A COMPARISON OF SELF-REPORTED AND OFFICIAL HOMICIDE DESCRIPTIONS BY PSYCHOPATHIC AND NON-PSYCHOPATHIC OFFENDERS

by

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at

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My Master's thesis was dedicated to my wife and our (soon to be) first-born child.

This time around I am thrilled (again beyond words!) to dedicate this dissertation to my best-friend and wife, Amy, as well as our two precious children, Mia and Tobin. I love all three of them with all my heart.

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Abstract

Psychopaths are highly egocentric, lack empathy and remorse, and have few inhibitions against lying or aggressing to serve their own internal or external needs (e.g., Porter & Woodworth, 2004). In the first study of its kind, this thesis concurrently examined the nature of psychopathic violence in the context of homicide (the manner in which the violent act was committed) and deceit in the context of an interview with the offenders themselves (the manner in which the violent act is described). The sample was comprised of 50 Canadian offenders currently incarcerated for homicide in a medium or maximum security institution. The nature of the homicides (primarily in terms of instrumentality/reactivity) was coded based on the official Criminal Profile Reports contained in their official files, and examined as a function of psychopathy. Further, the offenders' accounts of the incidents were coded using the same coding scheme to allow a comparison of the official reports versus the self-reports. Results indicated that psychopaths were significantly more likely to have committed primarily instrumental (premeditated, non-impulsive) homicides than non-psychopaths. However, this difference disappeared when coding the self-reported crime descriptions. Rather, although non-psychopaths also sometimes exaggerated the reactivity of their offence, psychopaths were significantly more likely to exaggerate the level of reactivity of their offence (such that their selfreported homicides were as reactive/impulsive as the offenses described by the nonpsychopaths). Further evidence for self-exculpating behaviour on the part of psychopaths emerged in the finding that they were significantly more likely than their counterparts to omit some of the main details of their homicide offence. These findings have important implications for credibility assessment and treatment of violent offenders, and increase our understanding of the affective deficit and persistent deception characterizing psychopathy. Further, they provide a glimpse of how psychopaths may think about, and more importantly, describe their own violence long after its occurrence.

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I. Introduction

In recent decades, the construct of psychopathy has emerged as a major focus of research in forensic psychology (e.g., Hare, 2003). In the most widely adopted conceptualization, psychopathy comprises a particular constellation of pathological interpersonal and affective traits, combined with a pattern of chronic antisocial behaviour. Specifically, psychopaths are callous individuals who persistently violate the rights of others across the lifespan (e.g., Porter, Birt, & Boer, 2001). A large body of research has established a robust association between psychopathic traits and aggression in both childhood (e.g., Frick & Ellis, 1999; Frick, Bodin, & Barry, 2000; Lynam, 2002; Porter, 1996) and adolescence (e.g., Campbell, Porter, & Santor, 2003; Forth, Hart, & Hare, 1990; Forth & Mailloux, 2000), and with violence and crime in adulthood (e.g., Cooke, Forth, & Hare, 1998; Harris, Rice, & Quinsey, 1993; Hemphill & Hare, 2004; Hemphill, Hare, & Wong, 1998; Porter & Woodworth, 2004; Rice & Harris, 1997; Salekin, Rogers, & Sewell, 1996). With little empathy or remorse, psychopaths have few inhibitions against using other people for material gain, drugs, sex, or power (e.g., Hart & Hare, 1997; Woodworth & Porter, 2002). Accordingly, they often are con artists with a long history of frauds and scams; some even become cult leaders, corrupt politicians, or successful corporate leaders, before their downfall (e.g., Babiak, 2000). On the other hand, some psychopaths (termed "successful" by Ishikawa, Raine, Lencz, Bihrle, & Lacasse, 2004) such as Josef Stalin may maintain great power while continuing to dominate, intimidate, and deceive other people on a mass scale. The exploitation of others by these "human predators" (Hare, 1993) or, perhaps more appropriately, "flawed predators" (Porter & Woodworth, 2004) is facilitated by a superficially engaging

personality and use of manipulation and deception (e.g., Hare, 1993). That is, although they are dangerous individuals, their potential for aggression and violence is disguised by superficial charm, gregariousness, and lying.

Despite a long tradition of anecdotal evidence for a link between psychopathy and deceptive behaviour in the clinical literature (e.g., Cleckley, 1976; Hare, 1998; Hare, Forth, & Hart, 1989; Lykken, 1995; Porter, Birt, Yuille, & Hervé, 2001), there has been scant research addressing the presumed relationship. In particular, no research has examined the manner in which psychopathic individuals describe their own antisocial or criminal actions, or the potential for deception in this context. The primary goal of this dissertation was to investigate the manner in which psychopaths and non-psychopaths describe their violent crimes relative to the official file descriptions. Based on a review of the literature to follow, it was expected that there would be larger discrepancies between official and file reports in the case of psychopathic offenders than with other offenders. I hypothesized that the narrative accounts of psychopaths would be more selfexculpatory than accounts by other offenders in two main ways. First, it was predicted that psychopaths would describe their violent crime as being less premeditated or instrumental, and more of a reactive "crime of passion" than indicated by the official report. Secondly, it was expected that psychopaths would omit major details of their offense in order to minimize their involvement or avoid disclosing information that would cast them in a negative light in the eyes of an interviewer. The rationale for conducting this research was twofold. First, this work could be important in establishing the nature of psychopathic deception for the first time in an empirical fashion. Secondly,

this research could have implications for forensic settings, with relevance for police interviewers, legal decisions makers, and treatment facilitators.

To introduce and establish the foundation for this thesis, an overview of historical highlights and diagnostic/assessment issues pertaining to psychopathy is first provided, followed by an overview of the literature relevant specifically to psychopathy and credibility/deception. In the latter section, I examine anecdotal and clinical evidence suggesting a link between psychopathy and deception, as well as the (limited) extant empirical literature. Next, I review a body of research linking psychopathy and particular forms of antisocial behaviour, including an examination of the limited research on psychopaths and the types of violence they perpetrate (such as the instrumental or reactive nature of the offense). Based on my review, I next introduce a novel methodological approach offering a concurrent empirical examination of both psychopathic violence and deception concerning the violence in the context of an interview. The degree of concordance between the actual level of instrumentality evidenced in offenders' violent crimes and the instrumentality characterizing their own descriptions of the offense is the primary issue under investigation. Prior to describing the study itself, I describe the rationale for the methodology, the hypotheses, and the potential implications of the findings.

History of the Construct of Psychopathy

For over two hundred years, psychopathic traits have been the focus of much clinical and scientific attention (e.g., Cleckley, 1941; Hare, 1991; Kraepelin, 1913; Lykken, 1955; Pritchard, 1837; Schneider; 1958). One of the first written descriptions of the condition was by Pinel (1801) who described a psychiatric condition associated

primarily with amorality rather than psychosis. He referred to this condition as "manie sans délire", or madness without delirium. In patients with manie sans délire, he observed profound deficits in emotion but no apparent reasoning/intellectual dysfunction. Based on Pinel's writings, some scholars have argued that psychopathy was the first personality disorder to be formally recognized in the field of psychiatry (e.g., Millon, Simonsen, & Birket-Smith, 1998). Similar to Pinel's notion, British psychiatrist James Pritchard (1837) coined the term "moral insanity" to delineate a mental condition characterized by an absence of morality, rather than the "madness" seen in other psychiatric patients. Like Pinel, Pritchard observed that while there clearly was emotional dysfunction in such patients, their cognitive abilities were intact. Pritchard (1837) further discussed how individuals suffering from moral insanity seemed to completely disregard the moral, ethical, and cultural practices of society. One of the first uses of the word "psychopathic" occurred near the end of the nineteenth century. Koch (1891, as cited in Millon et al., 1998) objected to the term "moral insanity" and opined that a more appropriate term would be "psychopathic inferiority." In his view, the condition of psychopathy stemmed from a type of physiological abnormality that resulted in personality anomalies such as selfishness. This conceptualization of psychopathy, with its focus on personality pathology, was more closely aligned to the modern conceptualization of psychopathy than previous views. Partridge (1930) argued that individuals with this psychopathic inferiority were exhibiting a "social" disorder and coined the term "sociopath," reflecting the idea that the condition involved pathological personality and an "anti-society" view on life. His views were eventually incorporated into the American Psychiatric Association's first edition of the Diagnostic and Statistical

Manual (DSM) in 1952, which described a "sociopathic personality disturbance, antisocial reaction." For several decades, "psychopathy" was defined according to the DSM category of Antisocial Personality Disorder (APD).

The modern conceptualization of psychopathy is most heavily founded in the clinical observations of American psychiatrist Hervey Cleckley. With a series of clinical case vignettes presented in his classic text, The Mask of Sanity (1941), Cleckley proposed that there are a number of defining characteristics of the disorder, both affective/interpersonal and behavioural in nature. Cleckley observed that psychopaths were unresponsive to social control and behaved in a socially inappropriate manner. Further, he described a profound emotional deficit, such that deep emotion and anxiety were improbable in the psychopath. In fact, he theorized that a lack of emotion was at the core of the disorder, with other symptoms following from this emotional shallowness (a view adopted by some modern theorists; e.g., Porter, 1996). He maintained that psychopaths have an outward appearance of normalcy masking an unemotional, callous internal life and propensity toward deception (a "mask of sanity"), recently described by Porter and Woodworth (2004) as "a high level of dangerousness masked by an adept social artistry" (p. 4). Cleckley (1941) also commented on the frequent use of deception observed in the psychopath, stating "he appears to have a total disregard for truth and is to be trusted no more in his account of the past than in his promises for the future or his statement of present intentions" (p.239).

Inspired by Cleckley's seminal work, many modern researchers have adopted a definition of psychopathy that incorporates both pathological affective and behavioural features (e.g., Cooke & Mitchie, 2001; Hare, 1993; Hart & Hare, 1997). In particular, for

the past three decades, Robert Hare and colleagues have worked toward operationalizing Cleckley's criteria for psychopathy, aimed at the generation of a highly reliable diagnostic tool for researchers. The result was a clinical rating scale for psychopathy known as the Psychopathy Checklist (Hare, 1980), revised in 1991 (Psychopathy Checklist-Revised, Hare, 1991), and described in more detail below.

