Literature Review Evaluating the Effectiveness of Correctional Programming for Psychopathic Offenders

by

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Dedication

For my grandfather, who sadly passed away during my undergraduate degree, I often think of you and wish I could share this with you. Also to Kennedy, my amazing niece, who has taught me the importance of life balance--I have learned so much from being your aunt.
Abstract

The effectiveness of interventions to reduce recidivism in psychopathic offenders has been represented extensively in the literature. Previously it has been thought that psychopaths are beyond rehabilitation—a viewpoint that has affected therapist perception of offenders as well as public opinion. Additionally, the definition of psychopathy has encountered much debate and is often confused with Antisocial Personality Disorder (APD). This overlap has created implications in the treatment of psychopathic offenders. The purpose of the current literature review is to alleviate the confusion about the definition of psychopathy as well as provide a summary of the empirical evidence of the effectiveness of current psychopathic offender rehabilitation. Numerous online databases and other academic sources were used to locate relevant information including PsychINFO, PsychARTICLES, PsychBOOKS, ERIC, and the Criminal Justice Collection. Academic textbooks and the Correctional Service Canada website were also used as supporting literature. Despite the negative view of psychopathic criminals, adherence to the risk-need-responsivity model (RNR) has shown promise in reducing recidivism rates for this population. Awareness of the responsivity challenges associated with psychopathic offenders can facilitate more effective programming. Additionally, the debate of psychopathy as a taxon and the validity and reliability of the widely used Psychopathy Checklist—Revised (PCL-R) are discussed. Empirical studies support the use of cognitive-behavioural therapy (CBT) or CBT-based programming in rehabilitating this unique population. Uses of this modality, particularly in sex offender populations, show promising results in reducing the severity of crime as well as increasing the length of time for reoffences to occur. Recommendations for future research include evaluating the effectiveness of programs that adhere strictly to the RNR model for psychopathic offenders and the development of a program specifically for this population.
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Chapter I: Introduction

The issue of whether psychopathic offenders benefit from treatment has been a topic of discussion in the literature. There are multiple meta-analyses and original empirical studies that review the treatment of psychopathic offenders (Abracen, Looman, & Langton, 2008; Harris & Rice, 2006; Olver, Lewis, & Wong, 2013; Polaschek & Daly, 2013; Skeem, Monahan, & Mulvey, 2002;). Psychopathic offenders represent 15-25% of the federal inmate population in Canada, compared to 1% of the general population (Porter, Birt, & Boer, 2001). This statistic highlights the importance of programs that are effective for psychopathic offenders (Forth, Brown, Hart, & Hare, 1996).

Studies conducted in the mid-to-late 1990s indicated that programming that focused on problem-solving, identifying cognitive distortions, and challenging schemas reduced violent recidivism by 86% (Serin & Preston, 2007). Current information suggests that psychopathic offenders are more likely to commit violent crimes and have a higher risk of reoffending than non-psychopathic offenders (Berkout, Gross, & Kellum, 2013). While specific characteristics of psychopathy will be detailed in Chapter II, it has been suggested that certain traits of psychopaths make it possible to deceive others into thinking treatment gains have been made (Hobson, Shine & Roberts, 2000). As well, psychopaths are often marked by a lack of empathy, which may contribute to their risk for reoffending (Andrews & Bonta, 2015). Psychopathy and reoffending will be discussed in more detail in Chapter II.

Corrections Service Canada (CSC) has implemented several programs for offenders that focus on cognitive-behavioural techniques and include aspects that have shown promise in rehabilitating violent and psychopathological offenders (Government of Canada, 2014). CSC currently offers correctional programming that addresses the following areas: violence, family violence, substance abuse and use, community maintenance, and sexual offences (Government of Canada, 2014). These areas are all included under the Integrated Correctional Program Model (ICPM) (Government of Canada, 2014).

Additionally, an abundance of research supports the use of the Risk, Need, Responsivity (RNR) model (Bourgon & Armstrong, 2005; Beyko & Wong, 2005; Skeem, Polaschek, & Manchak, 2015; Mitchell, Wormith, & Tafrate, 2016). Andrews and Bonta (2015) developed the RNR approach and assert its use in corrections, stating that such an approach improves treatment outcomes for offenders. The risk principle maintains that the level of intervention given to offenders should match their risk level (Andrews & Bonta, 2015). Therefore, high-risk offenders should receive the most intense level of service. There is evidence to support that matching high-intensity interventions with low-risk offenders results in an increase in recidivism rates (Andrews & Bonta, 2010; Andrews & Bonta, 2015; Michel & Stys, 2014; Skeem, Steadman & Manchak, 2015). The need principle outlines the necessity to implement programs that address criminogenic need. Criminogenic needs are divided into dynamic and static risk factors identified as contributing to criminal activity (Andrews & Bonta, 2015). Dynamic risk factors are those that are changeable, while static risk factors cannot be altered (i.e. age of first crime) (Andrews & Bonta, 2015). These factors are developed from The Central Eight and divided into The Big Four and The Moderate Four (Andrews & Bonta, 2015). The Big Four identifies a history of “antisocial behaviour, antisocial personality pattern, antisocial cognition, and
antisocial associates” (Andrews & Bonta, 2015, p.58). *The Moderate Four* risk factors consist of “family/marital circumstances, school/work, leisure/recreation, and substance abuse” (Andrews & Bonta, 2015, p.59). By matching treatment targets to deficits in these dynamic risk factors, treatment outcomes are enhanced. Finally, the responsivity principle focuses on considering the strengths and challenges of each individual, and delivering interventions in a way that addresses these needs (Andrews & Bonta, 2015). In doing so, treatments are developed using cognitive behavioural principles and social learning theory and take into consideration the strengths and abilities of the individuals receiving treatment (Andrews & Bonta, 2015). Specific responsivity factors may include motivation, intelligence, learning style, and mental health issues. Therapeutic rapport and setting may have an impact on responsivity factors (Andrews & Bonta, 2015). The responsivity principle holds that there are several factors, besides the program itself, that influence the effectiveness of an intervention. This approach has been widely accepted by CSC and is an influencing factor in the development and implementation of programs (Correctional Programming, 2014).

**Scope of the Thesis**

Correctional programming needs to adhere to the most empirically sound treatment practices in order to be effective (Leschied, Bernfeld, & Farrington, 2001). This highlights the importance of evaluating and adapting correctional programming to determine its effectiveness. Unique responsivity factors associated with psychopathy should be addressed in programming.

The current thesis incorporates and summarizes seven core components of existing literature with respect to psychopathic offenders. The first chapter consolidates the immense history of psychopathy, the evolution of the definition of psychopathy, and the comparison of antisocial personality disorder. Additionally, the first chapter adds to the current debate on the presence or absence of a psychopathic taxon, which directly impacts the effort of rehabilitative practices. The Hare Psychopathy Checklist Revised (PCL-R), the premier measure used in assessing psychopathy, is evaluated for its validity and reliability across multiple populations and racial backgrounds to substantiate its wide use. Other components that are reviewed include psychopathy and the likelihood of recidivism; correctional programming currently offered to psychopathic offenders in Canada; the effect that completion of treatment has on psychopathic offenders upon release; and acknowledging responsivity issues in programming. To date, empirical evidence suggests a reduction in the severity of crimes that psychopathic offenders commit after completion of appropriate treatment. The results of extensive research studies and previous literature reviews are evaluated, compared, and contrasted, and consequentially offer recommendations for future research.

**Rationale for the Thesis**

Empirically valid treatments are a necessity for all offenders, including the psychopathic offender, in order to ensure the effectiveness of treatment (Leschied et al., 2001). Additionally, clinical understanding of the construct of psychopathy and the distinction between it and antisocial personality disorder is important in determining specific needs of the psychopathic offender. Assessment tools should be relevant, reliable, and valid. To date, there are several studies that evaluate the effectiveness of reducing recidivism rates in psychopathic offenders (Olgoff, Wong, & Greenwood, 1990; Ready, Kearns, & DeGue, 2013; Salekin, Worley, & Grimes, 2010). The current literature review will discuss research related to psychopathy and effectiveness of correctional programming for psychopathic offenders.
Chapter II: Literature Review

Over the course of history, the definition of psychopathy has changed multiple times which has elicited confusion among society and professionals (Arrigo & Shipley, 2001). To properly assess, treat, and support offenders, a clear distinction must be made between antisocial personality disorder (APD) and psychopathy. Understanding the evolution of the construct of psychopathy can provide insight into the development of the present definition.

History of Psychopathy as a Construct

The construct of psychopathy was first described in the early 1700s as a ‘disease of the mind’ (Werlinder, 1978; as cited in Hervé, 2003). The behaviour of psychopaths was believed to be a derivative of ‘evil forces’ (Werlinder, 1978; as cited in Hervé, 2003). It was not until the 1800s that the antisocial behaviour of these individuals was thought to have a different origin (Hervé, 2003). The term has evolved significantly, starting in 1801 with Pinel and what he classified as “manie sans delire” or, mania without delirium (Werlinder, 1978; as cited in Hervé, 2003). Pinel described those with “manie sans delire” as individuals who continued to engage in harmful behaviour despite negative consequences. (Werlinder, 1978; as cited in Hervé, 2003). He commented that these individuals often knew their actions were irrational; a critical distinction between this classification and others that identified similar symptoms (Werlinder, 1978; as cited in Hervé, 2003). Rush (1812; as cited in Hervé, 2003) coined the term “moral derangement” and described these individuals as having “intact intellect but engage[ing] in disruptive social behaviour from an early age and lack[ing] remorse or guilt” (p.14). These characteristics remain in the current construct of psychopathy.

Prichard, in 1835, provided a meaningful contribution to the construct of psychopathy (Craft, 1966; as cited in Hervé, 2003). Prichard’s work is credited as being the first that developed an complete definition of psychopathy, which he termed “moral insanity” (Craft, 1966; as cited in Hervé, 2003). The biggest challenge at this juncture was that these terms could be used to describe individuals with different mental illnesses. The development of the definition continued throughout the 1800-1900s (see Appendix B), the most influential being the work of Cleckley in the 1940s (Hervé, 2003). His work, The Mask of Sanity developed a definition that distinguished the construct of psychopathy from other clinical or biological disorders. He provided an introduction of 16 characteristics he deemed to be specific to psychopathy.

1. “superficial charm and good intelligence”
2. “absence of delusions or other irrational thinking”
3. “absence of nervousness or psychoneurotic manifestations”
4. “unreliability”
5. “untruthfulness and insincerity”;
6. “lack of remorse or shame”
7. “inadequately motivated antisocial behaviour”
8. “poor judgement and failure to learn by experience”
9. “pathologic egocentricity and an incapacity for love”
10. “general poverty in major affective reasons”
11. “specific loss of insight”
12. “unresponsiveness in general interpersonal relations”
13. “fantastic and uninviting behaviour with drink and sometimes without”
14. “suicide rarely carried out”;
15. “sex life impersonal, trivial, and poorly integrated”

These specifications made it possible to differentiate psychopathy from other personality disorders and focused primarily on antisocial behaviour deemed crucial for criminal behaviour (Hervé, 2003).

The personality construct of psychopathy was recognized in the Diagnostic and Statistical Manual 1st Edition (DSM-I) in 1952 which attempted to clinically define the earlier work of Cleckley (Crego & Widiger, 2015). Despite this attempt, confusion persisted as the DSM-I definition overlapped between psychopathy and APD (Polaschek, 2015). Specifically, the DSM-I outlined traits of psychopathy with the label “sociopathic personality disturbance, including such characteristics as lack of loyalty, empathy, and responsibility” (Crego & Widiger, 2015). Cases previously diagnosed as “constitutional psychopathic state” or “psychopathic personality”, were included under this generic definition. When the DSM II was released in 1968, the term psychopathy was not included, and only included under the diagnostic criteria for “antisocial personality” (Crego & Widiger, 2015). This definition, of an individual who displays callous, selfish, and repeated illegal activity, was more similar to Cleckley’s original interpretation of a psychopath (Crego & Widiger, 2015). Deviant criminal behaviour was not a necessary criterion in meeting diagnostic standards (APA, 1968; as cited in Crego & Widiger, 2015). The DSM-III made some significant changes with regard to personality disorder diagnoses, but failed to include several of Cleckley’s personality traits (Crego & Widiger, 2015). However, the establishment of the Psychopathy Checklist (PCL) in the same year (1980), helped provide a clearer distinction between APD and psychopathy by omitting the need for a conduct disorder diagnosis as an adolescent (APA, 1980; as cited in Crego & Widiger, 2015). Additionally, a revision of the DSM-III (DSM-III-R) included several criteria taken from the PCL to help psychologists distinguish between APD and psychopathy.

The DSM-IV (1994) eliminated several behavioural characteristics of APD in an attempt to prevent an overlapping definition of psychopathy and APD (Crego & Widiger, 2015). The DSM-5 (2013) reviewed the works of Hare on the Psychopathy Checklist Revised (PCL-R), Cleckley, and previous editions of the DSM to develop a “hybrid model of psychopathy” (Crego & Widiger, 2015). This model included the diagnostic criteria for APD and combined traits of psychopathy identified on the PCL-R. The only reference to the term psychopathy in the most current diagnostic manual is the inclusion of psychopathic traits, deemed as a “psychopathy specifier” (Few, Lynam, Maples, MacKillop, & Miller, 2014).

The Triarchic Psychopathy Measure (TriPM) is a paradigm that may decrease the confusion of psychopathy (Crego & Widiger, 2015). The TriPM is comprised of three traits, boldness, meanness, and disinhibition--which overlap with Cleckley’s original 16 traits. Boldness is used to describe the low anxiety and frustration level experienced by individuals (Patrick, Fowles, & Krueger, 2009; as cited in Polaschek, 2015). This trait permits the absence of stress and pressure, portraying a calm, collected, and composed individual who is indifferent to consequence (Patrick et al., 2009; as cited in Polaschek, 2015). Patrick et al., (2009; as cited
in Polaschek, 2015) explained that exerting power over others, and displaying a lack of remorse and empathy, highlights the chaotic trait of ‘meanness’. Finally, disinhibition is the psychological capability to forego responsibility, seek immediate gratification (often through substance use); ignore consequences; and react impulsively (Patrick et al., 2009; as cited in Polaschek, 2015).

