprising factor 2, have traditionally been thought of as easier to agree upon (Hare, 1996).

This could be attributed to the raters’ different theoretical and clinical experience. As the research assistant has extensive knowledge of the instrument, but limited clinical experience, it is conceivable that her frame of reference differs somewhat from the second rater’s. She is a graduate student of clinical psychology, and not unfamiliar with a clinical setting as she has received training in treatment. This may be a disadvantage within the context of assessment, since this could contribute to a tendency to over-interpret the information given by the participant.

On the other hand, relying only on the item content does not offer sufficient guidance for distinguishing between normal and pathological adolescent behaviour. This period in an individual’s life can be seen as one of ‘Sturm und Drang’ (Vincent & Hart, 2002). Some of the items in question may leave room for subjective interpretation, where one rater might see age appropriate behaviour, whereas the other rater perceives pathological impulsivity. Needless to say this has important implications for validity and reliability of the instrument for use on this sample.

Cooke and Johnstone (2004) suggest that there may be a need for a reconstruction of our instruments, adding developmentally informed items to the assessment tools used for adolescents. Their assumption is, that in making valid assessments of psychopathic traits in the young it should be recognised that the latent trait being measured can, depending on age,

manifest itself in different ways and behaviours.

#### **LIMITATIONS OF THE STUDY**

The present study is part of the program requirements. As such, it presents with a number of limitations due to the time and resources available. One significant consequence of these limitations is that it simply is not possible to have a very large sample. Correlational analyses, in particular, have very low power when samples are small. In this our study, one can suspect that part of the results' modesty can be attributed to sample size.

Concerns regarding reliability and validity apply to all three-item groups used in the correlation matrix (depicted in Table 9). As the authors arbitrarily grouped together items that were thought to measure moral, affective and cognitive traits respectively we cannot be certain to have controlled all confounding variables in the selection of the items.

We regret not being able to study the two factors of the PCL: SV separately. Computing separate correlations between our three criminogenic variables and factor 1 and factor 2, respectively, would perhaps have given more insight into the manifestations of psychopathic traits in our sample.

#### **TREATMENT**

Do our results indicate any direction for treatment engineering? No, not significantly at any rate – except for the proactive aggression type. But that piece of knowledge does not automatically give us any guidance regarding the best use of it. Maybe the view on psychopathy as untreatable would, as mentioned above, be altered if we managed to treat this facet of psychopathy separately and effectively. In many existing group treatments for anger management no differentiation is made between the two aggression types. Aggression is seen as an entity and this inevitably reflects in the analysis of treatment outcome. In practice this could mean that the decrease in frequency of a person's manifest aggressivity may exist without there being any *real* change. As mentioned earlier, several of the young men that we met, asked for “real treatment” – was it change on a deeper, emotional level they meant? Further investigation into this may help guide researchers and practitioners in their work with these youngsters.

## **IMPLICATIONS AND REFLECTIONS**

The starting point for this thesis was an ethical concern about the stigmatising effect of applying the concept of psychopathy to young people. We had hoped to produce data that would aid in the important and difficult task of making adequate assessments in this area. Unfortunately, we cannot say to have added to the intended validation in any considerable way. However, it is our hope that by merely studying the phenomenon and reporting the findings, we can counteract some of the fear of approaching this particular disorder that exists amongst clinicians and the general public. It is completely understandable that practitioners are overly restrictive in applying this label, but one does not solve the problem by pretending it does not exist. We have to accept that we are seeing these traits as overt manifestations, and our only option is to validate our beliefs and instruments so that they fit our young clients. Neither results such as those presented here, nor the fear of labelling should put us off this task, although it must be executed with great caution as we await a broadened understanding.

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