Assessment of Psychopathy

Unless otherwise specified, the definition of psychopathy used in this dissertation adheres to Psychopathy Checklist-Revised (PCL-R; Hare, 1991) criteria. The PCL-R is a 20-item scale that requires a semi-structured interview, case history information (extensive file review), and reliance on specific scoring criteria. Each item is rated on 3-point scale depending on the extent that the item description applies to the individual being assessed. A score of 30 traditionally has been used as the diagnostic cutoff for determining whether someone meets the criteria for psychopathy (e.g., Hare, 1991). The psychometric properties of the PCL-R have been well established, with high validity and reliability in a number of forensic populations, across many cultures, and with both genders (e.g., Brown & Forth, 1997; Cunningham & Reidy, 1998; Fulero, 1995; Hare, 2003; Hemphill & Hare, 2004; Porter et al., 2001). Although now widely used in forensic assessments and legal decision-making, the PCL-R was not originally designed to assess risk of recidivism. As mentioned, it was intended to serve as a tool that could reliably measure the clinical construct of psychopathy as originally envisioned by Cleckley (e.g., Hare, 1998b, Hemphill & Hare, 2004).

In addition to generating a score and classification (psychopath versus non-psychopath) for a particular individual, the PCL-R also yields "factor" scores, based on a

stable, oblique two-factor structure (e.g., Hare, 1991; Harpur, Hakistan, & Hare, 1988), identified through factor analytic techniques, with the two factors being moderately correlated (r of approximately .50; e.g., Hare, 2003). The first factor (Factor 1) reflects the interpersonal and affective components of the disorder, such as emotional shallowness, callousness, and grandiosity. On the other hand, Factor 2 is more associated with a chronic antisocial and socially deviant lifestyle similar to APD (e.g., Hart & Hare, 1997). Research indicates that the two factors are differentially related to various outcomes. For example, a recent meta-analysis by Walters (2003) examining the results of forty-two studies on recidivism outcomes concluded that Factor 2 scores were significantly more predictive of both general and violent recidivism than Factor 1 scores. While the two-factor approach has received much validation, Cooke and Mitchie (2001) recently concluded that a three-factor model of psychopathy was more appropriate. This model is comprised of a "Deficient Affective Experience" factor, an "Impulsive and Irresponsible Behavioural Style" and an "Arrogant and Deceitful Interpersonal Style." The authors have obtained this three-factor model in factor analyses on various samples, including samples from various cultures and across genders (Warren et. al, 2003). Although the recently published second edition of the PCL-R (Hare, 2003) retains a total score out of 40 and the original two factors, it now also breaks the score down into 4 subfactors. Factor 1(a) is Interpersonal, 1(b) is Affective, 2(a) is Impulsive and 2(b) is Antisocial Behaviour. Initial research has shown the second version to be highly reliable and valid (Hemphill & Hare, 2004).

The PCL-R construct of psychopathy differs from the DSM-IV diagnosis of Antisocial Personality Disorder (APD) (e.g., Rogers, 2000; Skeem, Edens, Sanford, &

Colwell, 2003). To warrant an APD diagnosis, an individual must meet several diagnostic criteria primarily concerning persistent antisocial behaviours (such as reckless disregard for the safety of others and failure to conform with social norms), with a lesser emphasis on the interpersonal and affective characteristics comprising the PCL-R. Such socially deviant behaviour is insufficient to diagnose psychopathy (e.g., Lilienfeld, Purcell, & Jones-Alexander, 1997). As such, although many or most psychopaths could be diagnosed as having APD, most individuals with APD do not meet the diagnostic criteria for psychopathy (e.g., Hare, 2002). Research indicates that 50-80% of individuals incarcerated in federal prisons meet the diagnosis of APD, compared to the 15-25% who meet the criteria for psychopathy (e.g., Hart & Hare, 1997; Hemphill & Hart, 2003). Research with female inmate samples indicates a base rate of psychopathy between 9 to 31 % (e.g., Vitale, Smith, Brinkley, & Newman, 2002; Warren et al., 2003).

Other diagnostic tools have been designed to measure psychopathic traits in other populations besides adult males. For example, a youth version of the PCL-R entitled the PCL-YV was recently published (Forth, Kosson, & Hare 2003) for use with adolescents (e.g, Forth & Mailloux, 2000; Frick & Hare, 2001). Further, a Psychopathy Screening Device (Frick & Hare, 2001) has been developed to measure the emotional and behavioural characteristics of psychopathy in children using the PCL-R conceptualization.

To develop the theme of the current paper, the next section of the Introduction reviews the literature on psychopathic deception.

Psychopathy and Credibility

In the clinical literature, psychopaths long have been characterized as having a remarkable disregard for the truth (e.g., Cleckley, 1976; Hare, 1998; Meloy, 1988), to the extent that deceit often is regarded as a defining characteristic of the disorder. For example, Cleckley (1976) listed one of the main characteristics of psychopathy as "untruthfulness and insincerity" (p. 338). Further, the PCL-R (1991, 2003) contains two items that consider dissimulation: Item 4 is entitled "pathological lying" and "describes an individual for whom lying and deceit are a characteristic part of his interactions with others" (Hare, 2003, p. 37); and Item 5 is entitled "conning/manipulative" and refers to the "use of deceit and deception to cheat, bilk, defraud, or manipulate others" (Hare, 2003, p.37). In addition, Millon and Davis (1998) proposed ten subtypes of psychopathy, two of which highlight deception as a defining characteristic (the "unprincipled" psychopath and the "disingenuous" psychopath). Finally, one of the three main factors identified in Cooke & Mitchie's recent (2001) model of psychopathy reflects an "arrogant and deceitful interpersonal style." The tendency to lie, deceive, cheat, and manipulate others is a major consideration in virtually all conceptualizations of the psychopathic personality, with clinical accounts repeatedly referencing this heightened level of deception (e.g., Hare, et al., 1989). This is not particularly surprising considering the evolutionary, affective, social, and practical implications of the psychopathic personality that may make psychopaths more inclined to engage in deception. Next, I review the relationship between psychopathy and deceptive behaviour from each of these perspectives.

Evolutionary Factors: It has been suggested that psychopaths have a particular genetically based reproductive strategy that involves deception and manipulation to promote finding a large number of mating partners so that their genes are passed on to the next generation (e.g., Hare, 1998a; Mealey, 1995). Deriving their conclusions from sociobiological theory, MacMillan and Kofoed (1984) argued that psychopaths use a strategy for survival and reproduction that involves maximizing their number of reproductive partners and investing little time or energy into caring for the offspring. Harpending and Sobus (1987) suggested that psychopaths may be particularly successful with this type of strategy as they are skilled at deceiving and seducing members of the opposite sex, find it very easy to conceal their motivations, and are constantly developing new techniques to disguise their intentions. Further, Hare (1998a) cautioned that unless a psychopath was particularly attractive, he could best accomplish his goals of maximizing reproduction of his genes through various deceptive means, such as manipulation, cheating, and misrepresentation of his status. Also adopting an evolutionary perspective, Mealey (1995) more recently argued that psychopaths employ a "cheater strategy" that involves exploiting others (while gaining resources and spreading their genes) through deception and intimidation. According to her view, psychopaths are "designed for the successful operation of social deception and... pursue a life strategy of manipulative and predatory social interactions" (p. 524). Other theorists have agreed with this view of the psychopath as an exploitive and manipulative member of society. For example, Wiebe (2004) recently argued that psychopathy may have developed as a method of facilitating deceptive, short-term, impersonal, and coercive sexual relationships for the purpose of mating and reproduction. The development of this

"cheater strategy" in psychopaths appears to be combined with an emotional shallowness that also facilitates their ability to engage in deceit.

Affective Factors: Psychopaths seem to have a profound emotional deficit, manifested externally as callousness, lack of remorse, lack of empathy, and lack of anxiety. Converging evidence from several paradigms (e.g., startle reflex, emotional word comprehension) has established the nature of their emotional deficits (e.g., Hare, 1998b; Patrick, 2001). For example, research has consistently demonstrated that psychopaths have a deficient startle reflex, considered to be a physiological correlate of both fear and anxiety (e.g., Patrick, Bradley, & Lang, 1993; Levenston, Patrick, Bradley, & Lang, 2000; Vanman, Mejia, Dawson, Schell, Raine, 2003). Patrick et al. (1993) examined the relationship between startle modification and psychopathy in a sample of 54 incarcerated psychopaths and non-psychopaths. While non-psychopaths showed a larger potentiation of the startle reflex during the presentation of negative stimuli (relative to positive stimuli), psychopaths displayed a similar potentiation to both types of stimuli. This emotional deficiency appears to extend to the general interpretation of emotional language, words, and sounds (e.g., Hervé, Hayes, & Hare, 2003; Verona, Patrick, Curtin, and Lang, in press; Williamson, Hare, and Wong, 1990). For example, Hervé et al. (2003) asked participants to sort a number of metaphorical statements on a continuum from very negative to very positive. Results indicated that psychopaths made significantly more sorting errors than non-psychopaths, despite being able to sufficiently understand the literal meaning of the metaphors. Hervé et al. (2003) concluded that psychopaths' emotional deficit translated to a decreased understanding of the emotional content of language. Researchers recently have begun to explore potential neurological

correlates of the emotional deficits in psychopaths (e.g., Blair, 2003). For example, Kiehl et al. (2001) conducted an MRI study that revealed differences between psychopaths and non-psychopaths in brain regions such as the hippocampus and amagydala during an emotional processing task. (see also, Lorenz & Newman, 2002; Raine, Lencz & Taylor, 2003).

Interestingly, the results of a recent British study suggest that the emotional deficits observed in psychopaths may even extend to the commission of homicidal violence. Gray, Macculloch, Smith, Morris, and Snowden (2003) measured implicit beliefs about murder in psychopathic and non-psychopathic murderers, and psychopathic and non-psychopathic offenders who had committed other offenses. Using a modified Implicit Association Test (IAT), the researchers presented participants with a word to which they had to respond by rating it either "unpleasant" or "pleasant" and either "peaceful" or "violent." In general, when people are shown a word, they take longer to determine which button to press when non-related words such as violent and pleasant are on the same response key. When the same response key is assigned for pleasant and violent words, participants usually find the task to be more difficult. Results indicated that psychopathic murderers did not display the same impairment in response time as non-psychopaths with an incongruent word presentation (pleasant and violent words). That is, they responded as if they did not associate violence with unpleasant, and showed diminished negative reactions to violence compared with non-psychopathic murderers.