**Psychopathy Subtypes**

Hervé (2003) not only consolidated the various definitions of psychopathy, but also identified several subtypes of the construct (see Appendix C) with the most influential subtypes deriving from more current definitions of the concept. The first major factors of psychopathy (identified by Hare in 1988) classified psychopaths on either Factor 1 (Interpersonal/Affective) or Factor 2, relating to antisocial lifestyle (Hervé, 2003). Hare (1991; as cited in Crego & Widiger, 2015) describes Factor 1 as determining overt behavioural components of psychopathy, such as “selfish, callous, and remorseless use of others” whereas Factor 2 identifies components of a “chronically unstable and antisocial lifestyle” (p. 38). Analyses conducted by Bolt, Hare, and Newman (2002; as cited in Hervé, 2003), using Item Response Theory (IRT), identified that psychopathy can be labelled as hierarchical, and consequently developed a three-facet, structure of psychopathy (Cooke & Michie, 1997; as cited in Hervé, 2003). In this interpretation, psychopathy is labelled as the predominant factor, with interpersonal, affective, and lifestyle labelled as facets (Cooke & Michie, 1997; as cited in Hervé, 2003).

More recently, Hare (2002; as cited in Hervé, 2003) introduced the four-facet, hierarchical model of psychopathy. This model was established from 18 items in PCL-R (two items were removed through factor analyses). After confirmatory factor analyses were conducted, Hare identified psychopathy as the superordinate factor; interpersonal/affective and behavioural as the two subordinate factors; and interpersonal, affective, lifestyle, and antisocial as an additional four subordinate factors (Hare, 2002; as cited in Hervé, 2003). Hare’s (2002; as cited in Hervé, 2003) four-facet model differed from Cooke and Michie’s in the addition of the antisocial facet. Hervé (2003) commented that the facets of interpersonal, affective, and lifestyle are not distinct from one another when analyzing the three-facet/four-facet models, but that the affective facet is the most crucial in distinguishing psychopaths from other inmates.

**Biological Indicators of Psychopathy**

Along with behavioural characteristics and personality traits, there are biological indicators of psychopathy. Neurological deficits in the amygdala, prefrontal cortex, and grey matter have been prevalent in MRI scans of psychopathic individuals (Thompson, Ramos, & Willett, 2014). The amygdala, responsible for “emotional processing, emotional reactions and the formation of emotional memory” has been shown to have reduced dimensions in individuals diagnosed with psychopathy (Thompson et al., 2014, p.488). The prefrontal cortex is responsible for emotional regulation and connects affect and behaviour (Thompson et al., 2014). Gregory et al., (2012; as cited in Thompson et al., 2014) discovered that a deficit in grey matter was only prevalent in offenders that had the additional diagnoses of psychopathy.

Irregularities in some neurotransmitters have also related to psychopathy. Buckholtz et al. (2010; as cited in Thompson et al., 2014) conducted an experiment whereby the mesolimbic
dopamine reward system was studied in individuals with psychopathy. The authors concluded that when presented with an anticipated reward, the levels of dopamine were excessive in comparison to non-psychopaths. A continuation of this study suggests that this area may be the connection between psychopaths and prevalence of high substance use in this population (Buckholtz et al., 2010; as cited in Thompson et al., 2014). Soderstrom, Blennow, Sjiodin, and Forsman (2003; as cited in Thompson et al., 2014) found that violent offenders rated as high on the PCL-R in the areas of aggression, impulsivity and irresponsibility, and poor behavioural controls were seen to have excess serotonin and high dopamine turnover (Soderstrom et al., 2003; as cited in Thompson et al., 2014). An implication of this dysregulation is that serotonin cannot modulate dopamine activity, giving more support to the thrill-seeking behaviours exhibited by psychopaths. While it is unrealistic to scan the brain of every psychopathic inmate, these biological indicators suggest that some pharmacological interventions may be helpful.

**DSM-5 and Antisocial Personality Disorder**

As stated before, the confusion between psychopathy and APD still exists today. This lack of clarity creates diagnostic and treatment error (Few et al., 2015). The prevalence of APD in correctional settings is 50-75%, whereas the prevalence of psychopathy is 15-25%, outlining that differences between the two must exist; one does not always equal a diagnosis of the other (Hare, 1991; as cited in Wall, Wygant, & Sellborn, 2015).

Currently, the DSM-5 criteria for APD is heavily relied on as the clinical term for psychopathy, as there are several overlapping constructs that apply to both disorders (Edens, Kelley, Lilienfeld, Skeem, & Douglas, 2015). The American Psychological Association (2013) DSM-5 lists the following as criteria for a diagnosis of APD:

A. A pervasive pattern of disregard for and violation of the rights of others, occurring since age 15 years, as indicated by three (or more) of the following:

1. Failure to conform with social norms with respect to lawful behaviors, as indicated by repeatedly performing acts that are grounds for arrest.
2. Deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure.
3. Impulsivity or failure to plan ahead.
4. Irritability and aggressiveness, as indicated by repeated physical fights or assaults.
5. Reckless disregard for safety of self or others.
6. Consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations.
7. Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another.

B. The individual is at least 18 years of age.
C. There is evidence of conduct disorder with onset before age 15 years.
D. The occurrence of antisocial behavior is not exclusively during the course of schizophrenia or bipolar disorder. (p. 659)

While APD has a higher prevalence rate in corrections, psychopaths are more deceptive in nature, have more criminal versatility, and commit more violent crimes across their lifespan (Few et al., 2015). Black, Gunter, Loveless, Allen, and Sieleni (2010) attributed the high
prevalence of APD in offenders to the anxiety of these individuals. Black et al., (2010) assessed 320 newly incarcerated offenders. They (2010) used the Mini International Neuropsychiatric Interview (MINI), the Short Form Health Survey (SF-36), and the Level of Service Inventory-Revised (LSI-R). The original sample consisted of 322 male and female offenders, where 35.3% (or n= 113) had a diagnosis of APD (Black et al., 2010). Results indicated that an anxiety disorder was present in 61.1% of individuals diagnosed with APD compared to a prevalence of 32.9% for offenders who did not have a diagnosis of APD (Black et al., 2010). Psychopaths do not exhibit anxiety and can charm their way out of less favourable situations (Smith, Selwyn, Wolford-Clevenger, & Mandracchia, 2014). It can be argued that there are more ‘successful’ psychopaths still in the community—that is, individuals who have committed a crime but have not been charged, in comparison to individuals with APD, who display less manipulative tendencies (Colins, Andershed, & Pardini, 2015).

It can be argued that the greatest distinction between psychopath and APD considers the three factors of the TriPM (Wall et al., 2015). These three factors include traits of boldness, meanness, and inhibition. Wall et al., (2015) empirically validated these three factors and their relevance to psychopathy and APD. Among their findings, Factor 2 of the PCL-R (antisocial/lifestyle) correlated more strongly with APD traits, which corresponded to the factors of meanness ($r = .35$) and disinhibition ($r = .31$) in the TriPM (Wall et al., 2015). Additionally, the factor of boldness did not correlate as strongly ($r = .19$). The authors (2015) suggest that the factor of boldness is the distinguishing trait between APD and psychopathy.

To summarize, though the terms are used somewhat interchangeably, differences are present in psychopathy and APD. Criteria for the diagnosis of APD and the presence of psychopathy differ. The study by Wall et al., (2015) suggested that boldness, the presence of fearlessness; dominance; and low anxiousness, is not a significant trait in APD. This finding proposed that the presence of boldness (as defined by the TriPM) is a distinction between APD and psychopathy.

**Psychopathy Checklist Revised (PCL-R)**

The PCL-R is the most widely used assessment for classifying psychopathy (Hare, 2003; Olver, Neumann, Wong, & Hare, 2013; Olver & Wong, 2015; Wogan & Mackenzie, 2007). Established in 1980 as the Psychopathy Checklist, by Dr. Robert Hare, the PCL-R reduces the original version from 22 to 20 items (Hare, 2003). Each item pertains to a personality trait evident in psychopathy, and is rated on a Likert scale from zero to two (see Appendix D). A score of zero on an item indicates it is inapplicable to the individual, a score of one indicates the item somewhat applies, and a score of two suggests that it is an accurate description of the individual (Hare, 2003). The assessment is out of a possible score of 40, with a score of 30 or higher indicative of psychopathy (Hare, 2003).

Other versions of the checklist include the PCL-R: YV (Youth Version) and the PCL-R: SV (Screening Version). The PCL-R: YV adapts items from the PCL-R to predict antisocial characteristics in adolescents (Hare, 2003). The identification of these traits is critical because it outlines potentially problematic areas in adulthood (Cauffman, Kimonis, Dmitrieva, & Monahan, 2009). Cauffman et al., (2009) note that there is not an empirically validated cut-off score for psychopathy using the PCL-R: YV but as it is also 20 items, a cut-off score between 25-30 is accepted. The PCL-R: SV is used in initial assessments and outside forensic and correctional
settings to support the classification of an individual as a psychopath in a more time efficient manner (Hare, 2003). The PCL-R: SV uses only 12 items and eliminates the time constraints of the PCL-R (Hare, 2003). A score of 18 or higher indicates that there are psychopathic traits present, and warrants the administration of the full PCL-R (Brazil & Forth, 2016).

The reliability of the PCL-R has been extensively researched (Hare, Clark, Grann, & Thornton, 2000). The PCL-R is labelled a Level C test and as such requires a doctorate level degree or active membership in an organization/college related to the field (Blais, Forth, & Hare, 2017). Hare et al., (2000) summarized that intraclass correlations (ICCs) in a variety of studies generally exceeded .80 for a single rate, and .90 for two raters (a value of 1.00 indicates perfect agreement. Blais et al., (2017) conducted data analyses on six practice cases, given to 280 raters who had undergone PCL-R training. Interrater reliability was computed amongst the six cases, determining how many of the 280 raters assigned the same number value to the same items on the PCL-R (Blais et al., 2017). Results indicated that while no items achieved perfect consistency amongst raters, only six percent of all items had significant variability (Blais et al., 2017). ICC_{AI} (intraclass correlations for absolute agreement of a single measure) was also computed with promising results (Blais et al., 2017). ICC_{AI} for total PCL-R scores was 0.75, 0.78 for Factor 2 scores, and 0.65 for Factor 1 scores. According to Cichetti, Fontana, and Showalter (as cited in Blais et al., 2017), a value of 0.70 is considered the minimum standard for a ICC_{AI} value. Reliability for the PCL-R across settings and subjects is also demonstrated in other studies (Alterman, Cacciola, & Rutherford 1993; Forth, Brown, Hart, & Hare, 1996; Olver, Neumann, Wong, & Hare, 2013). Overall, the PCL-R is considered to be highly reliable across various settings, though inconsistencies do exist depending on rater characteristics.

Since its inauguration, the PCL and its subsequent revisions have undergone rigorous psychometric testing to determine the validity of the measurement; that is, does the PCL-R actually measure the construct (psychopathy) in which it is intended to measure. Additionally, Hare et al., (2000) noted that though most studies are conducted using male adult offenders, the PCL-R has demonstrated its predictive validity for females, male abusers, and sex offenders. For example, Kennealy, Hicks, and Patrick (2007) demonstrated validity in a sample of 222 female inmates assessed with the PCL-R. To establish the predictive validity of the 20 PCL-R items, Kennealy et al., (2007) applied two linear regression techniques, one used factors 1 and 2 as predictor variables, and the other used the four facets from the four-facet model of psychopathy. Both regression techniques produced results that mirrored other studies using a male-only sample and indicated that the PCL-R was reliable in identifying psychopathy across genders. The PCL-R has demonstrated predictive validity cross-culturally in Sweden, England, Germany, Belgium, Spain, and Portugal (Hare et al., 2000). Results in these studies concluded that the ability of the PCL-R to estimate the likelihood of recidivism and crime typology was strong (Hare et al., 2000).
Psychopathy and Recidivism

In general, psychopaths are known to have poorer conditional release and community outcomes, and reoffend at a higher rate than non-psychopaths (Porter, ten Brinke, & Wilson, 2009). Looman, Abracen, Serin, and Marquis (2005) followed a sample of 154 admissions to the Regional Treatment Centre Sex Offender Treatment Program (RTCSOTP) to assess sexual and violent recidivism. The mean PCL-R for the sample was 22.54 and participants were categorized into low PCL (score of 25 or less), or high PCL (score of 25 or more) (Looman et al., 2005). Wilcoxon survival analysis specified that the high PCL group recidivated at significantly higher rates than the low PCL group, with an 80.7% survival rate for low PCL and a 60% survival rate for high PCL (Looman et al., 2005). Additionally, a reduction in risk rating was discovered and further divided the sample into low PCL-R-no reduction; low PCL-R-reduction; high PCL-no reduction; and high PCL-R-reduction (Looman et al., 2005). Comparisons indicated that the high PCL group-no reduction reoffended at a 50% rate compared to 30% for high PCL-reduction, 6.2% for the low PCL-R-no reduction, and 24.4% for the low PCL-R-reduction group (Looman et al., 2005). This is suggestive that the presence of a high PCL-R score positively correlates with recidivism and risk reduction.

The PCL-R has shown validity in predicting recidivism rates for individuals who obtain a high score (Hare, 2003). Olver and Wong (2015) assessed a sample of 315 federal inmates in Canada. All individuals were adult males, 137 who had a PCL-R score of 25 or higher, and 34 who had a score of 30 or higher (Olver & Wong, 2015). The authors (2015) followed the sample for an average of 24 years. Results indicate that PCL-R scores accurately predicted nonviolent recidivism throughout the 24 years, general recidivism for up to 20 years, and violent recidivism within five years of release. Interestingly, the authors found that the antisocial facet of the PCL-R was the most accurate in predicting all reconvictions (general, violent, and nonviolent) for up to 20 years, whereas the lifestyle facet predicted nonviolent recidivism (Olver & Wong, 2005). Olver et al., (2013) also generalized the predictive significance of the PCL-R in Aboriginal offenders and concluded that, out of a sample of 766 adult males (448 White and 318 Aboriginal), high PCL-R scores (25 or higher) were indicative of future recidivism after an average of 25.9 months.

Debate of Psychopathy as a Taxon

A debate in the literature is whether psychopathy is a discrete class of human beings, or, if it is dimensional, encompassing latent traits of psychopathy across a continuum (Guay, Ruscio, Knight, & Hare, 2007). Evidence of a taxon suggests that psychopathy is a non-arbitrary class—that is, psychopaths are qualitatively different from other individuals (Walters et al., 2007). Guay et al., (2007) outline several components that warrant the taxometric investigation of psychopathy. Biological indicators (such as deficits in the amygdala), cognitive deficiencies, and genetic twin studies, all suggest that these components are antecedents to the classification of psychopathy (Guay et al., 2007). Previous research demonstrates mixed results, justifying the need for further study. As the authors point out, solving this debate has many implications in the psychological field, namely, validating psychometric tests that are used for clinical decision-making (Guay et al., 2007). If psychopathy is a taxon and psychopaths cannot move along a continuum to make treatment gains, treatment failure may seem inevitable (Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003).
Evidence for and against a taxon. One of the most widely known studies supporting a psychopathy taxon was conducted by Harris, Rice, and Quinsey (1994). Harris et al., (1994) used a sample of 653 mentally disordered offenders in Canada, and applied taxometric analyses to eight items of the PCL-R that best correlated with overall PCL-R scores. The following items were used in the analyses: proneness to boredom; conning and manipulative; callous; parasitic lifestyle; early behavior problems; lack of realistic goals; impulsivity; and irresponsibility (Harris et al., 1994). Analyses were also conducted for the two factors of psychopathy (Factor 1 and Factor 2). Harris et al., (1994) conducted several analyses to determine the presence of a taxon. Results indicate the presence of an underlying taxon. Factor 1 and 2 items were also separately evaluated to determine if a taxon exists. Results demonstrated evidence of a taxon underlying each of the factors. Harris et al., (1994) tested the sample eight years later to account for limitations from their previous study (e.g. PCL-R scored only on file reviews; subjects being all mentally disordered offenders found not guilty by insanity; premature conclusion). Results were similar in that Factor 2 items (correlated to APD) demonstrated evidence of a taxon; however, analysis on Factor 1 items did not show evidence of a taxon. These results, that only Factor 2 items, correlated strongly with APD, are evidence of a discrete class, and Factor 1 items are not, (personality-based characteristics of psychopathy) contributed to the ongoing debate.

Further supporting the notion that psychopathy is a taxon, Skilling, Quinsey, and Craig (2001) assessed 1,111 boys using the PCL-YV and the Child and Adolescent Taxon Scale (CATS). Items from the DSM-IV criteria for conduct disorder were also coded to be used in taxometric analyses (Skilling et al., 2001). The study also utilized the Goodness of Fit Index (GFI) to assess the latent structure of psychopathy. Results indicated a taxon and internal consistencies for all measures used supported the existence of an underlying psychopathic taxon (Skilling et al., 2001). The implications of this study suggest that if psychopathy can be determined at a young age, interventions could be implemented earlier in life to prevent lifelong criminal psychopaths (Skilling et al., 2001). Marcus et al., (2004) note that several limitations exist in the above-mentioned studies. For example, in Harris et al., (1994), the sample was biased and several of the taxometric analyses used did not have sufficient empirical support. The majority of the sample had been found not criminally responsible by insanity and were maximum security offenders. Additionally, in the Skilling et al., (2001) study, items for the MAXCOV analyses were dichotomized. Marcus et al., (2004) assert that this dichotomy weakened the overall analyses and may be responsible for skewed results. Furthermore, other authors support Marcus et al., (2004) in stating that the GFI is insufficient in discriminating between taxonic and latent structures.

Several authors since then have executed similar analyses, hoping to demonstrate definitive evidence to support or discount the theory of psychopathy as a taxon, and correct such taxometric analyses errors shown in Harris et al., (1994) and Skilling et al., (2001). Guay et al., (2007) used a total of 15 samples included in their study in an attempt to correct the bias sample noted in the Harris et al., (1994) study (see Table 1.1).
Results from all taxometric analyses (MAMBAC, MAXEIG, and L-Mode) yielded demonstration of a latent psychopathy dimension. This study also utilized empirically supported taxometric analyses, with the benefit of having simulation data readily available for comparison purposes. Comparison data supported the absence of taxometric peaks within the distributions and reinforced the suggestion of a latent dimension of psychopathy. The shortcomings of the Harris et al., (1994) study are reiterated in Marcus et al., (2004). Marcus et al., (2004) studied archival data from offenders who had completed the Psychopathic Personality Inventory. Hare (2003; as cited in Marcus et al., 2004) noted that forensic and jailed populations tend to have a base rate of psychopathy of 20–25%. According to Lilienfeld (1998; as cited in Marcus et al., 2004), a base rate of 20-25% is sufficient to identify a taxon in a specific population, and therefore warrants analyses to determine if a psychopathy taxon does exist yielded concave, or unimodal distributions, which are suggestive of a dimensional structure (Marcus et al., 2004). All analyses supported psychopathy on a continuum. A study in 2006, co-authored by Marcus, further evaluated the possibility of a psychopathy taxon using the four facets of the PCL-R for evidence of a taxon (Edens, Marcus, Lilienfeld, & Poythress, 2006). This study elaborated on the original Harris et al., (1994) study, which showed evidence of a psychopathy taxon in only Factor 2 of the PCL-R, but not Factor 1. In a sample of 876 American, male offenders who had been assessed using the PCL-R. Participants included offenders from Florida, Nevada, Utah, Oregon, and Texas, incarcerated in state prisons or completing mandatory residential drug treatment programs. Results were suggestive of a dimensional construct of psychopathy. Edens

<table>
<thead>
<tr>
<th># of People in the Sample</th>
<th>Sex</th>
<th>Security Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 322</td>
<td>Male</td>
<td>Federal, medium</td>
</tr>
<tr>
<td>2. 121</td>
<td>Male</td>
<td>Provincial</td>
</tr>
<tr>
<td>3. 369</td>
<td>Male</td>
<td>Federal, minimum (U.S.)</td>
</tr>
<tr>
<td>4. 106</td>
<td>Male</td>
<td>Mixture of minimum, medium, and maximum just before conditional release.</td>
</tr>
<tr>
<td>5. 87</td>
<td>Male</td>
<td>Federal, medium</td>
</tr>
<tr>
<td>6. 152</td>
<td>Male (African-American)</td>
<td>Not noted.</td>
</tr>
<tr>
<td>7. 60</td>
<td>Male</td>
<td>Medium security (U.S.)</td>
</tr>
<tr>
<td>8. 197</td>
<td>Male</td>
<td>Federal, medium</td>
</tr>
<tr>
<td>9. 172</td>
<td>Male</td>
<td>Forensic psychiatric institution</td>
</tr>
<tr>
<td>10. 1,190</td>
<td>Male</td>
<td>State, medium (U.S.)</td>
</tr>
<tr>
<td>11. 320</td>
<td>Male</td>
<td>Federal, medium</td>
</tr>
<tr>
<td>12. 60</td>
<td>Male</td>
<td>Federal, medium and maximum</td>
</tr>
<tr>
<td>13. 185</td>
<td>Male</td>
<td>Federal, medium</td>
</tr>
<tr>
<td>14. 427</td>
<td>Male</td>
<td>Federal, medium</td>
</tr>
<tr>
<td>15. 1,640</td>
<td>Male</td>
<td>Regional reception and assessment center of Correctional Service Canada</td>
</tr>
</tbody>
</table>

Table 1.1 Demographic data on the 15 samples included in the Marcus et al., (2004) study.
et al., (2006) also used base rates to validate the absence of a taxon. Three of the four facets of the PCL-R provided evidence of psychopathy as a dimensional construct (Edens et al., 2006). Specifically, the skews of the affective, lifestyle, and antisocial facets of the PCL-R all supported a dimensional construct of psychopathy (Edens et al., 2006). Crucial differences between Edens et al., (2006) and the earlier works of Harris et al., (1994) and Skilling et al., (2001) was the use of an unbiased sample, data that was not dichotomized before taxometric analyses, more recent taxometric analyses, and an attempt to replicate Harris et al., (1994) data to evaluate core differences between the results. Given that the results favoured a dimensional structure of psychopathy, after accounting for limitations in previous studies that demonstrated a taxon, the strength of the argument for a dimensional structure of psychopathy is increased. Even more recently, Walters et al., (2014) applied taxometric analyses to a sample of 1162 male delinquents who were assessed using the PCL: YV. Results did not support evidence of a taxon (Walters et al., 2014). This study, with the sample being comprised of delinquents, is noteworthy. If a psychopathy taxon did exist, it should be evident in all age groups.

These findings have been mirrored in other studies (Bolt, Hare, Vitale, & Newman, 2004; Walters et al., 2007). Empirical evidence would appear to favour a dimensional structure of psychopathy. The implication of psychopathy as a dimension is that no one factor is responsible for its onset, but that a collective group of factors may contribute to its development (Walters et al., 2014). Edens et al., (2006) asserted that failure to identify a latent taxon of psychopathy guides researchers to investigate etiological, dimensional agents that could, in time, manifest as surface traits of psychopathy.

**Treatment Options and Outcomes for Psychopathic Offenders**

The notion that psychopaths are untreatable has dominated the literature for decades (Reid & Gacono, 2000). Psychopaths are characterized as being difficult clients to treat (Polaschek & Daly, 2013). As well, their ability to manipulate staff and mimic other’s prosocial behaviours can increase difficulty in assessing treatment gains (Wong & Hare, 2005; as cited in Vien & Beech, 2006). Recent empirical findings suggest that psychopaths do benefit from treatment (Olver, Lewis, & Wong, 2013). The following section provides information on outcomes of treatment for psychopaths.

**Therapeutic communities.** A common earlier treatment that still exists today is the therapeutic community (TC). Initially, the TC was the most prominent form of psychopathic offender rehabilitation (Harris & Rice, 2006). However, results from several studies showed that participation in a TC produced worse treatment outcomes, and aided in perpetuating the belief that psychopaths were beyond rehabilitation (Salekin, Worley, & Grimes, 2010). One critical study of this modality was conducted by Rice, Harris, and Cormier in 1992. The study assessed recidivism in 176 individuals who had participated in a therapeutic community for two years or longer. Individuals were matched to offenders who had not in order to compare rates of reoffence (Rice et al., 1992). Interestingly, of those offenders who were violent and at risk to fail upon release, 77 recidivated violently (Rice et al., 1992). In comparison, 55 psychopaths who were untreated recidivated violently (Rice et al., 1992). The authors conclude that for violent crimes, treatment actually produced a greater likelihood of recidivism in psychopathic offenders. There were several limitations to the Rice et al., (1992) study that contributed to the failure of psychopathic rehabilitation (Looman et al., 2005). Looman et al., (2005) commented that the study used non-directive therapy and the offenders received very little one-on-one time with
professional staff. Furthermore, because of the emphasis on group therapy, it is possible that psychopaths learned to mimic behaviours of non-psychopaths (Looman et al., 2005). Additionally, Looman et al., (2005) assert that the use of nude encounter groups, and administering of the LSD drug in earlier therapeutic communities negatively impacted treatment outcomes. These limitations suggest that therapeutic communities may not provide the treatment needed for psychopaths to be effectively rehabilitated.

Cognitive-behavioural therapy. Perhaps one of the most widely accepted therapeutic orientations used as the foundation for correctional programming is cognitive-behavioural therapy (CBT). Hofmann, Asnaani, Vonk, Sawyer, and Fang (2012) described CBT as addressing cognitive factors in individuals. They (2012) stated that the premise of CBT “holds that maladaptive cognitions contribute to the maintenance of emotional distress and behavioral problems. According to Beck’s model, these maladaptive cognitions include general beliefs, or schemas, about the world, the self, and the future, giving rise to specific and automatic thoughts in particular situations” (p.427). The goal of CBT is to challenge maladaptive thoughts that affect behaviour (Davidson, Tyrer, Tata, Cooke, Gumley, Ford, Walker et al., 2008), and its efficacy has been widely studied throughout the literature (Hofmann et al., 2012; Landenberger & Lipsey, 2005; Lipsey, Landenberger, & Wilson, 2007; Walker, McGovern, Poey, & Otis, 2004). With respect to correctional programming, CBT-based interventions are the most commonly used and most effective in reducing recidivism rates in offender populations (Nafekh, Allegri, Stys, & Jensen, 2009). Recent research has indicated that CBT programs may be effective in reducing recidivism rates for psychopathic offenders convicted of a sexual offence (Abracen & Looman, 2016).

Abracen, Looman, and Langton (2008), in their review of the treatment of psychopathic sexual offenders, supported that programs adopting CBT techniques and incorporating relapse-prevention strategies are in adherence to best practice. A study conducted by Olver and Wong (2009) followed 156 federally convicted sex offenders for an average of ten years after community release. All participants met the cut-off score of 25 on the PCL-R (Olver & Wong, 2009). The CBT program addressed cognitions specific to the sex offence and included a relapse prevention module (Olver & Wong, 2009). The sample was categorized into the following groups: non-psychopathic completers; non-psychopathic dropouts; psychopathic completers; and psychopathic dropouts (Olver & Wong, 2009). Findings supported that individuals who completed the program reoffended at a lower rate than those who did not. For those in the psychopathic completers group, 42.2% reoffended sexually, compared to 50% in the psychopathic dropouts group (Olver & Wong, 2009). Additionally, 60.6% of psychopathic completers reoffended violently, while 91.7% of psychopathic non-completers reoffended violently (Olver & Wong, 2009). While the difference in the rate of reoffending for sexual crimes is not statistically significant, there is a significant difference in rates of violent recidivism between psychopathic completers and psychopathic dropouts. These results suggested that, for violent recidivism, CBT-based treatments improve outcomes for psychopathic offenders (Olver & Wong, 2009). The authors note the importance of matching psychopathic sex offenders who participated in treatment with a similar sample who did not complete treatment. Research using this criterion would provide more efficacy for CBT treatment with this population (Olver & Wong, 2009).
In support of these findings, Abracen, Looman, Ferguson, Harkins, and Mailloux (2011) compared the outcomes of 64 sexual offenders to 55 untreated sexual offenders. The study aimed to provide a more controlled sample size than previous studies (see Olver & Wong, 2009) as well as match the actuarial assessments of the sample. The 64 sexual offenders received treatment at the Regional Treatment Center, Sex Offender Treatment Program (RTCSOTP) and completed the Rapid Risk Assessment of Sexual Offense Recidivism (RRASOR) prior to treatment (Abracen et al., 2011). Findings supported that, of the 14 psychopathic individuals who completed CBT-based treatment, one reoffended sexually (Abracen et al., 2011). Specifically, 5.9% of high risk (as rated on the RRASOR) individuals who completed treatment reoffended after 9 years, compared to 15.4% of high risk individuals who did not complete treatment. This provided support for the effectiveness of CBT programming in reducing sexual recidivism in psychopathic offenders. These results are comparable to Olver & Wong (2009) but provide a more accurate representation of psychopathic sexual offenders with regards to treatment. Notably, the sample size is quite small, which could affect generalization to this population as a whole. The authors also consider this sample to be high-risk and high-need, which could potentially provide more opportunity for treatment gains (Abracen et al., 2011).