There is reason to believe that the profound lack of emotion, as evidenced in such research (e.g., Ekman, 2002; Hare, 2003) may contribute to a pattern of persistent and effective interpersonal deception. For example, anxiety and guilt, missing in the

psychopath, may be key emotional experiences that serve to inhibit deception in most people under many circumstances (e.g., Ekman, 2002; Lykken 1995). Specifically, Ekman (2002) noted that psychopaths are highly skilled at deceitful behaviour and distorting their narratives because they can do so without being bothered by negative emotions or fear of being caught. Similarly, Lykken (1995) suggested that because psychopaths experience less fear than non-psychopaths, they are able to deceive more often and more adeptly than others. Recently, Hervé et al. (2003) proposed that psychopaths' lack of emotion enables them to discuss emotional issues (e.g., love) in a glib, superficial manner, allowing them to manipulate others. While the emotional deficit may facilitate the psychopath's ability to successfully engage in deception, interpersonal/social factors consistent with the self-serving and deceptive orientation of the psychopath may also facilitate this ability.

Social/Cognitive Factors: The observation that psychopaths may use deceit for pathological, "internal" reasons should not imply that they do not lie for instrumental gain. As Cleckley noted, "the conception of living up to his word seems, in fact, to be regarded as little more than a phrase sometimes useful to avoid unpleasantness or to gain other ends" (Cleckley, 1976, p. 342). It long has been recognized that psychopaths expend much time and energy in exploiting others. This proficiency as "intra-species predators" (Hare, 1998a) is likely to derive from their superficially engaging personality and skilled use of deception through verbal and non-verbal communication. That is, their high level of psychological dangerousness to others is masked by well-planned, ill-intended social manipulation. Thus, many non-violent but pernicious actions of the psychopath involve forethought, and are instrumental and skillfully orchestrated. In fact,

most antisocial behaviour by "white collar" psychopaths may be characterized in this way (e.g., Babiak, 1995). Indeed, Babiak (2000) proposed that the deceptive and conning nature of psychopaths makes them exceptionally well suited for moving up the ladder of big corporations or politics.

This depiction of the psychopath as a conning and manipulative charmer out to serve his/her own needs is a consistent one in the literature in case studies and anecdotal evidence. For example, Hare (1998a) described such adept social artistry of one of his psychopathic subjects, a 30 year-old fraud artist. He indicated that the man had been involved in literally dozens of common-law marriages, and had abruptly left at least eight women after getting them pregnant (perhaps corresponding with the sociobiological theory detailed above). Further, the man was associated with several rock stars (often claiming he was their personal agent or confidant), and had convinced numerous aspiring entertainers that he could give their career a big boost. Hare et al. (1989) also described the apparent ease at which psychopaths can subtly maneuver around the truth while conning and deceiving others. However, they cautioned that the consequences of psychopaths' deception could be more than simply "getting conned." For example, Clifford Olson, a notorious Canadian serial killer, is a diagnosed psychopath known both for his ability to deceive and manipulate others, as well as his pathological lying. Between 1957 and 1981, he was arrested 94 different times for charges ranging from fraud to armed robbery to sexual assault. Finally, in 1982, he was convicted of brutally murdering 11 youths between the ages of nine and 18 (he is strongly suspected to have committed many more murders). While his deceit was apparently instrumental in securing his victims, his manipulative nature also led to one of the most controversial

deals in legal history after the Crown agreed to pay his family \$100,000 if he disclosed the location of some of the victim's bodies.

In summary, there is considerable anecdotal/clinical evidence that psychopaths lie frequently and in self-serving ways. With this in mind, it can be predicted that their descriptions of their own criminal offenses will contain elements of deception and self-exculpatory statements. The next section will examine empirical research that has set out to investigate the relationship between psychopathy and deception.

Empirical Investigations of Psychopathy and Deception

The first study to address deceptive behaviour in psychopaths was David

Lykken's (1955) dissertation research at the University of Minnesota. Lykken devised a
laboratory study that examined psychopathy and deceit using a "guilty knowledge"
polygraph approach. Psychopaths (according to Cleckley's criteria) and non-psychopaths
were asked to select a number between one and five, and then conceal the number that
they had chosen by answering "no" when asked about the number. Results indicated that
while psychopaths showed large electrodermal responses to all five numbers, nonpsychopathic offenders and non-offenders only produced larger electrodermal responses
to the number they had chosen, but whose knowledge they had tried to conceal. In other
words, psychopaths showed similar physiological arousal whether they were lying or
telling the truth. Lykken proposed that psychopaths may have an advantage in deceiving
relative to non-psychopaths, as there was no physiological response to indicate they may
have been providing a deceptive answer. Another explanation for these findings is that
the psychopaths in his sample may have been intentionally trying to increase their arousal
on non-deceptive numbers (baseline arousal) in an attempt to fool the experimenter.

Since Lykken's (1955) study there has been little research addressing the relationship between deceit and psychopathy. One line of research follows from Mealey's (1995) evolutionary approach. Seto, Khattar, Lalumiere, and Quinsey (1997) investigated sexual strategy (use of sexually deceptive tactics to obtain sexual partners) and psychopathy in 47 heterosexual males recruited from the community. They created a number of measures for the study, including a seven-item "general deceptiveness" scale, and a 24-item "sexual deception" scale. This latter scale was designed to assess the extent of dishonest tactics utilized by participants in attempting to appear more desirable for both sexual and social purposes (the scale used some items from Tooke & Camire, 1991). Results indicated that higher scores on the PCL-R were related to both general measures of deception (such as instrumental lying to get out of work for the day) as well sexual deception tactics (exaggerating the number of sexual partners to other males). The authors interpreted their findings as a reflection of psychopaths' general propensity to engage in deceit to obtain social and sexual benefits, or other types of external goals.

Research also has demonstrated a relationship between psychopathy and deception in adolescent populations. For example, Rogers, Johansen, Change, and Salekin (1997) investigated the issue in a sample of adolescents from a residential treatment program for dually diagnosed (suffering from both a mental disorder and substance abuse) offenders. They found that the total rate and frequency of both "deceit and theft" conduct problems (as measured by the DSM-IV) were "substantial" factors in predicting a high level of psychopathy traits in the youths. To clarify the nature of the relationship between psychopathy and deception among this age group, Rogers, Salekin, Sewell, Goldstein, and Leonard (1998) compiled data on samples of adolescent male

offenders, female offenders, and male forensic patients (N = 373). Using this aggregated sample, the authors examined deception and psychopathy (as measured by the PCL-SV) in a diverse sample of adolescents (with manifold psychological issues). They found that psychopaths were three times more likely than non-psychopaths to deny their criminality, display evidence of conning and manipulation, and exhibit an implausible presentation style (characterized by an unbelievable display regarding their emotions and statements).

A follow-up study by Rogers and colleagues (Rogers, Vitacco, Jackson, Martin, Collins, & Sewell, 2002) highlighted the potential negative consequences of psychopathic youthful offenders' deceptive self-reports for the legal system. The authors provided 80 detained juvenile offenders with incentives to appear socially desirable during a psychopathy assessment interview. Results indicated that deceptive reports by adolescents who scored higher on the PCL:YV were more "successful" at deceiving the interviewer than those with lower scores. Specifically, adolescents with psychopathy scores in the high range were able to intentionally lower their total PCL:YV scores by 7.89 points, compared to only 1.11 points for adolescents with lower psychopathy scores. Based on their findings, the authors concluded that adolescent psychopaths may be able to present in such a convincing way as to evince lower PCL-YV scores from a clinical rater than are warranted.

Other research on the behaviour of psychopaths has more indirectly revealed their potential for deceptive behaviour (e.g., Verona, Patrick, & Joiner, 2001). For example, the non-verbal presentation style of psychopathic individuals may lead to mistaken conclusions in the observer, in line with the clinical description provided earlier in my Introduction. Verona, Patrick, Curtin, and Lang (in press) found that psychopaths

exhibited different patterns of physiological responding (from non-psychopaths) in their reactions to both aversive and appetitive (or pleasant) auditory cues. However, results also indicated that they did not differ in their overt facial expressions/responses to these positive and negative emotional sounds, and appeared to observers to be registering them in the same way as non-psychopaths. Other research also has demonstrated a discrepancy between the psychopath's outward appearance/reactions and corresponding physiological reactions (e.g., Hare, 1970; Patrick 1994). Verona at al. (2001) suggested that the results of their study on self-harm and psychopathy, revealed a subtle type of deceptive behaviour in psychopaths. They found that, contrary to previous contentions, high PCL-R scorers were no less likely to have a history of self-harm behaviour than low PCL-R scorers. However, the authors posited that psychopaths were more likely to engage in superficial, manipulative self-harm actions rather than sincere suicide attempts. Porter and Woodworth (2004) have further speculated that while self-directed aggression by psychopaths may occur, it is more likely to be instrumental and manipulative (and rarely lethal), unlike self-directed aggression by non-psychopaths which is associated with internal emotional problems such as depression.

Studies demonstrating a lack of treatment response in psychopaths also provide indirect evidence for deception within the treatment context. Seto and Barbaree (1999) found that psychopathic offenders in the standardized Correctional Service of Canada sex offender treatment program (in Ontario) received the highest/most positive evaluations pertaining to treatment gains, but subsequently also showed the highest reoffense rates. Therefore, it is possible that psychopaths used non-verbal and/or verbal deception in the context of the program to falsely induce a belief in the treatment facilitators that they

were benefiting from treatment. In fact, there is no evidence that any form of psychological treatment currently works with this population (e.g., Hare, 2003).

Despite the clinical and limited empirical evidence that psychopaths are highly manipulative and engage in an inordinate amount of deception (e.g., Hare, 2003), there is other literature to suggest that they may not always be inclined toward deceit, and that their deception may be identifiable. Indeed, Lilienfeld and Andrew's Psychopathic Personality Inventory (PPI) measure specifically relies on the self-report of the interviewee to assess for psychopathy. Further, this instrument has shown considerable predictive utility and reliability as an index of psychopathic traits (Poythress, Edens, & Lilienfeld, 1998). There is some empirical research to suggest that psychopaths may not actually be more proficient at lying successfully (e.g., Cogburn, 1993; Edens, Buffington, & Tomicic, 2000). Raskin and Hare (1978) examined the ability of 48 incarcerated criminals (24 psychopathic and 24 non-psychopathic) to lie successfully in an interview and a polygraph examination in the context of an interrogation about a mock crime. Results indicated that psychopaths were no better than non-psychopaths at evading detection of their deceit (perhaps because of their inability to disguise their 'duping delight' or enjoyment of being deceptive). Psychopaths may appear to observers to be more dishonest, even when they are telling the truth. For example, Cogburn (1993) videotaped participants discussing two socially desirable and two socially undesirable acts. Only one of each of the two types of acts was an honest account. Results indicated that blind judges were more likely to rate the videotaped statements of subjects with high PCL-R scores as less truthful, regardless of the veracity of the statement (see also, Klaver, Lee, Spidel, & Hart, 2004).

Other evidence questioning the deceptive nature of psychopaths, as well as their ability to deceive effectively, comes from investigations of malingering (e.g., Rogers & Cruise, 2000). Malingering is a particular type of deception in which individuals intentionally display false or exaggerated symptoms for the purpose of obtaining some type of reward (American Psychiatric Association, 1994). Hare et al. (1989) noted that across three institutional (correction and psychiatric) samples, there was only a "weak" tendency for individuals with higher PCL scores to falsify their answers in an attempt to claim psychopathology on the MMPI (as indicated by F scale elevations). Kropp (1994) also investigated the ability of psychopaths and non-psychopaths to effectively simulate mental illness. A sample of 50 inmates was administered the Structured Interview of Reported Symptoms (SIRS), commonly used to investigate potential malingering. His results indicated that psychopaths were not significantly more effective at feigning mental illness than their non-psychopathic counterparts. Rogers and Cruise (2000) argued that findings such as the above were sufficiently conclusive to warrant disregarding psychopathy as a consideration in malingering evaluations (see also Poythress, Edens, & Watkins, 2001).

In summary, there is considerable evidence - both clinical and empirical - that psychopaths utilize a great degree of deception in their interpersonal interactions generally, but also in forensic settings specifically. However, almost no research has examined the manner in which psychopaths deceive. Further, while there are some studies to suggest that psychopaths are proficient liars, there are others that are not consistent with this view. From the above review, it is clear that additional research is warranted to more closely examine the manner in which psychopathic individuals use

deception. To help introduce the methodology and predictions of my dissertation, the relationship between psychopathy and criminal behaviour will now be reviewed, leading to a consideration of the nature of psychopathic violence.

Psychopathy and Criminal Behaviour

Many of the key personality and affective features of psychopathy would appear to be conducive to criminal behaviour (e.g., lack of fear of punishment, lack of empathy, little sense of guilt, being conning and manipulative). Not surprisingly, then, there a large number of studies that have found a relationship between psychopathy and criminal behaviour (e.g., Dolan & Doyle, 2000; Douglas, Ogloff, & Nicholls, 1997; Grann, Langstrom, Tengstrom, and Kullgren, 1999; Harris, et al., 1993; Hart, Kropp, & Hare, 1988; Monahan et al., 2001; Porter et al., 2001). In one of the earliest investigations of the relationship between psychopathy and violence, Hare and Jutai (1983) found that adult psychopathic offenders had been charged with violent crimes about twice as often as non-psychopaths. Virtually all of the psychopaths in their sample had perpetrated at least one violent crime, compared to about half of the non-psychopaths. Further, in Blackburn and Coid's (1998) study of 167 adult male offenders, offenders with elevated psychopathy scores engaged in both more violent and nonviolent offenses, and they began these offenses at an earlier age. Similarly, Porter et al. (2001) investigated the complete criminal career and community release profiles of 317 Canadian federal offenders. They found that psychopathic offenders consistently committed more violent and non-violent crimes than their non-psychopathic counterparts during the three decades spanning late adolescence to late 40s. A recent study by Soderstrom, Sjodin, Carlstedt, and Forsman (2004) examined the usefulness of a variety of clinical and personality

assessment tools to identify individuals at risk for aggression and repeated violent criminality. They found that in their sample of 100 subjects (involved in pretrial forensic psychiatric investigations) that the PCL-R was "superior" to all DSM-IV definitions of personality disorders in identifying traits that were linked to violence. Recent meta-analyses indicate that psychopathy as measured by the PCL-R (Hare, 1991) shows an overall effect size of r = .27 -.37 in predicting violence (e.g., Hemphill, Templeman, Wong, & Hare, 1998; Salekin et al., 1996).

The above described high level of violent and criminal behaviour by psychopaths continues after their release from incarceration. In one of the first prospective studies to demonstrate this pattern, Hart et al. (1988) tracked 231 male offenders for approximately four years on conditional release. They found that psychopathy made a significant contribution to the prediction of release failure. Subsequently, Rice and Harris (1997) examined the conditional release performance of 340 released sex offenders, finding a violent recidivism rate of 90% for offenders who scored above 25 on the PCL-R, compared to 50% for those who scored under this cut-off. Hemphill et al. (1998) found that, compared to other offenders, psychopaths were three times more likely to reoffend (and four times more likely to reoffend violently) during their first year of release from prison.

While the base rate of psychopathy in civil psychiatric patients is low relative to the rate in federal offenders (e.g., Douglas et al., 1999), the association between psychopathy and aggression also extends to this population. For example, Tengstrom, Grann, Långstrom, & Kullgren (2000) studied 202 psychotic patients with a primary diagnosis of schizophrenia. They found that patients who scored above 25 on the PCL-R

had a violent recidivism rate of 66% (average 51 month follow-up), while patients who scored below 25 had a recidivism rate of 18% (see also Douglas et al., 1999). Further, Monahan et al. (2001) conducted a large-scale study investigating mental illness and risk for violence in 939 patients evaluated over a 20-week period following their discharge from a civil psychiatric facility. They found that of 134 potential variables, psychopathy (in particular, Factor 2) was the most potent predictor of community violence.

The institutional conduct of psychopathic individuals is also a real problem. Research indicates that psychopaths engage in a disproportionate amount of aggression, manipulation, and other infractions in institutional settings (e.g, Edens, Buffington-Vollum, Colwell, Johnson, & Johnson, 2002). For example, Hare, Clark, Grann, and Thorton (2000) found that psychopathic offenders were more likely than non-psychopathic offenders to act out to a degree that required their segregation. In their study, which examined a sample of 728 offenders in an English Prison Service, psychopathy was a strong predictor of assaults (on other inmates and guards) and vandalism. Hildebrand, deRuiter, and Nijman (2004) studied daily hospital information of 92 Dutch male patients during their time in a psychiatric hospital. Significant correlations were found between PCL-R scores and verbal abuse, threats, rule violations, number of infractions, and frequency of periods in seclusion. This increased level of institutional infractions also likely influences the poor treatment prognosis that is often given to psychopathic individuals.

Treatment planning with psychopaths in forensic settings poses huge challenges.

In fact, as far back as the 1830s, Pritchard (1837) suggested that individuals with psychopathic traits were not responsive to punishment and remediation. Cleckley (1976)

reiterated how social control mechanisms were ineffective for controlling the behaviour of psychopaths. Studies of treatment outcome mirror these discouraging prognostications. For example, in the Seto and Barbaree (1999) study mentioned above, they tracked a sample of 224 adult sex offenders for an average of three years after their release from prison. They found that individuals who were rated the most positively in treatment (by clinicians), scored higher on the PCL-R and were more likely to recidivate, and recidivate in a serious manner. The authors (also see Hart and Hare, 1997) proposed that some types of treatment programs may help psychopaths to improve their impression management skills and, inadvertently, increase the rate of re-offending. The traditional, and somewhat justified, pessimism surrounding treatment for psychopaths has recently been brought into question by some researchers (e.g., Salekin, 2002). Hemphill and Hart (2002) proposed a variety of reasons why the outlook for treating psychopaths may not be so bleak. They highlighted that many previous studies examining treatment effectiveness for psychopaths used inconsistent measurements of psychopathy, inadequate definitions and implementation of treatment, and severely restricted (and occasionally questionable) outcome criteria (see also, Salekin, 2002). Skeem, Poythress, Edens, Lilienfeld, & Cale (2003) also recently proposed that the treatment of psychopathy could be improved if empirically supported variants or subtypes of psychopathy were identified (such as Porter's secondary psychopath notion, Skeem, 2004). Another roadblock still impeding the effective treatment of psychopaths is the fact that relatively little is known about the specific types and/or characteristics of their violence. The next section will take a close look at some recent research that has started to examine the characteristics and type of violence committed by psychopaths. This examination of the specific type of violence

committed by psychopaths and non-psychopaths will be crucial to the unique methodology of the current study.

Instrumental and Reactive Violence.

One method used to investigate the type of violence committed by psychopaths is by considering the instrumental or reactive nature of their behaviour (e.g., Cornell, Warren, Hawk, Stafford, Oram, & Pike, 1996; Woodworth & Porter, 2002). That is, was the perpetrator reacting aggressively to a desperate, emotional situation or, instead, was the aggressive action more volitional and instrumental? One long-standing view holds that aggression is founded in frustration and provocation. Berkowitz (1983) argued that aggression is best conceptualized as a hostile reaction to a perceived threat or dangerous situation. A second major view posits that aggression or violence involves goal driven behaviour with specific intended consequences (e.g., Bandura, 1983). As such, in order to understand the violent act, it is necessary to consider the external goals of the perpetrator. There is validity in both of these perspectives (e.g., Stanford, Houston, Villemarette-Pittman, & Greve, 2003). A consideration of both reactive and instrumental elements of aggression is essential toward understanding the motivations behind violent actions (e.g., Brown, Atkins, Osborne, & Milnamow, 1996; Dodge, 1991) and individual differences in the aggressors (e.g., Stanford, et al., 2003). Some of the first research to examine aggressive behaviour following the dichotomy of instrumental and reactive violence was conducted on aggression in children (e.g., Dodge & Coie, 1987; Poulin & Boivin, 2000). This has led to a number of interesting findings. For example, instrumental aggression by children is associated with atypical affective functioning and foreshadows a pattern of long-term antisocial behaviour (e.g., Pulkkinen, 1996; Vitaro,

Gendreau, Tremblay, & Oligny, 1998).