Several studies support the use of CBT for reducing violent behaviour in psychopathic offenders. Skeem, Monahan, and Mulvey (2002) analyzed a group of 195 potentially psychopathic patients (PPP) and 72 psychopathic patients in a civil psychiatric setting receiving treatment that was in accordance with the principles of CBT. Scores for psychopathy were calculated using the PCL-R: SV, where scores of 12 or higher classified an individual as potentially psychopathic, and scores of 18 or higher classified an individual as psychopathic (Skeem et al., 2002). The study considered treatment involvement as a factor in recidivism rates. Patients were followed up every ten weeks to assess participation and outcome (Skeem et al., 2002). At each follow-up period, patients were assessed on the number of treatment sessions they attended, whether they were receiving additional supports, and if they had engaged in any violent behaviour since the last follow-up period (Skeem et al., 2002). Treatment sessions were dichotomized into zero to six sessions and seven or more (Skeem et al., 2002). Individuals who received six or less treatment sessions were included in the “little or no treatment” group. Results were favourable for those who completed seven or more treatment sessions. Of the original sample, 121 PPP patients and 42 psychopathic patients had some form of access to the community (Skeem et al., 2002). Only 6% of potentially psychopathic offenders and 8% of psychopathic patients who attended seven or more sessions and were released into the community had a violent occurrence after a ten-week follow-up (Skeem et al., 2002). In summary, Skeem et al., (2002) found that PPP individuals who received little or no treatment (six sessions or less) were two and a half times more likely to commit violent acts, and psychopathic individuals who participated in six sessions or less were three and a half times more likely to be violent. These results suggest that those who receive longer, cognitive-behavioural treatment sessions see a reduction in violence and aggression once released to the community, though the follow-up period is too short to be conclusive. This study provides insight into how a larger sample size performs in the community (when compared to other studies), however, the short follow-up time does not confirm treatment reliability.
Contributing to earlier results from Skeem et al. (2002), Olver, Lewis, and Wong (2013) aimed to extend the literature on the cognitive-based strategies that use the PCL-R as a measurement of psychopathy. The authors (2013) evaluated the effectiveness of the Aggressive Behavior Control (ABC) program with 152 federal offenders. The ABC is a six- to eight-month program designed to help participants learn prosocial behaviours and tools while identifying criminogenic needs and targets for change (Olver et al., 2013). Olver et al. (2013) assessed each participant using the PCL-R; there was an average score of 26 points across the sample. Of the original sample of 152 offenders, 98 met the criteria for psychopathy when applying a score of 25, and 42 met the criteria for psychopathy when applying a score of 30 (Olver et al., 2013). Olver et al., (2013) followed the sample for an average of 4.9 years, a significantly longer period of time than Skeem et al., (2002). Results indicated that the affective facet of psychopathy uniquely predicted violent recidivism. During the follow-up period, 46% of psychopaths were convicted for a new violent offence, 56% a new non-violent offense, and 62% had a new conviction in the community, whether violent or non-violent (Olver et al., 2013). Furthermore, Kaplan-Meier survival curves were calculated for four different groups: low psychopathy, low change; low psychopathy, high change; high psychopathy, low change; and high psychopathy, high change (Olver et al., 2013). Results showed that those in the low psychopathy, high change group, and the high psychopathy, high change group, had a change score of 7.1 and 7.2 on the Violence Risk Scale, indicating a reduction in the level of risk for these individuals (Olver et al., 2013). Finally, though the majority of individuals in the high psychopathy group did have a reconviction, those assessed as having significant treatment gains remained offence-free longer than those assessed as low change. These results imply that completion of a CBT program can produce significant effects and while it does not eliminate reoffending, it does slow the cycle of offense down (Olver et al., 2013). Though this may not be the most desirable outcome, it could provide staff with more time to implement maintenance or relapse prevention strategies before a reconviction occurs. Interestingly, when compared to Skeem et al., (2002), this study had more classified psychopaths. An implication of these results is the suggestion that, because the sample was more representative of psychopathic offenders (as classified by the PCL-R), it may be more credible when reviewing the literature.

Polaschek, Bell, Calvert, and Takarangi (2010) also conducted a study that supported the efficacy of CBT treatment with violent offenders in reducing violent cognitions. The program included offence mapping, identifying cognitive distortions, and the implementation of social and impulse control skills (Polaschek et al., 2010). Thirty violent offenders housed in the Violence Prevention Unit (VPU) in New Zealand were followed for nine months after completion of an 8-month, intensive, group CBT program which occurred approximately three to four times a week for a period of two-and-a half to three hours (Polaschek et al., 2010). The mean score of psychopathy for the group was 19.6, but the authors noted that 78% of participants were at, or above, the appropriate cut-off score for psychopathy as defined by Hare (Polaschek et al., 2010). The program was separated into four consecutive cohorts over 18 months (Polaschek et al., 2010). The two phases of the study included 1) self-report questionnaires, which helped identify participants’ beliefs about their violence and aggression, and 2) implicit association tests (IATs) (Polaschek et al., 2010). A reduction in the number of stages for the IATs led to two stages in total (Polaschek et al., 2010). The first stage of the IAT was a practice trial and asked offenders to pair photos of flowers with like or dislike (Polaschek et al., 2010). This stage
ensured that the offenders could complete the required task once the trials included photographs of violence and words. The second stage involved 70 trials related to violence, where pictures of weapons or violent acts were paired with like and dislike (Polaschek et al., 2010). Results were promising and indicated that an intensive CBT program can help reduce violent cognitions (Polaschek et al., 2010). Polaschek et al., (2010) found that the preference for the non-violent category during the IAT (flower photographs) increased post-program. Furthermore, preference for the violence-based trials decreased post-program (Polaschek et al., 2010). Specifically, the reaction time to pair weapons with “like” decreased from a mean of 1250.83 microseconds to 1219.67 microseconds (Polaschek et al., 2010). This decrease in time indicates that individuals paired their dislike for a weapon faster than before completing the program. Additionally, the mean for the self-report questionnaires also decreased. The Aggression Questionnaire, which assesses cognitions about aggression, decreased from a mean score of 84.3 to 65.4, providing evidence of a decrease in aggression (Polaschek et al., 2010). Further supporting this decrease, the mean score for the Criminal Attitudes to Violence Scale (CAVS) decreased from 48.8 to 30.2 (Polaschek et al., 2010). These results, combined with the reduction in response time during the IAT trials, suggested that CBT treatment for high-risk, violent, psychopathic offenders can reduce cognitive errors that perpetuate criminal activity.

**Correctional programming currently offered.** The most widely used program in Correctional Services Canada is the Integrated Correctional Program Model (ICPM) which incorporates addressing an individual’s dynamic risk factors with cognitive-behavioural techniques in a group format (Government of Canada, 2014). Offenders often participate in the ICPM during their sentence in adherence to their correctional plan. The ability to engage offenders in subject matter instead of simply following their correctional plan can be a responsivity factor in treatment outcomes (Government of Canada, 2014). Specific responsivity factors for psychopathic offenders are addressed in Chapter V, but motivation remains a key issue in implementing effective programming (Government of Canada, 2014). The ICPM program addresses violence, substance abuse, and criminal attitudes while teaching the CBT techniques of self-monitoring, thought challenging, and thought restructuring (Government of Canada, 2014). There are several different streams to the ICPM program (Government of Canada, 2014). Adaptations are made for risk level based in recidivism predictions and offenders can either be placed in the low, medium, or high-intensity program, each varying in length and topic (Government of Canada, 2014). Additionally, a specific sex offender ICPM exists for individuals who are incarcerated for a sexual offence, which also offers low, medium, or high-intensity treatment (Government of Canada, 2014). Recently, an adapted program has been implemented for offenders who display cognitive impairments and have difficulty participating in regular programming (Government of Canada, 2014). An Aboriginal adaptation, in all three intensity streams is also available and focuses on implementing the same skills in regular programming while adhering to cultural practices (Government of Canada, 2014). All ICPM programs begin with a primer, which evaluates treatment readiness and communicates with offenders the dynamic risk factors that have been identified as treatment targets (Government of Canada, 2014).

Efficacy for these components (see above) suggests that psychopathic offenders may benefit from such programming, however, adaptive programming for psychopathic traits
Currently does not exists. In response to a lack of motivation, offenders are referred to motivational interviewing modules with the purpose of highlighting the benefits to participating in a correctional program (Government of Canada, 2014). Again, whether psychopathic offenders genuinely agree that programming is beneficial remains debatable, as such agreeance could be a tactic of manipulation (Government of Canada, 2014). Furthermore, a component of ICPM is the maintenance module (Government of Canada, 2014). In this module, offenders who completed the program early in their sentence, or who have been released under community supervision but are due for warrant expiry, are given a brief review of the skills taught in the main program (Government of Canada, 2014). This module is believed to reinforce pre-existing skills. Preliminary data suggests that the general population has significantly lower recidivism rates compared to offenders who do not complete programming (Government of Canada, 2015). Specifically, 32% offenders who complete the program reoffended, compared to 38% of offenders completed traditional correctional programming. Though not statistically significant, these results are premature in assessing the true effects of ICPM programming, as the program was only implemented within the last four years (Government of Canada, 2015). ICPM successfully addresses an offenders risk level, intensity of programming (need) and cultural and cognitive differences (responsivity), with the appropriate stream of programming.

**Summary of Program Effectiveness**

Though initially believed to be ineffective, correctional treatment for psychopathic offenders has demonstrated that recidivism rates can be decreased (as seen in Abracen et al., 2011; Olver et al., 2013). Specifically in sexual offender populations, the use of CBT programming has shown to be effective in reducing recidivism (Abracen & Looman, 2016; Olver & Wong, 2009). Though CBT cannot ‘cure’ psychopathy, treatment gains in the areas of victim empathy and cognitive distortions can produce favourable outcomes, such as reducing the violent nature of future crimes, and aiding in a slower rate of reoffending (Polaschek et al., 2010; Skeem et al., 2002). The ability to create more length in between crimes provides a unique opportunity to implement further programming and monitor individuals for their personal risk factors (Olver et al., 2013). The ICPM program that psychopathic offenders in federal Canadian correctional facilities can access adheres to CBT principles and is a viable option in the treatment of psychopathy.

**RNR Factors in Psychopathic Offender Programming**

There are several unique responsivity factors that psychopathic offenders and program delivery staff can encounter. In adherence to the RNR model of offender rehabilitation, in order to effectively treat psychopathic offenders programming must be adapted to address such responsivity issues. Skeem et al., (2015) noted that a service gap in programming delivery is that no such adaptation exists. Generally, individuals with antisocial traits have higher drop-out rates than those who do not have APD (Beyko & Wong, 2005). This assertion presents a unique challenge in that psychopathic offenders are often labelled as high-risk offenders. In adherence with the RNR model, those who are of high-risk should receive the highest intensity of programming. It becomes difficult to address the criminogenic and non-criminogenic needs of the offender if programming cannot be completed. Polaschek and Daly (2005) noted that because psychopathic offenders do not often express remorse for their actions, or do not agree with the difficult subject matter in some programming, their motivation diminishes and contributes to early termination of participation.
The therapist. A major responsivity factor that psychopathic offenders face is the attitude of the professionals they are assigned to (Beyko & Wong, 2005). As psychopaths are one of the more difficult populations to treat, therapists may have engrained beliefs that treatment cannot work (Skeem et al., 2015). This negative outlook affects the integrity of intervention and can prevent therapeutic rapport between client and staff from being established (Harkins & Beech, 2007). Additionally, staff could be unwilling to work with said population because of these reservations, diminishing the amount of services and resources available. Comparingly, psychopathic offenders, being as skilled as they are, may prey on therapists who lack experience, or are new to the population (Neergaard & Gullhaugen, 2015). A case study by Neergaard and Gullhaugen (2015) addressed this risk with a therapist who treated a criminal psychopath in the community. While questioning from the therapist was professional, the client quickly resorted to asking questions outside the ethical boundaries that were established in the relationship (Neergaard & Gullhaugen, 2015). This breach can create an opportunity for manipulation, deception, and coercion in the therapeutic relationship, leading to the inaccurate opinion of treatment gain (Skeem at al., 2015). This false interpretation could have detrimental impacts on staff self-esteem, their willingness to work with psychopathic offenders again, and parole decisions based on unintentional, fictitious program reports (Vien & Beech, 2006; Wong & Hare, 2005). As Beyko and Wong (2005) suggested, therapists should be properly trained and resources should be allocated to help build therapeutic alliances in order to assist with this population. They (2005) continued to say that research outlining the difficulty of working with psychopaths should be utilized to improve existing program—rather than support the exclusion of this population. Exclusion would violate the need principle of the RNR model.

The psychopath. There are several responsivity issues that derive from the viewpoint of the psychopathic offender. As empathy is often defunct in clinical psychopaths, it can be frustrating for an individual to partake in interventions they deem irrelevant to their own personal experience (Cullen, Soria, Clarke, Dean, & Fahy, 2011). Additionally, a lack of remorse for crime or harm to others can reduce motivation in attending programming as it is believed they are not at fault (Neergaard & Gullhaugen, 2015). It is important to also note that psychopaths generally are brought up in homes with absent parental figures and a lassie-faire parenting style (Tuvblad, Bezdjian, Raine, & Baker, 2013). This history of poor relationships, with little discipline, could be an underlying factor in treatment attrition—for example, if a child’s environment is void of empathy from authoritative figures this could impact their future ability to empathize with others.

Summary of Literature

The notion that psychopaths are beyond rehabilitation is proven inaccurate when reviewing the current literature. Use of the Hare PCL-R, a valid and reliable measurement of psychopathy has provided greater insight into treatment options and outcomes for psychopathic offenders. As an accurate predictor of recidivism, the PCL-R has the capacity to inform professionals of the intensity of treatment required and the risk a psychopathic offender poses in reoffending upon release (Hare, Clark, Grann, & Thornton, 2000). Research suggests that the PCL-R is the gold-standard in the assessment of psychopathy and is recommended as the premier instrument for use in professional domains.

Of significance in the current literature is the debate of psychopathy as a taxometric or dimensional. Earlier studies were in favour of a psychopathic taxon. Results from Harris et al.,
EFFECTIVENESS OF PSYCHOPATHIC OFFENDER PROGRAMMING

(1994) and Skilling et al., (2001) supported this notion. However, given small and biased sample sizes, as well as outdated taxometric analysis, more recent studies support the opposite side of the debate. Edens et al., (2006), Guay et al., (2007), and Marcus et al., (2004) have all demonstrated the dimensionality of psychopathy. The implications of such a debate effect the negative attitude towards treatment psychopathic offenders. Professionals who advocate for a psychopathy taxon could potentially have negative attitudes which affect therapeutic outcomes. Acknowledging the dimensionality of psychopathy may create more positive outcomes by improving the therapist attitude toward a psychopathic client and thereby improve the therapeutic relationship. The abovementioned factors contribute to treatment attrition and compliance in psychopathic offenders and impact treatment outcomes.

Though earlier studies suggested that treatment made psychopaths more likely to reoffend violently (Rice, Harris, & Cormier, 1992; Salekin, Worley, & Grimes, 2010), these studies utilized a therapeutic community approach, which have several ethical and procedural limitations. Since the inauguration of psychopathic offender rehabilitation, one treatment modality has proven effective in reducing recidivism in this population. Specifically, cognitive-behavioural based treatment programs demonstrate favourable treatment outcomes in reducing violent and sexual recidivism in psychopathic offenders.
Chapter III: Method

The methodology section describes the process used for gathering research used in a literature review. The literature review consolidates the information from research into one broad report on correctional programming and recidivism in psychopathic offenders.

**Demographic and Setting**

Although gender and age of participants were not used to limit studies included in this review, adult males (18 years or older) were typically the participants of studies reviewed. Research reviewed predominantly explored psychopathic offenders in federal correctional systems, however, some articles did comment on psychopathic offenders in treatment centres or forensic hospitals. Finally, articles were chosen based on location, with Corrections Service Canada as a focal point of research, however articles including participants in Europe and United States were included.

**Literature Search Strategy**

Numerous resources were utilized to gather information for this literature review. First, each chapter of interest was separately researched to identify specific areas to investigate. Using the EBSCO Host server, the PsychINFO, PsychBooks, PsychARTICLES, and the Criminal Justice Collection databases were searched. Google Scholar was used as an additional source, resulting in several articles from the ERIC database. Search terms included the following: psychopathy, offender, treatment, definition, reducing recidivism, Canadian, PCL-R, taxonomy, and risk-need-responsivity. Only articles from peer-reviewed journals were included. Reference sections of each article were reviewed for additional resources. In addition to online databases, several hard copy resources were utilized. Academic textbooks and the PCL-R manual were used to glean information about the development of the instrument and items used. Results from current literature review, substantiated by additional sources, were compiled in the result section. Erin McCormick was consulted as the college supervisor and provided an abundance of resources and insight during the writing of the review.

**Inclusion Criteria**

The scope of this literature review encompassed research on psychopathic offenders and the reduction of recidivism. The academic books also provided empirical evidence for certain intervention techniques. Inclusion criteria were broad so as not to omit any relevant information. Articles were from peer-reviewed academic journals and preferably written within the last 15 years. Some research prior to 2002 was included to comment on the history of psychopathy, or to reference earlier research studies that validated current meta-analyses.
Chapter IV: Results

The goal of this thesis was to evaluate whether correctional programming is effective for psychopathic offenders. A review of the current literature supported the use of cognitive-behavioural techniques and programs within this population. Furthermore, evaluation of the RNR model provided insight to the exclusive responsivity issues that need to be addressed with psychopathic offenders. The section that follows outlines key data that were accumulated during the literature review and support the use of CBT-based psychopathic offender rehabilitation.

Psychopathy and the Need for Treatment

With regard to psychopathy, the literature emphasizes the difficulty in rehabilitating and reducing recidivism with this population. Therefore, there is a substantial need for effective treatment to be implemented, distributed, and advocated for in this population. Psychopathy is correlated positively to sexual and violent crimes (Berkout, Gross, & Kellum, 2013). Moreover, the negative attitude towards psychopathic offenders affects treatment outcomes and is a responsivity issue that is not often addressed. The literature notes that there is no cure for psychopathy, but there are rehabilitative programs which slow the offence cycle down and show promising effects for reducing violent recidivism.

Therapeutic Model Ineffectiveness

The research demonstrated that ineffectiveness of the therapeutic community, which was a common rehabilitative program used for psychopathic offenders. Garnering support in the beginning, therapeutic communities utilized a group therapy format with little professional support staff (Looman et al., 2005). Reviews by Rice et al., (1992) and Salekin et al., (2010) suggested that the therapeutic community increased recidivism rates for psychopathic offenders—creating the popular opinion that psychopaths were beyond rehabilitation. However, given the minimal exposure to professional treatment, the opportunity for psychopaths to deceive and mimic prosocial behaviours from the matched groups, and the administering of nude encounter groups and LSD, recent research has denounced this as an ethical treatment.

CBT Results

The following section comments on the efficacy of CBT treatment with psychopathic offenders. Largely considered the premier choice for rehabilitation, CBT-based treatment results show promise in sex offender and violent offender populations. A summary of the results for each is consolidated below.

**Sex offender.** A study conducted by Olver and Wong (2009) demonstrated a reduction in recidivism for 152 federally convicted, psychopathic sexual offenders. While the results were not statistically significant, there was a difference between those who completed treatment and those who did not. There was a 7.8% difference in the sample with 42.2% of those who completed treatment reoffending sexually, and 50% of those who did not complete treatment reoffending. Despite these insignificant results, the authors argue that any reduction in sexual recidivism is socially significant and provides more promising treatment outcomes in the future. Abracen et al., (2011) built on these results by matching the sample demographics. Results conclude that
psychopathic offender rehabilitation, when using a CBT-based approach, decreases sexual recidivism.

**Violent offenders.** In the same Olver and Wong (2009) study listed above, the authors also calculated violent recidivism in psychopathic offenders. These results were more statistically significant in that 60.6% of individuals who completed treatment violently reoffended after ten years, whereas 91.7% of those who did not complete treatment violently reoffended during the same follow-up period. Skeem et al., (2002) provided support for CBT-based interventions with psychopathic offenders in reducing violence. They (2002) found that psychopathic offenders who completed seven or more sessions had better treatment outcomes than psychopathic offenders who completed six or less treatment sessions. These results suggest that with long-term, intensive CBT therapy, recidivism rates for psychopathic, violent offenders can decrease substantially. Polaschek et al., (2010), and Olver and Wong (2013) conducted studies that support these notions. Polaschek et al., (2010) demonstrated that a CBT-based program decreased violent cognitions in psychopathic offenders, indicating that cognitions can be changed in this difficult population. Olver and Wong (2013) evaluated the Aggressive Behaviour Control program (ABC) and the relationship between treatment compliance and violent recidivism. Results indicated that those measured as high-risk on the VRS had a reduction in score post-treatment and, those categorized into the “high psychopathy, high change” group had longer span of time between crimes compared to the “high psychopathy, low change”.

Implications for the above-mentioned results are discussed further in the subsequent discussion questions as well as consolidated in Appendix A.
Summary and Conclusions

The current literature review includes several key components in the field of psychopathic offender rehabilitation. The definition of psychopathy has been revised and edited since its original conception in the early 1700s and has now evolved to be a specific classification under the DSM-5 definition of APD (Edens, Kelley, Lilienfeld, Skeem, & Douglas, 2015). Implications for understanding the unique and complex nature of a psychopath can be seen in all multidisciplinary roles. For example, the classification of a psychopath in an institutional setting can affect staff in mental health, programming, security, and parole areas. Additionally, recognizing the difference between APD and psychopathy can help identify best practice interventions. In conjunction with effective interventions, the debate of psychopathy as a taxon has crucial effects on when interventions should be implemented (either in adolescence or adulthood), and if psychopaths have the ability to be rehabilitated (Edens, Marcus, Lilienfeld, & Poythress, 2006). An evaluation of the validity and reliability of the PCL-R confirms its use in the assessment of psychopathy. Cross-cultural validation implies that the PCL-R can be used globally as the predominant indicator of psychopathic traits in offenders (Hare et al., 2000). Furthermore, more recent studies conducted in sex offender populations as well as high-risk, violent offender populations suggest that some traits of psychopathy can be reduced to facilitate lower recidivism rates (Abracen et al., 2011; Abracen & Looman, 2016; Olver & Wong, 2009; Olver et al., 2013). The efficacy of CBT based interventions has been validated as an appropriate treatment option for psychopathic offenders. Finally, responsivity factors that are exclusive to psychopaths encourage adherence to the RNR model of offender rehabilitation in order to provide the most effective programming possible. Understanding the challenges that both the therapist/staff and the offender encounter is critical in reducing recidivism rates in this population.

Contributions to the Behavioural Psychology Field

This literature review provides three contributions to the Behavioural Psychology field. First, the paper aids in dispelling the popular belief that psychopathic offenders are untreatable. This may assist in providing alternate opinions to those who are rigid in their beliefs. Second, this review contributes to the already vast research that supports evidence based CBT strategies and the effectiveness of adhering to the RNR model and applies these principles to psychopathic offenders. Finally, the current thesis illuminates the unique responsivity factors to consider when delivering programming to psychopathic offenders. This may influence the decision to adapt programming in the future.

Limitations of the Current Literature Review

The current review intended to provide information on psychopathy as a construct and if correctional programming was effective for psychopathic offenders—however, some limitations exist. First, the literature was predominately from English speaking countries. This lack of cultural representation creates difficulty in generalizing the current review findings cross-culturally and may make the review irrelevant to non-English speaking countries. Much of the literature also represented male, adult offenders, diminishing generalizability across samples. A further limitation is that the effectiveness of programming can only be extracted from previous research studies, eliminating an opportunity for current empirical validation.
Recommendations for Future Research

In the future, research that includes multiple settings and subjects should be conducted to further validate correctional programming for psychopathic offenders. It may be beneficial to create an adapted program designed specifically for psychopathic offenders and test the effectiveness of such a program. Until this adaptation is complete, it can be difficult to assess whether treatment gains are fully made. Moreover, completing staff training for those who may encounter such a population is a key factor in addressing the responsivity issues associated with this particular group. Development of a staff training manual may assist in ensuring that staff members are equipped to effectively care for psychopaths while protecting themselves against manipulation and deception.

**Word Count:** 11,609
References


### Appendix A

**Summarized Articles**

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<th>Author/Title</th>
<th>Method</th>
<th>Results</th>
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<td>Abracen, J., Looman, J., &amp; Langton, C.M. (2008). Treatment of sexual offenders with psychopathic traits: Recent research developments and clinical implications. <em>Trauma, Violence, and Abuse</em>, 9(3). doi: 10.1177/1524838008319633</td>
<td>This study compiled the existing literature on psychopathic offender treatment and discussed current outcome, gaps, and recommendations for future research. The literature review included studies that addressed psychopathic sex offenders, psychopathic adolescents, and comorbid substance abuse. Finally, the study addressed treatment outcomes for these populations and provided implication of the current literature.</td>
<td>Results indicated that current research does not support a “nothing works” approach with psychopathic offenders. Conclusions were made that long-lasting, cognitive-behavioural based treatment program are the best approach in reducing violence and aggression in psychopathic offenders.</td>
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<td>Abracen, J., Looman, J., Ferguson, M., Harkins, L., &amp; Mailloux, D. (2011). Recidivism among treated sexual offenders and comparison subjects: Recent outcome data from the regional treatment centre (Ontario) high-intensity sex offender treatment programme. <em>Journal of Sexual Aggression</em>, 17(2). doi: 10.1080/13552600903511980</td>
<td>The authors attempted to provide a more complete analysis of the outcome of the Regional Treatment Centre Sex Offender Treatment Program (RTCSOTP). The investigation differs from previous ones by providing a comparison group. Offenders were matched on PCL-R score, age at index offence, and type of sexual offence. Treatment at RTC was compared to those who were not treated at Millhaven Institution. Information available for each offender included the initial intake assessment, and PCL-R score. Recidivism data was collected through the RCMP and Finger Print Service (FPS) records. A score of 25 was</td>
<td>The mean PCL-R score for untreated offenders was 18.75, and 18.01 for RTCSOTP offenders. For the whole sample, 11.1% of individuals at RTCSOTP recidivated sexually, and 9.1% for the comparison group. Investigation into treatment completion showed that those who received substance abuse treatment as well as sex offender programs recidivated less than those who just completed sex offender treatment. Of the individuals who were classified as psychopathic, only one high PCL-R offender in the treatment group, and one in the comparison group recidivated sexually. Results from the RRASOR indicated</td>
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used as the cut-off for the PCL-R in identifying psychopathy. The Rapid Risk Assessment of Sexual Offender Recidivism (RRASOR) was scored for all participants. Sixty-four individuals in the RTC sample were matched with 55 individuals at Millhaven.

The average follow-up period was 9.4 years for the treated group and 11.2 for untreated. that individuals at the RTCSOTP had a higher risk of reoffending sexually. Of the sample, 54.8% of the treated group scored in the high-risk range, while 24.1% of the untreated group scored in the same range. High risk treated offenders reoffended at lower rates than originally predicted, suggesting that the RTCSOTP program was effective in reducing rates of recidivism.


The authors conducted a study which assessed treatment attrition and provided information on applying the RNR model to psychopathic offender treatment. The study compared treatment completers with treatment non-completers and adherence to the RNR model in a sex offender program. Statistically significant different variables were used to classify these two groups and discriminant functions were used to assess the accuracy of these classifications.

Participants included 64 male, adult sex offenders--32 completed treatment, and 32 dropped out of the Clearwater Sex Offender Program. The program took place in a forensic mental health setting in Canada between the years of 1995-2001. The risk principle of the RNR model was assessed using the Static 99 measure which predicts sexual recidivism. The need Acceptable levels of interrater reliability were calculated for the Static 99 (r = .77), the Sexual Deviancy and Criminality variables of the VRS:SO (r = .80), ratings of Denial (r = .73), Attitude Toward Treatment (r = .73) and Disruptive Behavior on Unit (r = .59).