Studies with adult samples have repeatedly found that aggressive behaviour, even for extreme acts such as homicide, can reliably be classified and conceptualized into these two distinct subtypes (e.g., Stanford et al., 2003). For example, Salfati (2000) examined 247 British homicide files from the 1970s to the early 1990s. Results indicated that most homicide crime scenes could be differentiated by either having an expressive/reactive or an instrumental "theme". However, sometimes classifying these two types of violence can be quite difficult, with a number of researchers suggesting that although categorizable, often a violent offence will contain elements of both of these types of violence (e.g., Bushman and Anderson, 2001). For example, Barratt, Stanford, Dowdy, Liebman, & Kent (1999) found that only 20-25% of the aggressive acts coded in their sample could be classified as either strictly premeditated or impulsive. Therefore, researchers of aggressive behaviour must refine their operational definitions beyond simply "instrumental" or "reactive" in order to capture the complexities of motivations for violence (Porter & Woodworth, 2004). Some researchers in the field have now proclaimed that a determination of whether violence is either primarily instrumental or reactive may be one of the most relevant criteria in assessing risk for future violence and treatment prognosis in criminal offenders (e.g., Eaves, Douglas, Webster, Ogloff, & Hart, 2000).

Instrumentality and psychopathic violence.

Given the concurrent attributes of callous premeditation and poor behavioural controls associated with the actions of psychopaths in general, predicting whether their violence will be primarily reactive or instrumental is not straightforward (e.g., Porter &

Woodworth, 2004). However, there is a strong theoretical basis to predict that violence committed by psychopaths may be instrumental. For example, Cleckley (1976) posited that violence committed by psychopaths often is motivated by an external goal, rather than the strong emotions of anger or despair that often characterize reactive "crimes of passion" by other individuals. In fact, he speculated that the psychopath's affective deficit was sufficiently profound to make the act of reactive violence unlikely. Williamson, Hare and Wong (1987) conducted the first study to demonstrate empirically a relationship between psychopathy and instrumental, non-reactive violence. They investigated the violent offense dynamics of 55 psychopathic and 46 non-psychopathic inmates. Their results indicated that the psychopaths' offenses were significantly more likely to have a motive of material gain (45.2%) than non-psychopaths (14.6%). Further, non-psychopaths (31.7%) were much more likely to display reactive and high levels of emotion in their offenses than psychopaths (2.4%). Cornell et al. (1996) conducted the first major study to specifically examine the relationship between psychopathy and type of violence in 106 male offenders from a medium-security state prison. The authors operationalized instrumental violence as violence that was goal-driven and required planning without an antecedent of provocation. Conversely, reactive aggression was defined by an absence of planning or goals and, instead, involved an immediate dispute or interpersonal conflict with the victim. Their results indicated that offenders who had committed one (or more) acts of instrumental violence across their criminal histories had higher PCL-R scores than offenders who had only committed acts of reactive violence. Cornell et al. (1996) concluded that across the general offense history, offenders that had engaged in instrumental violence were more psychopathic than offenders who only

engaged in reactive violence. Research also has demonstrated a link between psychopathy and a higher level of instrumentality in specific populations such as hostage takers (e.g., Herve, Mitchell, et al., 2004), male spousal assaulters (Chase, O'Leary, & Heyman, 2001), and mentally disordered offenders (Heilbrun et al., 1998).

From these studies, it became clear that violence by psychopaths was far more likely than violence by others to have an instrumental component. Nonetheless, for many of their documented acts of violence, there was no evidence of an external goal. For example, in the Williamson et al. (1987) study, the majority of violent acts by psychopaths in the sample were not instrumental. Further, Dempster et al. (1996) reviewed the files of 75 adult male violent offenders participating in an inpatient treatment program. Although psychopaths were found to have committed more instrumental violence, they also had displayed impulsive behaviour in the context of their crimes. Hart and Dempster (1997) concluded that while psychopaths may be more likely to commit instrumental crimes, their behaviour is best described as "impulsively instrumental." This supports the idea that poor behavioural controls or impulsivity in psychopaths also contributes to their violence. Overall, these data established that for general violence, psychopaths engage in both major forms of aggression, whereas violent non-psychopaths are unlikely to engage in instrumental violence.

Woodworth and Porter (2002) conducted the first study to specifically examine the relationship between psychopathy and homicide. Homicide is a heterogeneous crime, in terms of the characteristics of both the perpetrator and context. In particular, some homicides are highly planned, instrumental acts whereas others involve a lack of premeditation. The latter may occur in the context of an emotional dispute or in response

to a situational provocation (a "crime of passion"). Woodworth and Porter (2002) reasoned that if the pattern for general violence held true, psychopathic murderers would perpetrate both types of homicides, but would show a greater propensity overall toward instrumental homicides. Their sample included 125 incarcerated homicide offenders from two Canadian federal institutions. The degree of instrumentality and reactivity associated with each homicide was conceptualized as a continuum and rated on a likert-type scale. The rating ranged from one (purely instrumental) to four (purely reactive), with offenses that combined elements of both rated in between (the coding scheme will be described in more detail in my Method section). Results clearly demonstrated that the psychopaths in the sample were more likely to engage in instrumental or "cold-blooded" homicides, compared to non-psychopathic individuals. In fact, 93.3% of the psychopathic offenders engaged in primarily instrumental violence, compared to 48.4% of the non-psychopaths. Further, results indicated that Factor 1 scores, but not Factor 2 scores, contributed to the instrumentality of the homicide (see also, Patrick & Zempolich, 1998).

Woodworth and Porter (2002) theorized that the impulsive behaviour often observed in psychopaths outside of the context of homicide may not be "uncontrollable" but, rather, reflect a choice not to inhibit an action when the stakes are lower. Although Porter and Woodworth (2004) acknowledged that while some violence by psychopaths is reactive, they observed that this type of crime is typically avoided when the stakes are high. Further, they argued that the impulsive behaviour in psychopaths may have less to do with a lack of control than with rapid, conscious considerations of the gravity of the consequences. Further, we concurred with Cleckley's (1976) notion that the affective

deficit in psychopaths may preclude the type of powerful emotions that often lead to reactive violence in the first place (also see Blair, 2001; Nestor, Kimble, Berman, & Haycock, 2002). Since Woodworth and Porter (2002), other researchers have also provided explanations for why psychopaths may be less prone for serious crimes to engage in reactive violence. For example, Skeem et al. (2003) proposed that since narcissism is one of the characteristics of the disorder, a psychopath may be unlikely to react in an impulsive manner to insult or provocation.

The above discussion establishes that psychopaths often use aggression for instrumental gain. Their violence can simply be a ruthless means to an end. There is recent evidence that psychopaths may derive enjoyment from their instrumental violent behaviour. Analyses of their sexual violence, in particular, suggest that both thrill-seeking and sadistic interests may play an important role in psychopathic crime (e.g., Porter & Woodworth, 2004). For example, Porter, Drugge, Fairweather, Hervé, Birt, & Boer (2000) indicated that psychopaths may be more inclined to plan and/or seek out opportunities and derive enjoyment from their violent sexual behaviour. They conducted a study of the offenses of a large sample of 228 sex offenders. They found that 64% of sex offenders who had targeted both children and adult victims were psychopathic, compared to 35.9% of rapists and fewer than 10% of child molesters. They speculated that the motivation of psychopathic sex offenders in targeting diverse and multiple victim types likely was thrill-seeking, rather than the paraphilia or anger motivating many sex offenders (see also, Porter, Campbell, Woodworth, & Birt, 2001).

There is other evidence from studies of sexual violence to suggest that thrillseeking and sadistic interests may play an important role in psychopathic sexual crimes

(e.g., Hare, Cooke, & Hart, 1999). The term sadism has been used to describe a range of cognitions and behaviours associated with the derivation of pleasure through inflicting physical or emotional pain on another person. Using the MCMI-II and the Personality Disorder Examination items for sadistic personality traits, Holt, Meloy, and Stack (1999) found that such traits were more common in violent psychopaths than violent nonpsychopaths in a maximum-security prison. In the most recent study on the association between psychopathy and sexual homicide, Porter, Woodworth, Earle, Drugge and Boer (2003) compared the characteristics of 38 sexual homicides by 18 psychopaths and 20 non-psychopaths. Of major interest was the level of gratuitous and sadistic violence that had been perpetrated on the victim. Gratuitous violence was defined as excessive violence that went beyond the level that would be necessary to complete the homicide. Evidence for gratuitous violence included torture, beating, mutilation, and the use of multiple weapons from the crime scene. Evidence that the offender obtained enjoyment or pleasure from the violent acts was coded as sadistic violence (this was coded from self-report information or evidence from the crime scene). Consistent with previous studies (e.g., Meloy, 2000), psychopathic offenders were significantly more likely to have committed a sexual homicide (54.5%) compared to the non-psychopathic offenders (22.5%). Further, homicides committed by psychopaths showed a significantly higher level of both gratuitous and sadistic violence than homicides by non-psychopathic offenders. Most psychopaths (82.4%) had committed sadistic acts on their victims, compared to 52.6% of the non-psychopaths. These results were clearly supportive of there being a selfish, instrumental or thrill seeking component to their offence.

While a careful consideration of the type of homicidal violence by psychopathic and non-psychopathic offenders was a focus of the current study, it also served as a foundation for investigating the validity of psychopaths' own narratives in describing their criminal behaviour.