Univariate analyses concluded two distinct variables which affect whether an individual completes treatment or not. These variables were 1) general criminality and rule breaking behaviours, and 2) lack of motivation and insight. Group 1 factors were representative of the Criminality domain of the VRS:SO, and group 2 factors were representative of the Treatment Responsivity domain of the VRS: SO. No significant differences between completers and non-completers were shown on the Static 99, through intellectual
principle was assessed using the Violent Risk Scale: Sex Offender Version (VRS:SO) which considers dynamic risk factors. Finally, the responsivity principle was assessed using three factors from the “Treatment Responsivity” domain of the VRS: SO. These factors included cognitive distortions, insight, and treatment compliance.  

Of the non-completers, rapists had the highest drop-out rate. 56% of non-completers were rapists, 19% pedophiles, and 25% mixed sexual offenders. Post-hoc comparisons showed that rapists had more disruptive behaviour than pedophiles (p = .03) and incest offenders (p = .04). Discriminant analysis determined that 30 of the 32 drop-outs were classified correctly and 31 of 32 treatment completers, an overall accuracy rate of 95.3%. 

Results indicated that rule breaking behaviour is a crucial treatment target, and lack of treatment motivation was an important factor in overall treatment attrition.


The authors sought to discover the prevalence of antisocial personality disorder in offenders. The study included 320 offenders who had been recently admitted into the United States correctional system. Of the 320 offenders, 264 were men, and 56 were women.  

All participants were administered the Mini International Neuropsychiatric Interview (MINI), a Short Form Health Survey (SF-36), and the Level of Service Inventory-Revised (LSI-R).  

Of the 320 participants, 113 met the criteria for antisocial personality disorder (35.3%). 37.1% of those with APD were men, and 26.8% were women. On the LSI-R, 80.5% of offenders with APD reported previous mental health treatment. The mean score for the LSI-R was 34.9 for those with APD, and 31.8 for those without. The results from the SF-36 were not statistically different between the two groups.  

Of interest, those with APD had significant overlap in
The Pearson chi-squared test was used for comparison between variables. The results indicate the prevalence of APD in a prison population, as well as the implications of comorbid diagnoses. The authors consider these results to be crucial in appropriately managing offender populations.

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<td>The authors evaluated the integration of the components of the RNR model in correctional programming as well as recommended treatment dosage. Recidivism data was collected. All participants were male offenders who met criteria for the Regional Treatment Center (RTC). The final sample consisted of 408 offenders who completed treatment, and 132 who were not admitted to treatment, with a mean age of 32.1 years. Participants were administered the Level of Service Inventory—Ontario Revision (LSI-OR) to predict violent and nonviolent recidivism. The unit also conducted interviews to gain demographic information. The Criminal Sentiments Scale (CSS) was provided to assess antisocial attitudes, The Paulhus Deception Scale (PDS) to assess self-serving biases, The Attitude Towards</td>
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<td>The average score of the LSI-OR was 22.8. Within the sample, 14.4% were considered “very high risk”, 55.3% “high risk”, 28.4% “moderate risk”, and 1.9% “low risk”. The most common “needs” assessed were substance abuse (97.7%) and depression/anxiety (39.0%). Rates of recidivism were statistically significant between the two groups. The treated group had 31.1% of offenders recidivate, while the untreated group had 41.3%. Regression analysis for LSI-OR results, criminogenic needs, and treatment were significant predictors of recidivism. Analyses also controlled for risk and need of the treatment and non-treatment group. The recidivism rate when controlling for these factors was 28.4% which was a 12.9% reduction when</td>
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Correctional Programming (ACT) to measure treatment motivation, and the Beck Depression Inventory (BDI).

Treatment effectiveness was measured through comparisons of recidivism data of treated and untreated offenders. Logistic regression was used to statistically analyze this comparison. To assess treatment dosage, post hoc analyses were conducted. Finally, multiple regression analyses were performed to evaluate risk, needs, and responsivity and length of treatment completed.

Logistic regression analyses for treatment “dosage” combining LSI-OR score, the number of criminogenic needs, and the length of treatment were found to influence recidivism rates. The reduction in recidivism for each week of treatment was 1.2% and therefore longer treatment programs were deemed more effective in reducing recidivism. Those who completed treatment recidivated at significantly lower rates than those who were untreated.

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<td>The authors discuss the history of the classification of psychopathy as it pertains to the Diagnostic and Statistical Manual. The compilation includes the DSM-I, II, III, and IV, and V. The DSM-I included the diagnosis of “sociopathic personality disturbance”. Unfortunately, this classification included characteristics associated with antisocial personality disorder and did not distinguish clearly the difference between ASD and psychopathy. The DSM-II expanded on this and included criteria more closely related to Cleckley’s original 16 traits of psychopathy. This version included specific and explicit criterion sets. During this time, Robert Hare developed the PCL. The revised version of the DSM-III incorporated Hare’s PCL items and attempted to distinguish key differences between psychopathy and APD. The DSM-IV sought to revise and eliminate items on the PCL to</td>
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correlate with behavioural tendencies of those with psychopathy. Again, there was much overlap between APD and psychopathy with no real distinction between the two. Finally, the DSM-V incorporated the Triarchic Psychopathy Measure which distinguished psychopathy from APD by three factors: boldness, meanness, and disinhibition. Additionally, the DSM-V included a “psychopathy specifier” under APD in an attempt to discriminate against the two personality disorders.


The authors examined the latent structure of psychopathy to determine if a psychopathy taxon existed. Participants were 876 male offenders who were either serving sentences in the United States or were participating in court ordered drug treatment. The study utilized the cut-off score of 30 to categorized participants into psychopathic and non-psychopathic groups. The mean PCL-R score was 23.16. The Quick Test was also administered to determine intellectual functioning—only participants who received an IQ score of 70 or higher were included in the story in order to avoid potentially incorrect data.

MAMBAC, MAXEIG, L-Mode, and MAXCOV taxometric analyses were conducted and visually.

The authors concluded, through the use of taxometric analyses, visual representations, and base rates that there was no evidence of a psychopathy taxon. Taxometric simulations were conducted as a comparison for data and were not replicated in the current study.
Analyses were conducted for the four facets of psychopathy (as indicated by Hare) as well as using eight items from the PCL-R which were most highly correlated with a psychopathy classification.

Replication of a previous study, which did indicate a psychopathy taxon, did not yield the same results as the original study.


The authors conducted taxometric analyses to contribute to the debate of the existence of a psychopathy taxon. Data from 4,865 federal offenders across Canada were collected. Psychopathy was assessed using the PCL-R. The mean PCL-R score for the participants was 21.9.

MAMBAC, MAXEIG, and L-Mode taxometric analyses were used to determine the presence of a psychopathy taxon. The first set of analyses was conducted to examine the four facets of the PCL-R. The second set of analyses attempted to label psychopathy as taxometric or dimensional based on the latent structure of the four facets. The final set of analyses examined the latent structure of Factor 1 and 2 of the PCL-R.

The first set of analyses supported that psychopathy is appropriately represented by all four facets of the PCL-R: interpersonal, affective, lifestyle, and antisocial. MAMBAC, MAXEIG, and L-Mode analyses yielded curved distributions, indicating that the four facets of psychopathy are influenced by individual differences and therefore psychopathy is dimensional.

The second set of analyses produced no taxometric peaks within the distribution. For the third set of analyses, MAMBAC and MAXEIG indicator sets that represented Factor 1 did not produce any taxometric peaks. These results were mirrored with Factor 2 results. All analyses supported that both the latent and core factors of psychopathy can be best interpreted as evidence of a dimensional structure of psychopathy.


This chapter reviews empirical findings for the efficacy of psychopathic offender programming. The literature review examined therapeutic communities and cognitive-behavioural

For therapeutic communities, Rice, Harris, and Cormier’s (1992) study produced results that implied psychopaths who received treatment actually recidivated violently at higher rates than those who did not.
For therapeutic communities, the authors examined Rice, Harris, and Cormier’s (1992) results. Their study was a quasi-experimental analysis which matched 146 treated offenders to 146 non-treated offenders. The average PCL-R score was 19. Follow-up was conducted approximately 10.5 years after completion of treatment. Additional summaries included results from Olgoff, Wong, and Greenwood (1990), and Hobson, Shine, and Roberts (2000).

Cognitive-behavioural based studies conducted by Seto and Barbaree (1999), Hughes, Hogue, Hollin, and Champion (1997), and Hare, Clark, Grann, and Thorton (2000). Furthermore, results from Olgoff et al., (1999) and Hobson et al., (2000) showed that psychopaths showed less motivation and tended to drop-out of treatment earlier than those who were non-psychopathic. A main criticism of the therapeutic community is that it allowed psychopaths the opportunity to practice deceitful behaviour by mimicking “non-psychopathic” behaviour.

Results from the cognitive-behavioural based prison programs yielded dismal results as well. In Seto and Barbaree (1999), psychopaths who completed treatment and who showed the most improvement reoffended sooner, and in more violent ways than those who had been categorized in different groups. Hughes et al., (1997) concluded from their study that PCL-R score inversely correlated with therapeutic gain. Finally, Hare et al., (2000) demonstrated that psychopaths who scored high, particularly on Factor 1 of the PCL-R, and had competed treatment, had higher rates of recidivism than those who scored high and did not complete treatment.

These results contributed to the belief that psychopathy is untreatable.
The authors administered the PCL-R to inmates who were admitted to the Regional Treatment Center Sex Offender Treatment Program (RTCSOTP). The program incorporated the RNR model and combined both group and individual therapy. The treatment hypothesis suggested that those with high PCL-R scores would recidivate at higher rates than those with lower PCL-R scores.

The study included 154 individuals who had all been admitted to the RTCSOTP and were federally convicted inmates. Recidivism data was collected through the CPI system and specifically looked at sexual and violent recidivism. Recidivism data was available for 102 of the 154 participants. The average PCL-R score was 22.5 for the sample. Participants were categorized into low PCL (score of 25 or less), or high PCL (score of 25 or more).

RTCSOTP treatment reports were coded on three dimensions: victim awareness, quality of offence cycle, and relapse prevention plans, which were chosen as primary treatment targets for the sample group. Risk rating at the end of treatment was also conducted using the Violence Risk Appraisal Guide (VRAG) or the Static-99.

Data for 118 men were available for this analysis. For the 38 men assessed as having no reduction in risk, 31.6% were rated as having good treatment behaviour. For the 80 men who were assessed at having a reduction in risk, 30.0% were rated as having poor treatment behaviour. Results from risk rating and psychopathy scores, via a correlation coefficient established a negative relationship (r = -.27). As psychopathy scores increased, risk reduction was less associated with treatment.

In relation to psychopathy scores and recidivism rates, Wilcoxon survival analysis showed a positive correlation with high PCL scores and recidivism. The proportion survived for PCL low scorers was 80.7% compared to 60% for high scores over an average of five-year follow-up period.

Pairwise comparisons showed that the high PCL—no reduction group reoffended at a 50% higher rate than both the low PCL—no reduction (6.2%) and low PCL—reduction group (24.4%).

Analyses explored the correlation between treatment behaviour, risk rating, psychopathy, and posttreatment reoffences. The relationship between PCL-R scores and risk reduction were assessed in four groups: low PCL—no reduction; low PCL—reduction; high PCL—no reduction, and high PCL—reduction.


The study aims to address several limitations in previous taxonomic explorations of psychopathy. Specifically, the authors use a more general offender population, focuses on psychopathic behaviour and omits antisocial, and implement improvements on taxometric analyses previously used.

The sample consisted of 309 male inmates. In place of the PCL-R (though scores were available for this instrument), the authors utilized the Psychopathic Personality Inventory (PPI) in the taxometric analysis. The base rate of 20-25% in this population was large enough to detect the existence of a taxon. MAMBAC, MAXEIG, and L-Mode analyses were used.

If MAMBAC analysis supported a psychopathy taxon, a peak along the distribution would be located near the base rate. However, base rate values varied and were between 0.30 and 0.51 and no such peak was produced. Additionally, comparison with simulated taxon data confirmed the large difference between the two.

Evidence of a taxon using MAXEIG analysis would elicit a peak between the members of the taxon group, and members of the complement group. Again, base rates varied and were between 0.25 and 0.77. The authors note that none of the MAXEIG analyses produced a peak that was suggested evidence of a taxon. Likewise, simulation data was significantly different when compared to the results.
The authors conducted a study to determine the effectiveness of a therapeutic community for psychopathic offenders. Specifically, attrition, clinical improvement, motivation/effort, and institutional behaviours were evaluated.

Participants were 80 federal inmates who completed the PCL. Offenders were categorized as either psychopathic (score of 27 or higher), mixed (score of 18-26), or non-psychopathic (score of 17 or lower). The degree of motivation was assessed through semi-structured interviews and scored from one (no) to four (substantial).

Comparisons between the two groups and statistical analyses provided insight into the difference between psychopathic offenders, mixed offenders, and non-psychopathic offenders.

Finally, the L-Mode would produce a bimodal distribution should evidence of a taxon exist. The curve was unimodal, supporting a dimensional structure of psychopathy. Base rates of approximately 0.50 are indicative of a psychopathy continuum, and L-Mode analyses calculated base rates at 0.47 and 0.48.

Mean PCL scores were 31.29 for psychopathic offenders, 22.06 for mixed, and 12.5 for non-psychopathic. Psychopathic offenders were in treatment for an average of 103.71 days, mixed offenders for 207.47, and non-psychopathic 241.67 days. Therefore, a negative correlation between PCL score and length of stay was determined ($r = -0.29$).

One-way ANOVAs demonstrated degree of improvement and motivation between the three groups. The average degree of improvement for psychopathic offenders was 1.29, 2.01 for mixed, and 2.25 for non-psychopathic, supporting that psychopathic offenders had less improvement than other offenders. For motivation, psychopathic offenders demonstrated lower levels of effort than the other groups (1.57 compared to 2.45 for mixed, and 2.83 for non-psychopathic).
These results indicate that therapeutic communities are not an effective treatment method for psychopathic offenders.