The Present Study: Homicide Self-Reports as a Function of Psychopathy

This dissertation study served to both attempt a replication of, and expand Woodworth and Porter's (2002) research on psychopathy and instrumental-reactive violence. Specifically, I examined the instrumentality/reactivity of the offences of another sample of psychopathic and non-psychopathic homicide offenders by examining the official file descriptions of the offenses. However, I also examined the instrumentality characterizing the description of the offenses provided by the offenders themselves. In this way, it was possible to compare the official and self-reported descriptions to investigate whether psychopaths are more likely than their counterparts to downplay the instrumentality in a self-exculpatory fashion. In the next sections, I address deception by offenders concerning their criminal behaviour specifically, and provide a rationale for focusing on the methodology employed in the current study. First, I provide an explanation for why homicide perpetration was specifically chosen for this study.

One way to learn potentially unique information about the self-report of psychopathic (and non-psychopathic) offenders is through an examination of their self-report specifically for an offence as severe as homicide. A comparison of the official homicide report to the inmate's self-report is a particularly useful method (relative to other offences) for examining psychopathic deception. Homicide is, of course, the most

serious act (in terms of victim harm and negative implications for the perpetrator) that can be committed, and typically is associated with powerful emotions such as remorse and guilt on the part of the offender (e.g., Geberth, 1996; Woodworth, & Porter, 2002). As mentioned earlier, these types of emotions are generally thought to be lacking in the psychopathic individual. In fact, recent research demonstrates that even an act as morally reprehensible as homicide may not have the same type of negative emotional connotations for psychopaths (Gray et al., 2003). The current thesis provided an opportunity to closely examine how psychopaths will frame or discuss this severe type of violent crime and offers an opportunity to obtain a wealth of information regarding offender' self-report for this particular type of behaviour. Indeed, homicide is a particularly challenging offence to comprehend in terms of the complex motivations often involved. For example, Serran and Firestone (2004) reported that female spousal homicide typically occurred within the context of some type of dispute or domestic conflict. However, they cautioned that motivations for the homicide could vary depending on if the male's intimate partner was younger or older. The primary reason for committing a homicide against a younger intimate partner was often found to be sexual jealousy, while homicides committed against older intimate partners were more generally over issues of possessiveness and control.

I also specifically chose to examine homicide perpetration (and perpetrators) because there is still a real need for additional research into this type of behaviour (e.g., Woodworth & Porter, 1999). Although Canada and the United States have recently experienced the first consistent drop in homicide rates, many have argued that this trend is best explained by demographics (e.g., Andresen, Jenion, & Jenion, 2003; Ouimet,

2002). In fact, recent statistics indicate that the number of homicides (and all types of violent crimes) began to increase again in the United States beginning in 2001, and that Canada's homicide rate also increased in 2002 (Juristat, 2003). However, research on psychological factors in homicide, including the role of psychopathy in homicide, has been lacking (cf. Decker, 1996; Firestone, Bradford, Greenberg, & Larose,1998; Nestor et al., 2002; Porter et al., 2003; Salfati, 2000; Woodworth & Porter, 2002). Homicide investigators themselves are now acknowledging that homicide investigation is both an art and a science, and that empirical research is a beneficial tool that can help them in what will usually be a challenging and sometimes complex investigation (e.g., Geberth, 1996).

Prior to this thesis, no research specifically examined the manner in which offenders describe their homicidal behaviour relative to the to the official file report. However, a major consideration in evaluating an offender's credibility is his/her self-reported description of involvement in the offense (Rogers & Cruise, 2000). Further, the credibility of the general offender population has often been questioned. Some have suggested (primarily through the use of case vignettes) that perpetrators of serious crimes may alter their self-report of the incident for a number of reasons, including an attempt to malinger mental illness (e.g., Rogers & Bender, 2003). Yochelson and Samenow (1976) proposed that choosing a criminal lifestyle makes deception and lying necessary for self-preservation, and if ultimately apprehended, to reduce personal accountability. Further, Rogers and Cruise (2000) suggested that there was a clear link between deception and crime in general, including in perpetration of crime, in avoiding apprehension, and in attempting to avoid prosecution or reduce culpability.

It has been argued that the interview portion is one of the most important information gathering tools available during the investigation of a serious crime (e.g., Holmberg & Christianson, 2002). Further, the manner in which an accused person discusses his/her crime and what he/she purports to remember about the incident, have relevance to not only the investigation and their defence, but are particularly important when considering potential treatment and release options (e.g., Byrne, 2003). Following incarceration for an offense, offenders may still be motivated to provide non-credible accounts concerning the crime in attempts to obtain early release or simply to deny their role in the crime. In the case of homicide, the stakes for successful deception may be substantially higher than for other types of crime. In fact, the potential for deception remains a major concern in evaluating criminal responsibility (e.g., McSherry, 1998; Porter, Birt, Campbell, & Woodworth, 2003).

Little is currently known about how well professionals may be able to detect less than credible self-reports of homicide offenders. However, numerous studies over the past few decades have demonstrated that the accuracy levels of laypeople, as well as professionals, at detecting deception are between 45 and 60% and generally are at the level of chance (Vrij, 2000). Relatively recent studies by Vrij and his colleagues have specifically examined murderers' self-report and the ability of professionals to detect deception. For example, Vrij and Mann (2001) examined the ability of 65 police officers to detect deception by obtaining the videotaped statement of a murderer. Results indicated that the officers had an overall accuracy rate of only 64%. However, since the study only examined the self-report of a single murderer, the generalizability of the findings is unknown. Recent studies have examined how well deception can be

identified in offenders using less direct methods. For example, Vrij, Edwards, and Bull (2001) found that police officers were more successful at detecting deception when they examined less standard aspects of the participants' self-reports, such as how hard it appeared they were thinking when they were talking.

I also opted to use a more indirect and novel approach to examining the selfreport of the current sample of homicide offenders. An innovative way in which to examine differences in the self-report of psychopathic and non-psychopathic homicide offenders is by relaying upon the coding scheme recently developed to examine the instrumentality (and/or reactivity) of a violent offense (Woodworth & Porter, 2002). As mentioned above, this coding scheme was devised to allow a reliable measure of the level of instrumentality evidenced during a violent crime by using a detailed official file-based description of the crime (based on police, forensic, and witness reports). However, in this thesis, this scheme was not only used to measure the instrumentality of the crime from the official description, but to compare this rating with the instrumentality evidenced in the offender's own description. Woodworth and Porter's (2002) coding scheme allows an opportunity to compare the official and self-reported description of the homicide offense. It is hypothesized that psychopaths would be more likely than other offenders to "reframe" the level of instrumentality that had been involved, in terms of minimizing the degree of planning/premeditation and exaggerating the victim's role in, and the spontaneity of the offense. In theory, by framing the offense as being reactive in nature, the psychopath will be minimizing his level of responsibility and providing a more exculpatory self-report. For example, in Canada, reactive, spontaneous offenses are generally accompanied by a lighter sentence (e.g., manslaughter versus first or second

degree murder), providing a motivation for offenders (at least those with little guilt) to lie about the offense. It also is possible that psychopaths may be more likely than non-psychopaths to callously boast about their involvement in the offense, even to the point of exaggerating its instrumentality. Indeed, since all of the offenders in the current sample had already been convicted (and were describing the offense in a confidential research interview), they would have nothing to gain by exaggerating the reactivity of the homicide.

Another strategy that homicide offenders may use to avoid truthfully describing their homicide offense is simply by omitting major details (e.g., Rogers & Cruise, 2000). This is most commonly referred to as "deception by omission" (e.g., Ekman, 2002). There are limited previous studies to suggest that psychopaths would be more likely to omit important (in terms of understanding the dynamics of the offence) details regarding their homicide offence. For example, Rogers et al. (1998) found that 83% of psychopathic offenders in their sample engaged in denial of criminality, compared to 34.9% of non-psychopaths. It is predicted that psychopaths will be more likely than nonpsychopaths to alter or omit the facts of their offense. For example, they may be reluctant to discuss, or to minimize certain aspects of the homicide such as a possible sexual element (Hazelwood, Dietz, & Warren, 1995). Further, they may wish to direct attention elsewhere and downplay their own culpability (e.g., they may neglect to mention the heinous manner in which they disposed of the body). Due to the wealth of information typically contained in the homicide offender's file, the offender's version and the official version can be compared on major details such as victim characteristics, relationship between the perpetrator and victim, and circumstances surrounding the

homicide. In summary, it was expected that psychopaths would be more likely than non-psychopaths to omit and/or alter some of the major details of their homicide offense.

The current dissertation is the first study to compare the self-reported offense descriptions of psychopaths and non-psychopaths to the official report. Research leading to a more thorough understanding of the factors associated with both the commission, and the self-report regarding different types of homicidal violence, could have important implications. For example, there is a concern that the deception psychopaths are believed to engage in may actually bias some of the clinical impressions and typologies that have been derived from observing and interviewing psychopaths (e.g., Hare, 2003). Findings from the current study could provide insights into the subtle, yet important, types of exculpatory statements that psychopaths may be more likely to make. Potentially, the results could also provide professionals in a correctional setting with more of an understanding regarding the self-report of offenders for this serious type of crime, leading to improved interviewing techniques. Indeed, if a number of discrepancies are observed between the self-report and the official report, the results will be fairly impressive considering the rather conservative setting of the current study. That is, for the current study there is no real incentive to lie, or provide inconsistent details. A specific investigation into how both convicted psychopaths and nonpsychopaths choose to report and or 'frame' the commission of their homicide could also provide beneficial information for treatment providers. For example, a better understanding of how particular types of offenders may choose to discuss their crime could provide useful information about particular areas of treatment to focus on. Therefore, results could potentially provide researchers with valuable knowledge

regarding the self-report of psychopathic and non-psychopathic homicide offenders, while also having a number of useful applied implications

Summary

My dissertation investigated both the type of homicidal aggression committed by the current sample, and more importantly the nature of their self-report for this appalling behaviour. Specifically, it will examine differences between the self-report and official report of psychopaths and non-psychopaths. Issues such as the manner in which the offense is described (as reactive or instrumental), and the reporting of main details, were of particular interest. Considering that deception and manipulation are considered to be key features of the psychopathic personality, it is proposed that there will be differences between the self-report of psychopaths and non-psychopaths, with more self-exculpatory reports being observed in the psychopathic offenders.

II. Methods

Prior to participant recruitment, this study was approved by the Social Sciences and Humanities Research Ethics Board at Dalhousie University (Ethics Approval # 2002-620).

Participants

Participants were recruited from the population of approximately 150 federal male offenders incarcerated for homicide (i.e., manslaughter, first or second-degree murder) in three federal correctional institutions in the Atlantic region of Canada at the time of data collection (2002-2003). Research assistants (security cleared by the Correctional Service of Canada) recruited the offenders from Springhill Institution (medium security) in Nova Scotia, Dorchester Institution (medium security) in New Brunswick, or Atlantic Institution (maximum security) also in New Brunswick. All homicide offenders incarcerated in these institutions were made aware of the study and given the opportunity to participate unless they were denying the offense, appealing their conviction, or were considered by institutional staff to represent a high risk for violence in the context of a research interview. Participation was completely voluntary and no remuneration or other award was offered (because of ethical considerations).

The resulting sample was comprised of N = 50 homicide offenders: 18 from Springhill Institution, 21 from Dorchester Institution, and 11 from Atlantic Institution.¹

¹ In four cases the inmate's self-report could not be included in the study (although their official report was still included for analysis not requiring the self-report). It readily became apparent in the self-report of two of the participants that they were still maintaining their complete innocence during the interview. Further, regrettably one of the interviewed inmate's self-reports could not be included because the quality of the tape recorded during the interview. was indecipherable. Finally, after agreeing to participate, one of the interviewed offenders

Procedure

Potential participants were asked whether they would be interested in participating in a research study concerning the manner in which homicide offenders recall their homicide offense. If they indicated that they were interested, the purpose and procedures of the study were explained to them verbally. Finally, offenders were asked to read and sign an informed consent form if they still wished to participate. A mutually agreed upon time was then scheduled for an interview to take place in a standard interview room in the institution. The interviewers consisted of two senior psychology graduate students, and one B.Sc. (Honours) level research assistant. All had been thoroughly trained in the interviewing format by their faculty member supervisor and in security measures by corrections staff. Participants were interviewed individually and were asked to complete several questionnaires described below in the materials section. The entire interview and testing process generally took about one and a half to two hours.

At the start of the interview, participants were asked a number of questions including whether they had a history of head trauma and/or cognitive problems (to take into account factors that could influence memory). If participants responded yes to any of these screening questions, they were asked to describe the nature of the problem, but could continue to participate.

reported he was unable (for confidential reasons) to provide *any* truthful information about his homicide offence.

Participants then were asked to state and describe in detail their homicide offense². The interview process was based on an interviewing technique known as the Step-Wise Interview (see Yuille, Hunter, Joffe, & Zaparniuk, 1993; Yuille, Marxsen, & Cooper, 1999). This highly standardized approach was selected to ensure that all three interviewers followed the same procedure and that all the offenders were given the same opportunity to provide their self-report (see Holmberg & Christianson, 2002, for a discussion of the importance of standardized interviewing in research with offenders). In the first stage of the interview, the participant was asked to describe the homicide in a free recall format without interruption from the interviewer. Each participant was asked to provide as much information about the incident as possible, from beginning to the end, leaving no details out no matter how trivial they may seem. It was left up to the participants to decide when the incident started. After the free narrative was completed, the interviewer posed open-ended questions pertaining to information arising during the free narrative ("Tell me more about----") to clarify and elaborate details provided earlier. Finally, the interviewer could ask specific questions concerning previously mentioned details that he/she felt needed to be clarified.

Immediately following their self-report, participants were asked to complete two measures/questionnaires related to their homicide offence. The first 15-item questionnaire is entitled the Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979), and is designed to assess the presence of traumatic symptoms related to the event (Appendix A). Specifically, it was designed to assess current subjective distress for a specific previous life event. The reliability and psychometric properties of the measure have been

² Although the offenders were also asked to discuss one of their other offences, as well as a positive

found to be good (e.g., Corcoran and Fischer, 1994). The second questionnaire, the EMS (Emotional Memory Survey) was designed by my supervisor Dr. Porter, and was created to obtain additional self-report information about the emotional and phenomenological characteristics of the memory for the specific event. It consists of 10 questions that cover a variety of topics related to the characteristics and memory of an event, such as how intoxicated the individual was at the time of the event, as well as how much stress or anxiety he/she experienced during the event (Appendix B).

Each interview was audio-taped with the permission of the participant for subsequent transcription (all self-reports were transferred from audio to written format). After the interview and subsequent questionnaires (described directly above) were completed, the participant was thanked for his participation and an institutional guard escorted the offender back to his cellblock.

Materials

Psychopathy Checklist-Revised (PCL-R; Hare, 1991). The PCL-R has been widely adopted in the assessment of psychopathy in forensic populations (e.g., Hemphill & Hare, 2004). Psychopathy, as measured by the PCL-R, is characterized by 20 criteria, scored either as 0, 1, or 2, allowing a maximum score of 40. As recommended in the manual, a score of ≥30 was the cut-off used for classifying psychopathy (Hare, 2003). The PCL-R score is highly reliable over time and has demonstrated validity according to a number of indices (e.g., Fulero, 1995; Hare, 2003; Stone, 1995). Although there is some debate over whether psychopathy represents a discrete or a continuous variable (e.g., Harris, Rice, & Quinsey, 1994), recent research suggests that psychopathy may

represent a distinct clinical entity or taxon (see Hart & Hare, 1997, Hemphill and Hare, 2004). Nonetheless, I used both a dichotomous and continuous score approach in my analyses.

In the Canadian correctional system (and many other forensic settings), risk assessments for the purposes of conditional release and treatment programs now routinely include an evaluation of psychopathy. This assessment is completed by a psychologist who has been well-trained in the coding of the PCL-R. PCL-R assessments are typically conducted as part of the intake assessment and for conditional release decisions, and are based on a structured interview as well as a thorough review of all collateral and historical information. A file search yielded all available PCL-R scores and corresponding Factor 1 and Factor 2 scores as reported in the official risk assessments.

It is now a requirement of the Canadian correctional system that a PCL-R be conducted on all violent offenders. However, due to the recency of this policy, 13 of the offenders in the current sample still required a PCL-R rating. Although PCL-R assessments are often based on a review of file information and an interview with the offender, research (e.g., Grann, Langstroem, Tengstroem, & Stalenheim, 1998; Wong, 1988) has consistently shown that assessments based solely on the offender's file information are highly similar to ratings including an interview (see Hare, 2003), and are appropriate for research purposes. For the current study, a senior undergraduate student was given extensive training over a period of two days by Dr. Porter from Dalhousie University, who is fully qualified to administer the PCL-R. He then reviewed all available official file information and scored the other 13 PCL-Rs. The rater was kept

blind to the purpose and hypotheses of the study to prevent any bias in his scoring of the PCL-R.

Inter-rater reliability of the PCL-R assessments for the entire sample was examined in two ways. First, 15% were randomly selected for dual coding. In these cases, with the exception of the psychological assessment report documenting the original PCL-R score, all file information available on each offender was made available to the blind coder. This check ensured that the original PCL-R scores were accurate, as expected given that the original raters were all highly trained psychologists. For a second reliability check, another 15% of the sample were randomly selected for dual coding. However, for these cases, all details pertaining to the current homicide offense were completely removed prior to coding. The rationale for this second test of reliability was that coding in the absence of the homicide description would circumvent the possibility of "circularity" or contamination in scoring the PCL-R. In other words, just as it was necessary for homicide coding to be done without knowledge of whether the offender was psychopathic, we felt that it was important to demonstrate that PCL-R scores were not unduly influenced by knowledge of the details of the homicide.

Characteristics and Type of Homicide Offence. After the data were collected, they were first analyzed with the Instrumental-Reactive coding scheme (Woodworth and Porter, 2002). This Instrumental-Reactive continuum was originally created to analyze the details of a crime and, in particular, the level of instrumentality involved in 125 homicide offences (e.g., Porter et al., 2003; Woodworth & Porter, 2002).

To examine in detailed (rather than using a dichotomy) fashion whether the degree of instrumentality and reactivity associated with homicide was associated with

level of psychopathy, each homicide was rated on a Likert type scale with possible ratings ranging from 1 to 4. Woodworth and Porter (2002) created the current coding scheme based on Cornell et al.'s (1996) coding criteria for instrumental and reactive aggression, as well as an extensive literature review. The resulting scheme was conceptualized as a continuum as follows:

- (4) Purely Reactive: In order for a homicide to be rated as purely reactive, there had to be strong evidence for a high level of spontaneity/impulsivity and a lack of planning surrounding the commission of the offense. Reactive violence was coded if there was evidence for spontaneity or impulsivity, a rapid and powerful affective reaction prior to the act, and no apparent external goal other than to harm the victim immediately following a provocation/conflict. A clear example of a purely reactive homicide is if an unknown victim verbally insulted the perpetrator, who in a rage immediately started a fight and proceeded to stab the victim to death with a weapon of "convenience" (e.g., a broken bottle in a bar).
- (3) Reactive/Instrumental: To qualify for this rating, the homicide had to show evidence for both reactive and instrumental violence. However, the <u>primary</u> quality of the violence leading to death had to be reactivity. For example, using the example above, the reactive/instrumental description would apply if after or during the unplanned fight (and eventual murder), the perpetrator elected to rob the victim as well. Thus, the evidence would suggest that the homicide was unplanned/reactive but that there was also a secondary instrumental, opportunistic component.
- (2) *Instrumental/Reactive*: To qualify for this rating, the homicide had to show evidence for both instrumental and reactive violence. However, the primary quality of

the violence leading to death had to be instrumental. For example, an instrumental/reactive homicide would be coded if the offender started to commit a bank robbery, but in the process proceeded to murder a bank teller after becoming agitated when the teller picked up a phone. In this case, a crime occurred for an obvious external gain and the homicide was part of this instrumental act. However, the homicide occurred as a reaction to unplanned events within the context of the crime.

(1) Purely Instrumental: For a homicide to be rated as purely instrumental, the offence had to have been clearly goal-oriented in nature with no evidence of an immediate emotional or situational provocation. The homicide had to have been committed for a clearly identifiable purpose other than "hot blooded" spontaneous anger or a response to an immediate frustration. Therefore, a purely instrumental homicide was coded if there was strong evidence that the homicide had been intentional, premeditated (non-impulsive), motivated by a clear external goal such as drugs, money, to obtain sex or to gain revenge, and not immediately following a potent affective reaction. For example, an offender may have carefully planned, carried out, and concealed a homicide in order to steal from the victim.