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<td>This study evaluated the psychometric properties of the Violence Risk Scale (VRS) and its ability to accurately be used as a violence risk assessment and subsequent treatment planning tool. The relationship between psychopathy, therapeutic change, and violent recidivism was examined. Both the VRS and the PCL-R were given to the sample. Participants were 152 federally incarcerated male offenders. Each individual participated in the Aggressive Behavior Control (ABC) program at the Regional Psychiatric Center (RPC) in Saskatoon. The mean age of participants was 30.5 years of age and serving an average sentence of 6.3 years. Violent recidivism was coded on a yes (1) or no (0) scale and included any new violent offences committed while incarcerated or after discharge into the community. General recidivism referred to any new offence violent or nonviolent. Analyses focused on the VRS therapeutic change score, psychopathy ratings, and violent recidivism measures. Correlations between therapeutic change and In the sample, 42 offenders scored 30 or higher on the PCL-R, and 98 met the criteria for psychopathy when using a score of 25 as the cut-off. In regard to the VRS, 142 individuals met the cut-off of a score of 50 or higher. Pre- and- post comparisons of the VRS showed a mean change score of 4.7. VRS therapeutic change scores were correlated negatively with PCL-R components which supports that when PCL-R scores are higher, therapeutic change is lower. Regression analysis showed that Factors 1 and 2 of the PCL-R predicted therapeutic change, with Factor 1 accounting for variance and Factor 2 did not have significant variance. An additional regression analysis was conducted using the four facets of the PCL-R which produced similar results to the first regression analysis. The sample was followed for approximately 4.9 years. Within this time frame, 69 were convicted of a new violent offence, 84 for a non-violent offence, and 93 had a new conviction in the community. Factors 1 and 2 on the PCL-R accurately predicted violent recidivism.</td>
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psychopathy were computed between PCL-R components and VRS scores. The accuracy for the PCL-R to predict future recidivism was also calculated. Finally, the effect of therapeutic change on reduction of violent recidivism was calculated after controlling for psychopathy.

PCL-R and VRS scores were dichotomized to create four groups: low psychopathy, low change; low psychopathy, high change; high psychopathy, low change; high psychopathy, high change.

Cox regression survival analysis were conducted to assess the predictive value of treatment change and future violence (once psychopathy was controlled). VRS change scores were interpreted and determined that 8.5% to 7.8% predicted decrease in violence for every one-point increase in change score on the VRS. VRS scores also exhibited predictive validity when Factors 1 and 2 items on the PCL-R were controlled for.

Kaplan-Meier survival analysis indicated the high psychopathy, low change group ($\chi^2 = 4.30$) had higher violent failure rates than the high psychopathy, high change group ($\chi^2 = 11.43$).

Results concluded that therapeutic change was associated with violent recidivism.


The authors provided an extensive review on treatment for psychopathy in forensic settings. The review began with studies that generated pessimistic results for the treatment of psychopathy, and expanded on more promising treatment outcomes. Finally, the literature review commented on if psychopathy can in fact be treated.

The authors reviewed several studies that posited that psychopaths are untreatable. However, the authors note that several of these studies (Salekin, 2002; Seto & Barbaree, 1999; Skeem, Polaschek, & Manchak, 2009) did not show a significant difference between psychopaths who completed treatment and psychopaths who did not, only that some subgroups of psychopathy do no worse than other offenders who are less psychopathic.
The authors compilation of psychopathic offender treatment that may be effective consistently argued that adherence to the RNR model, and cognitive-behavioural treatments were the most affective. Of interest is that reassessment using the PCL-R does show a reduction in Factor 2 scores over time suggesting that there is some reduction in this area. These results indicate that there must be a possibility then, that traits of psychopathy can be reduced.

| Polaschek, D.L.L., Bell, R.K., Calvert, S.W., & Takarangi, K.T. (2010). Cognitive-behavioural rehabilitation of high-risk violent offenders: investigating treatment change with explicit and implicit measures of cognition. *Applied Cognitive Psychology*, 24(3). doi: 10.1002/acp.1688 | When recidivism after treatment is examined. The authors used Implicit Association Tests (IAT) to determine if violent offenders had a reduction in violent responses after completion of an intensive cognitive-behavioural based program. Participants were 32 male offenders on the Violence Prevention Unit (VPU) who had been assessed as having a 70% chance of reconviction of a violent offence within 5 years of discharge. Seventy-eight percent of individuals met the 25-score cut-off for psychopathy. Data was collected for four different cohorts over an 18-month period.  

The PCL:SV, Criminal Attitudes to Violence Scale (CAVS), and Aggression Questionnaire (AQ) were After treatment, the participants responded less favourably to weapons during the IAT trials. Response time increased slightly for weapons in entertainment and violence housework, but were not statistically significant. For the self-report Aggression Questionnaire, scores reduced significantly pre-and-post treatment from an average of 84.3 to 65.4. The average CAVS score also decreased from 48.8 to 30.2. Unfortunately, score data for the VRS was unavailable in the study, however, the authors note that VRS scores pre-program were most closely associated with AQ scores. Therefore, the authors conclude that programming on the VPU unit did slightly |
completed. Individuals participated in six Visual Analogue Scales (VAS) which corresponded to the IAT trials, and were assessed using the Violence Risk Scale (VRS) to determine risk of recidivism. IAT trials were conducted over five stages and asked participants to pair 35 violent stimuli with positive words, and 35 with negative words. Latency of response was assessed.


The purpose of the study was to investigate if there was an relationship between psychopathy, sex offence, probability of being granted conditional release, and performance on conditional release.

File reviews of 310 Canadian male federal offenders was completed to gather demographic data and to categorize subjects for the purposes of the study. Offenders were labeled either as a non-sex offender, rapist, child molester, or mixed rapist/molester and were also categorized based on PCL-R scores. Ninety offenders were rated as being psychopathic. Ninety-nine were classified as rapists, 88 as child molesters, 24 mixed rapist/molesters, and 99 were non-sex offenders.

PCL-R scores differed significantly across type of offence. Rapists had a mean PCL-R score of 26.66, mixed rapist/molesters had an average score of 28.95, child molesters had an average score of 21.10, and non-sex offenders had a mean score of 25.67.

PCL-R scores effectively predicted violent offences. Offenders diagnosed with psychopathy committed on average 4.47 more violent offences when compared to individuals who scored lower on the PCL-R. Interestingly, psychopathy did not have any predictive validity for sexual offences for those in the rapist, mixed rapist/molesters, and non-sex offender populations, but did predict sexual offences for child molesters. Child molesters with psychopathy on average committed 7.72 more sexual offences than those in the lower psychopathic ranges. Chi-
The authors conducted a literature review to conclude whether psychopathic violence can be reduced. General adult forensic populations, adult psychiatric populations, adult sex offender populations, and adolescent populations were reviewed.

For general adult forensic populations, a study conducted by Richards, Casey, and Lucente (2003) were reviewed. In Richards et al., (2003) 404 maximum female prisoners were assigned either to a therapeutic community, a Heuristic System treatment with dedicated housing, or a Heuristic System treatment without dedicated housing.

Studies of violence in adult psychiatric populations included reviews of Chakssi, de Ruiter, and Bernstein (2010), Rice, Harris, and Cormier (1992), and Skeem, Richards et al., (2003) concluded that total scores and Factor 2 scores of the PCL-R were more closely related to the prediction of violence during the treatment program. Findings suggested that a relationship between psychopathy, poorer treatment response, general recidivism upon release, and violence while incarcerated existed. However, findings did not support that psychopathy was associated with violence after treatment.

Review of Chakssi et al., (2010) suggested that around 25% of the those with psychopathy became more violent after the 18-month follow-up than those who were non-psychopathic. The sample was followed for an average of 126 months and results indicated that psychopathic offenders who had better treatment behaviour
Monahan, and Mulvey (2002). Chakssi et al. (2010) had a sample of 74 adult psychiatric patients and used a cognitive-behavioural approach to assess institutional violence. 322 males participated in Rice et al.,’s (1992) study and were treated in a therapeutic community. The main outcome measure assessed nonviolent sexual recidivism. Skeem et al., (2002) had a sample of 195 individuals in a community psychiatric setting.

Adult sex offender studies included Barbaree (2005), Seto and Barbaree (1999), and Langton, Barbaree, Harkins, and Peacock (2006). For Barbaree (2005), the sample size included 224 males and assessed sexual and non-sexual recidivism. Seto and Barbaree (1999) had a sample size of 216 males and again assessed sexual and non-sexual recidivism. Langton et al., (2006) had a sample size of 571 males and assessed sexual and non-sexual recidivism as well as treatment drop-out.

For the final category, studies by Gretton, McBride, Hare, O’Shaughnessy, and Kumka (2001), and Spain, Douglas, Poythress, and Epstein (2004) Caldwell (2011), were reviewed. In Gretton et al., (2001) charges from 220 adolescent sex offenders were examined and compared to were more likely to commit violent act after release than psychopaths who did not have good treatment behaviour. Results indicated that those in treatment who received seven or more sessions and had high psychopathy, were more violent than those with high psychopathy that received between zero and six sessions.

Barbaree (2005) followed the sample for an average of 5.2 years. Results indicated that psychopathy accurately predicted sexual and non-sexual recidivism, and rates of occurrence were higher for psychopathy. However, treatment behaviour was not a significant predictor. Seto and Barbaree (2005) found that men with high psychopathy and better treatment behaviour were more likely to recidivate sexually or non-sexually than those who had lower psychopathy, or lower treatment behaviour but high psychopathy. Finally, in Langton et al., (2006), psychopathy accurately predicted treatment drop-out and faster failure rates. Additionally, psychopathy was an accurate predictor in violent and non-violent sexual recidivism.

For Gretton et al., (2001) results were calculated after an average follow-up period of 55 months. Adolescents assessed as highly
psychopathy scores. In Spain et al., (2004), data from 42 sex offender adolescents in a sex offender program, and 43 living in a halfway house were combined. In Caldwell (2011), 248 male adolescents were studied to determine the relationship between nonsexual violent recidivism and psychopathy and compared the Mendota Juvenile Treatment Center (MJTC) with a Treatment as Usual group (TAU).

The authors conducted an extensive literature review on current psychopathic offender treatment efficacy. Areas summarized include past modalities of treatment, reviews of adult, adolescent and childhood treatment, as well as direction for future research. Treatment of adulthood psychopathy was the main interest in this article as it pertains more closely to the current literature review.

In Olgoff et al., (1990) conducted information based on PCL scores and.

Unfortunately, in Hughes et al., (1997), individuals who scored of 30 on the PCL-R were excluded from treatment. Results did indicate that the higher the PCL-R score, the poorer the treatment outcome, but the small sample size created difficulty in generalizing the results.

In Richards et al., (2003) individuals who scored higher than 30 on the PCL-R were refused treatment. However, those who were admitted to
commented on the behaviour of individuals who were deemed psychopathic and those who were non-psychopathic. A total of 80 federal inmates participated in the study. In this review, specifics on procedures were not available.

Hughes et al., (1997) studied nine individuals who were deemed as mentally disordered psychopathic offenders. Treatment was cognitive skill based. The PCL-R was used to assess psychopathy and to examine the relationship between PCL-R score and treatment gain.

Richards et al., (2003) had a sample of 404 female offenders who were participating in a substance abuse program. The purpose of the study was to identify if higher PCL-R scores were associated with treatment outcomes and recidivism.

Finally, in Van Stelle et al., (2004), 179 males in a residential therapeutic community were assessed. The treatment had four, two-month treatment phases and participants had dual diagnoses over substance abuse and other illnesses. During the first follow-up, and had high PCL-R scores fared significantly worse than those who scored lower. Those with higher PCL-R scores were less likely to remain in the program, more likely to violate rules, had inconsistent attendance, and were more likely to refuse urinalysis. Follow-up also indicated that those with high psychopathy scores were more likely to reoffend than those with lower scores.

Results in Van Stelle et al., (2004) mirrored other studies. Higher PCL:SV scores were related to non-compliance, and non-completion of treatment. Furthermore, the 25% of participants who did complete treatment had less severe psychopathy, as indicated by scores on the PCL:SV.

Skeem, J.L., Monahan, J., & Mulvey, E.P. (2002). Psychopathy, treatment involvement, and subsequent This paper evaluated the relationship between psychopathy, treatment involvement, and violence. During the first follow-up, 59% of participants had received between zero and six sessions, and 41% had
Participants were enrolled in the MacArthur Violence Risk Assessment Study and were civil psychiatric patients. The study sought to answer whether psychopathy controls the effect of outpatient treatment and violence, and whether there may be a “dose-response” effect when treating patients. The final sample size was consisted of 871 patients who were rated using the PCL-R: SV (Screening Version). Results indicated that 195 were classified as “potentially psychopathic” and 72 were classified as “psychopathic”.

Individuals participated in two separate interviews. The first aimed to collect demographic information and to confirm DSM-III diagnoses. The second set of interviews were conducted every ten weeks over the year follow-up period. The PCL-R:SV was conducted on average during the first or second follow-up interview. At each follow-up, participants were asked whether they were participating in other treatment besides the MacArthur Violence Risk and if so, how many sessions they had participated in. Sessions were dichotomized from zero to six or seven or more sessions.

Instances of violence were based on official records, and received seven or more. Forty percent of patients said they were receiving no treatment at the first follow-up. This number decreased to 14% by the end of the fifth follow-up. Results showed that 72% of potentially psychopathic patients attended at most six sessions, and 28% received seven or more.

For violent incidences, 6% of potentially psychopathic patients who completed seven or more sessions were violent, whereas 23% who completed six or less sessions were violent.

Odds ratio across the follow-ups suggest that psychopathic patients who completed six or fewer treatment sessions were 3.5 times more likely to be violent within the 10-week follow-up period.

Propensity scores were calculated to determine if those who received no treatment were just as likely to be violent than those who received little treatment. Comparisons of the results indicated no difference between those who completed zero treatment and those who completed little treatment (1-6 sessions).
collateral information and were based off of the Straus and Gelles’ Conflict Tactics Scale. Raters were asked to record instances of violence and the frequency of the violent act (i.e. how many times someone hit).

| Skeem, J.L., Poythress, N., Edens, J., Lilienfeld, S.O., & Cale, E.M. (2003). Psychopathic personality or personalities? Exploring potential variants of psychopathy and their implications for risk assessment. *Aggression and Violent Behavior, 8*(5). doi: 10.1016/S1359-1789(02)00098- | The authors attempt to distinguish between the concepts of antisocial personality disorder and their relevance to modern-day psychopathy. The purpose is to evaluate these constructs in order to better treat, manage, and assess psychopaths. Articles that did not use the PCL-R to assess psychopathy were excluded from the review. The two variants of psychopathy identified in the article are primary psychopathy and secondary psychopathy. Variants of psychopathy discussed include work by Karpman, Porter, and Mealey. Additionally, dimensions of psychopathy and their differentiating variants are explored. Finally, implications for future research are discussed. | Karpman distinguished between primary and secondary psychopaths by commenting on etiological differences. According to Karpman (1948), primary psychopaths are absent of consciousness, but secondary psychopaths have the ability to occasionally portray traits of empathy, love, or guilt. He also argues that primary psychopaths are less impulsive in their actions, and generally have well-thought out plans before acting. Porter (1996) lends support to Karpman’s distinction by suggesting that primary psychopaths are influenced genetically, whereas secondary psychopaths are generally products of their environment. Mealey (1995) continues to build on these distinctions by suggesting that secondary psychopaths are influenced by environmental agents, and that primary psychopaths are a group of “unchanging frequency”. This provides a basis that treatment of secondary psychopaths is possible as environmental factors can be manipulated. |
The authors suggest that exploration into the two types of psychopathy, as well as the three (now four) facets of the PCL-R may be critical in determining an understanding of psychopathic individuals. Furthermore, whether these factors differ in treatment responsiveness is a crucial area in determining best practice outcomes for psychopaths.


The authors sought to build on previous research which did not conclusively state whether a taxon for psychopathy existed. Using a sample of adolescents, the authors hoped to provide results favouring either a taxometric or dimensional structure of psychopathy. Reasoning suggests that if a psychopathy taxon does exist, it should be evident in childhood. The base rate for adult psychopathy must be high or within a large sample. The sample consisted of 1, 111 adolescent boys with a mean age of 11.8.

The sample was given the PCL: YV (Youth Version) as well as the Childhood and Adolescent Taxon Scale (CATS). Results were compared to the DSM-IV conduct disorder criteria, as these criteria are associated most closely with identifying antisocial traits in children.

MAXCOV and MAMBAC taxometric analyses were used to determine a base rate for a psychopathy taxon averaged 0.08. Base rates for the eight PCL: YV items had an average of 0.10, and the seven CATS indicators had a base rate average of .09. Examination of distributions clearly demonstrated two distinct groups, boys who had
<table>
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<th>Source</th>
<th>Summary</th>
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<tr>
<td>Vien, A., &amp; Beech, A.R. (2006). Psychopathy: Theory, measurement, and treatment. Trauma, Violence, and Abuse, 7(3). doi: 10.1177/1524838006288929</td>
<td>The authors combine previous research outcomes and discuss more recent treatment options for individuals with psychopathy. Vien and Beech summarize theories of psychopathy, such as neurobiological, moral deficit, and selective attention in order to provide background information on explanations for psychopathic development. Consolidation of recent</td>
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<tr>
<td>Wong and Hare (2005) developed guidelines for the PTP program. The main premise of the program is to teach psychopathic offenders to use their developed prosocial behaviours in ways that benefit them as individuals. Unfortunately, the article does not elaborate on treatment efficacy using PTP guidelines and suggests this as an area for future research.</td>
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<tr>
<td>Thompson, D.F., Ramos, C.L., &amp; Willett, J.K. (2014). Psychopathy: Clinical features, developmental basis and therapeutic challenges. Journal of Clinical Pharmacy and Therapeutics, 39(5). doi: 10.1111/jcpt.12182</td>
<td>The objective of the literature review is to provide professionals with the following: an understanding of the characteristics of psychopathy, factors which influence the development of psychopathy, and pharmacological treatments. The authors used the databases MEDLINE, Web of Science, and International Pharmaceutical Abstracts to search for psychopathy and appropriate drug interventions. The literature suggests that deficits in the amygdala and prefrontal cortex, specifically grey matter are neurobiological indicators of the development of psychopathy. Additionally, increases in the neurotransmitter dopamine is associated with psychopathic individuals and may partially explain impulsivity. Furthermore, serotonin dysregulation has also been demonstrated in neuroimages of those with psychopathy. The authors suggest pharmaceuticals that regulate dopamine and serotonin may be appropriate for treatment in this population.</td>
</tr>
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</table>
In Wong and Hare (2005), the authors describe their intervention strategy called Psychopathy Treatment Program (PTP). The main objective of this program is to decrease the frequency and severity of violent behaviour.

Data from 152 male offenders in the United States were used and no exclusion criteria was set. The Structured Interview for DSM-IV Axis II Disorders (SCID-II) was used to assess APD as well as the PCL-R. The TriPM measurement was also utilized. Inmate institutional files were reviewed to complete the PCL-R. The average PCL-R score for the sample was 20.8, with Factor 1 scores averaging 7.7 and Factor 2 scores averaging 11.2. SCID-II for APD had a mean score of 4.6.

The main objective of the study was to determine if the Triarchic Psychopathy Model (TriPM) would accurately distinguish between psychopathy—as measured by the PCL-R, and APD. As ‘boldness’ as been identified in the literature previously as a key distinction between the psychopathy and APD, this domain of the TriPM was used in analyses.

The total scores for the PCL-R measurement were significant statistically in correlation to the SCID-II scores of APD. Total PCL-R scores were also correlated to the TriPM in the domains of meanness and disinhibition. For PCL-R Factor 1 items, scores were correlated to the SCID-II and the TriPM domains of boldness and meanness. Factor 2 scores were correlated to the SCID-II and the meanness and disinhibition areas of the TriPM. Notably, the SCID-II results were correlated to the areas of meanness and disinhibition for the TriPM, but not boldness—distinguishing this area as a critical difference between APD and psychopathy.

Variance scores calculated by linear regression indicated the degree to which APD accounted for discrepancy within the results. APD was responsible for 12% of variance for Factor 1 items on
Finally, the TriPM scores averaged 33.6 for the boldness domain, 15.0 for meanness, and 29.0 for disinhibition. Eighteen percent of the sample met the cut-off criteria for the PCL-R (30 or higher), and 59% met the criteria for APD as per the SCID-II.

Zero-order Pearson correlations were calculated for PCL-R scores, SCID-II scores, and the three domains of the TriPM. Hierarchical linear regression analyses were used to determine the degree in which boldness, meanness, and disinhibition show differences between psychopathy and APD.

The authors contribute to the debate of a psychopathy taxon by using the PCL: SV. The authors hypothesize that using the PCL:SV will yield similar results which support the dimensionality of psychopathy.

Six different samples were used. Sample 1 consisted of 864 male and female psychiatric patients; sample 2 consisted of 204 male inmates with a medium security classification; sample 3 contained 799 male and female individuals who had been released from a psychiatric hospital; sample 4 contained 42% for Factor 2. Boldness and meanness were significant in predicting Factor 1 scores along with APD. For Factor 2 items, boldness and disinhibition showed statistical significance. For the facets of the PCL-R, APD accounted for 9% of variance for Facet 1, 9% for Facet 2, 37% for Facet 3, and 8% for Facet 4.

Boldness was the only domain of the TriPM for predicting Facet 1 scores, meanness predicted Facet 2 scores, and disinhibition for Facet 4. No domains of the TriPM were predictive for Facet 3 scores.

In summary, the TriPM increased prediction value for total PCL-R scores, both factors of the PCL-R, and Facets 1 and 4. MAMBAC analyses yielded four curves, one for each facet of the PCL-R. When compared to simulated taxonic models, the MAMBAC curves did not elicit taxon peaks, and therefore were more representative of dimensionality. MAXEIG curves produced a base rate of .41, and, like MAMBAC curves, did not produce taxonic peaks. Finally, for the L-Mode analysis, all ten raters agreed it the curve was more representative of dimensionality. The L-Mode graph was unimodal. If the graph had been bimodal,
EFFECTIVENESS OF PSYCHOPATHIC OFFENDER PROGRAMMING

was comprised of 103 female offenders; sample 5, 149 psychiatric males in a maximum-security hospital; and sample 6, 131 female offenders with substance abuse.

The four facets of the PCL-R were used as indicators for taxometric investigation. MAMBAC, MAXEIG, and L-Mode analyses were all used.

evidence of taxon would have been concluded.


The authors aimed to identify whether or not classifying inmates by psychopathic subtype was beneficial in treatment outcomes. PCL:SV scores were used to assess whether these scores were accurate in classifying individuals. The two factors of the PCL were used as categorizations.

Ninety-five inmates were included in the sample, and the PCL:SV was scored through pre-existing file data. The Antisocial Personality Disorder (APD) checklist was also administered.

Older inmates scored higher on Factor 1 ($r = .36$) and lower on Factor 2 ($r = .22$). Factor 1 and 2 of the PCL:SV did not correlate with each other ($r = .40$). Antisocial behaviours, calculated by the APD checklist showed little correlation to psychopathic traits as measured by Factor 1 of the PCL:SV. These results suggest that APD and Factor 1 traits of psychopathy are independent of one another. Therefore, treatment should consider these findings and be appropriately modified given the categorization (higher on Factor 1 or 2) on the PCL:SV.
Appendix B

Historical Evolution of Defining Psychopathy

Adapted from Hervé, 2003

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Key Term(s)</th>
<th>Notable Implication/Discovery</th>
</tr>
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<tbody>
<tr>
<td>Pinel</td>
<td>1801</td>
<td>“manie sans delire”</td>
<td>Individuals understood the irrationality of their actions.</td>
</tr>
<tr>
<td>Rush</td>
<td>1812</td>
<td>“moral derangement”</td>
<td>The intellect of individuals was intact contrary to prior belief and social behaviour was exhibited from an early age.</td>
</tr>
<tr>
<td>Prichard</td>
<td>1835</td>
<td>“moral insanity”</td>
<td>“Moral insanity” was too broad of a term and was used to describe all syndromes (clinical, organic, and personality).</td>
</tr>
<tr>
<td>Koch</td>
<td>Late 19th century</td>
<td>“psychopathic inferiority”</td>
<td>First to introduce the term psychopathy, but this term, like its predecessors, encompassed many personality disorders.</td>
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<tr>
<td>Kraeplin</td>
<td>1907</td>
<td>Appendix C</td>
<td>Proposed that there were many forms of psychopathy.</td>
</tr>
<tr>
<td>Partridge</td>
<td>1930s</td>
<td>Developed the term “sociopathy”</td>
<td>This term was included in the first DSM as “antisocial personality disorder”, which began the confusion between psychopathy and APD.</td>
</tr>
<tr>
<td>Karpman</td>
<td>1940s</td>
<td>“primary/idiopathic”</td>
<td>Thought that the current definition was too broad and included the following traits: callous, lack of remorse, low anxiety levels, egotism, and a need for immediate gratification, as well as “secondary/somatic” (See Appendix C)</td>
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<tr>
<td>Author</td>
<td>Year</td>
<td>Source</td>
<td>Description</td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Henderson</td>
<td>1947</td>
<td>Appendix C</td>
<td>Believed psychopathy to be present from a young age; however, did not think that environment played a crucial role.</td>
</tr>
<tr>
<td>Schneider</td>
<td>1950</td>
<td>Appendix C</td>
<td>Based mostly on societal suffering due to deviant behaviour.</td>
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</table>
### Appendix C

#### Historical Subtypes of Psychopathy

Adapted from Hervé, 2003

<table>
<thead>
<tr>
<th>Name</th>
<th>Subtype/Classification</th>
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<tbody>
<tr>
<td>Kraeplin</td>
<td>“born criminal”—morally blind individual who shows no remorse over actions.</td>
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<td></td>
<td>“unstables”—no motivation.</td>
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<td></td>
<td>“morbid liars and swindlers”—those who get immediate gratification when</td>
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<td></td>
<td>deceiving other people.</td>
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<td></td>
<td>“pseudo-querulants”—self-centered individuals who exhibit signs of paranoid.</td>
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<td></td>
<td>“the impulsives”—engaging in thoughtless behaviour, reacting quickly.</td>
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<td></td>
<td>“the eccentrics”—lacking “uniformity”</td>
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<tr>
<td>Partridge</td>
<td>“delinquent”—prevalent in males, occurring at an early age, results in</td>
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<td></td>
<td>deception and manipulation.</td>
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<td></td>
<td>“inadequate”—term for females who display irresponsibility, impulsivity, and a</td>
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<tr>
<td></td>
<td>lack of emotion.</td>
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<td></td>
<td>“general incompatible/emotionally unstable”—characterized by callous,</td>
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<td></td>
<td>deviating from societal norms, projecting blame on others.</td>
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<tr>
<td>Karpman</td>
<td>“primary/idiopathic”—genetically based psychopathy with little influence on</td>
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<tr>
<td></td>
<td>environment.</td>
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<tr>
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<td>“secondary/somatic”—illusion of psychopathy to mask another personality disorder.</td>
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<tr>
<td>Cleckley</td>
<td>“the disorder in full clinical manifestation”</td>
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<td>“incomplete manifestations or suggestions of the disorder”</td>
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<tr>
<td>Henderson</td>
<td>“predominately aggressive”—immaturity, irrational actions, and inability to meet the</td>
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<td>demands of life.</td>
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</table>
| Schneider | “passive”—suave personality, skilled at manipulation and interpersonal communication.  
“creative”—egotistical, feeling above societal norms.  
“hypertymic psychopaths”—manic  
“depressive psychopaths”—low self-esteem, high anxiety.  
“fanatic psychopaths”—overvalued ideas  
“attention-seeking psychopaths”—entitled and boastful.  
“explosive psychopaths”—often violent and impulsive.  
“labile psychopaths”—easily altered emotions.  
“affectionless”—lack of remorse, skilled at deception.  
“weak willed”—no motivation.  
“asthenic”—extreme nervousness and anxiety. |
Appendix D
Items on the PCL-R

Adapted from Hare, 2003

1. Glibness/Superficial Charm (Factor 1)
2. Grandiose Sense of Self Worth (Factor 1)
3. Need for Stimulation/Proneness to Boredom (Factor 2)
4. Pathological Lying (Factor 1)
5. Conning/Manipulative (Factor 1)
6. Lack of Remorse or Guilt (Factor 1)
7. Shallow Affect (Factor 1)
8. Callous/Lack of Empathy (Factor 1)
9. Parasitic Lifestyle (Factor 2)
10. Poor Behavioral Controls (Factor 2)
11. Promiscuous Sexual Behavior
12. Early Behavioral Problems (Factor 2)
13. Lack of Realistic, Long-Term Goals (Factor 2)
14. Impulsivity (Factor 2)
15. Irresponsibility (Factor 2)
16. Failure to Accept Responsibility for Own Actions (Factor 1)
17. Many Short-Term Marital Relationships
18. Juvenile Delinquency (Factor 2)
19. Revocation of Conditional Release (Factor 2)
20. Criminal Versatility