In rare cases where it is completely unclear to the coder as to what actually happened, then the homicide should be coded a (5) *Unable to Code*.

Coders also recorded a variety of demographic information for the offender such as age, marital status, and legal description of his homicide, as well as information regarding victim characteristics. Further, a number of other interesting variables concerning the homicide were also coded including the offender's role in the homicide,

how the weapon was obtained, and the offender-victim relationship (Please refer to Appendix C to review entire coding scheme).

This instrumental-reactive coding scheme has previously demonstrated high interrater reliability, K(21) = .81, p < .001 (e.g., Woodworth and Porter, 2002). For the current dissertation, two highly trained coders (the primary researcher and an Honours Undergraduate student) coded either the official or the self-report version of the homicide. It was ensured (through specific examples that had been created for practice and feedback) that the second coder fully understood the coding scheme criteria for each variable, and was highly competent in coding the available information for both the official reports and self-reports. To avoid possible rating bias, the two coders were kept unaware of the PCL-R score (removed prior to coding). The only information provided to each coder was either the offender's self-reported offense description or the official crime description. As mentioned above, this approach enabled me to examine the level of discordance between the instrumentality of the self-report and official reports. To assess inter-rater reliability, 20 % of the instrumental-reactive coding schemes for the official report and the self-report were coded by two trained student undergraduate raters.

The coding scheme was completed by examining the official file version of the homicide offence contained in the offender's criminal records held by Correctional Service of Canada. Specifically, the crime information was coded directly from the official Criminal Profile Reports (CPR) included in the institutional files. This document is considered to be the most important and informative file within each offender's case file for describing in detail the offender's violent crime. The CPR is written by a case management officer and is based on the official police report (submitted to the prosecutor

to allow charges to be laid) and court information (e.g., submissions by the prosecutor). The report is an objective description of the actual crime as a result of a thorough investigation and court testimony. Within the CPR, an official detailed description (typically one to two pages in length) is provided for each serious offense. The extensiveness of the documents contained within each inmate's institutional file clearly was sufficient for completing the homicide coding.

To assist with some of the statistical analyses, difference scores also were created to directly assess discrepancies between the official report and self-report for each offender's type of homicide. Specifically, each participant's score (from 1 to 4) on the self-report was subtracted from his score (from 1 to 4) on the official report to create a distinct difference score that would indicate the degree of concordance between the two types of reports. For example, if the participant's official report was coded as purely instrumental (1), while his self-report was coded as being reactive, with an instrumental component (3), his difference score was –2. After all difference scores had been calculated, it became apparent that none of the participants had exaggerated the instrumentality of their offence, and the difference scores were changed to positive numbers to indicate the degree of exaggerated reactivity in the self-report. Therefore, while complete agreement between the official report and self-report was coded as a 0, numbers larger than 0 indicated exaggerated reactivity in the offence.

Main Detail of the Homicide Offence. For the homicide offenses, main details were defined as any of the information that was crucial to the understanding of the homicide offence, and/or pieces of information that were referred to as important in the official report of the homicide. Potential types of main details would be characteristics of

the homicide such as who the victim was, how the victim was murdered, where the homicide took place, and the nature of the murder weapon (Appendix D). In order to code the main details variable for each homicide offence, a comparison of the offenders' official file version of the homicide and the self-report version of the homicide was made by a trained senior undergraduate volunteer (0 = no main details missing, 1 = some/any main details were missing). It should be noted that initial coding for this variable was based upon the free-recall portion of the offender's step-wise interview. Therefore, despite utilizing an interviewing technique that was specifically designed to keep each interview as uniform as possible, we opted to use a conservative approach to analyzing the main details variable and only examined the initial free recall portion of each offender's self-report.

III. Results

Preliminary Analyses

PCL-R reliability check. An inter-rater reliability check was conducted on the PCL-R scores by having a trained graduate student re-code 10 (20%) randomly selected case files. Results indicated that the total PCL-R scores for Rater 1 and Rater 2 were significantly correlated in a positive direction, r(10) = .94, p < .001. Further, the mean score for the original PCL-R scores (20.6, SD = 7.9) did not differ from the mean for the re-coded files (19.1, SD = 4.9), t(9) = 1.65, p > .05. To examine the potential problem of circularity/criterion contamination, a second inter-rater reliability check was conducted on an additional 10 (20%) randomly selected files in which the raters were kept blind to the description of the offenders' current homicide offense (the description of the offense was removed prior to coding). Similar to the initial reliability check, results indicated that the total PCL-R scores for Rater 1 and Rater 2 were positively correlated, r(10) = .98, p < .001. The mean score for the original PCL-R scores (20.6, SD = 7.9) did not differ from the mean for the re-coded files (16.7, SD = 6.8), t(9) = 1.3, p > .05.

Major coding scheme reliability. An inter-rater reliability check was conducted on the instrumentality/reactivity coding scheme by using a second trained coder who followed the same coding guidelines as the primary investigator. The reliability check on the official reports, using 10 randomly selected cases (20 %), indicated that the scores for all of the major variables pertaining to the official report were highly reliable. Specifically, reliability was acceptable for instrumentality of homicide (kappa (10) = .86, p < .001), offender's role (kappa (10) = 1.0, p < .001), relationship with the victim (kappa (10) = .78, p < .001), and weapon selection (kappa (10) = .71, p < .001).

The reliability check on the self-reported homicide narratives, using 10 randomly selected cases (22 %), indicated that the scores for all of the major variables pertaining to self- reports were highly reliable. Specifically, reliability was acceptable for type of homicide (kappa (10) = .82, p < .001), offender's role (kappa (10) = 1.0, p < .001), relationship with the victim (kappa (10) = .81, p < 001, and weapon selection (kappa (10) = .80, p < .001).

Reliability for other variables of interest. An inter-rater reliability check also was conducted on the main details, amnesia variables and dissociation variables by a trained coder who followed the same coding guidelines as the primary coder. Consistent with the reliability coding discussed above, the coder was kept blind to the PCL-R score of each offender and purpose of the study.

Results indicated that the scoring for main details for Rater 1 and Rater 2 was significantly correlated in a positive direction, r(10) = .78, p < .01. The mean score was .3 (SD = .48) for the original main details variable and .5 (SD = .52) for the reliability check scores, t(10) = -.20, p > .05.

Descriptive Statistics

Age. The participants' mean age at data collection was 39.5 years (SD = 9.2; range of 22-55 years). Their mean age at the time of their current homicide was 28.9 years (SD = 9.2; range of 14-50 years).

³ Although Kappa is most commonly used when comparing the reliability of dichotomous variables, its suitability for a multi-leveled categorical variable has also been shown to be appropriate (Carletta, 1995; Howell, 1992).

Legal description of the offense. Overall, eight (16%) convictions were for first degree murder, 32 (64%) of convictions were for second degree murder, and 10 (20%) were for manslaughter.

Number of perpetrators involved. The offender acted alone in 36 (72%) homicides, with one accomplice in 12 homicides (24%), and with two accomplices in one (2%) homicide. In one case, it was unclear whether the offender had an accomplice. In addition, offenders were considered to have been primarily responsible for the homicide in 43 cases (86%) and to have shared a similar level of responsibility with an accomplice(s) in seven cases (14%).

Victim characteristics. The victims' mean age at time of death (based on the 30 victims for whom there was a specific age listed in the file) was 37.8 years old (SD = 22.9; range of 1-86 years. The general age of the victim was reported in 49 cases revealing that one was a child (2%), four were teen-agers (8.2%), 38 were adults (77.6%), and six were senior adults (65 and over; 12.2%). In addition, in seven cases (14%) the offender had more than one victim (in one case there were four victims). Finally, 30% of the victims were female, 66% were male, and in two cases (4%) victims were of both genders.

Substance use preceding the homicide. Information pertaining to the perpetrator's usage of either drugs or alcohol was available in 41/50 cases. In 12 (29.3%) cases both drug and alcohol use had preceded the homicide, in 15 (36.6%) cases only alcohol was involved, and in two (4.9%) cases only drugs were involved. In 12 (29.3%) cases neither drugs nor alcohol were involved.

Victim-offender relationship. An examination of the offender-victim relationship revealed that in 10 (20%) homicides the victim was a male stranger, in four (8%) the victim was a female stranger, in seven (14%) the victim was a common-law spouse or girlfriend (or the offender had recently separated from the person), in six (12%) the victim was a family member, in 12 (24%) cases the victim was a friend, and in 11 (22%) cases the victim was a co-worker or casual acquaintance.

Analysis of weapon usage. Nine (18%) offenders had used a firearm during the homicide, 15 (30%) used a knife, seven (14%) used their bare hands, nine (18%) used objects that are not normally thought of as a weapon, nine (18%) used a combination, and one (2%) used no weapon (tampered with the car brakes). When obtaining a weapon, 16 (32%) of the offenders used a weapon of opportunity, 17 (34%) used a weapon of choice, eight (16%) used no weapon, and in nine (18%) cases it was unclear whether the offenders had selected the weapon beforehand or if it was a weapon of opportunity.

Sexual violence. In 45 (90%) cases there was no evidence of sexual violence, in five (10%) cases there was evidence of sexual violence.

Psychopathy Check-List Revised (PCL-R) Scores

Thirty seven (74%) PCL-R ratings were conducted by psychologists employed at the Correctional Service of Canada institutions while 13 (26%) were completed by the research assistants. As mentioned, the coder was kept blind to the purpose and hypotheses of the study to prevent any bias in the scoring of the PCL-R. The average PCL-R total score was 20.6 (SD = 7.9; range 3-33). Using the diagnostic cut-off score of ≥ 30 , offenders were classified either as psychopaths or non-psychopaths. Nine (18%) offenders were psychopathic, while 41 (82%) of the sample were non-psychopaths.

Preliminary Statistics

Alcohol and Drug Use. To examine the influence of intoxication from drugs and/or alcohol at the time of the offence, offenders had been asked on the EMS to rate their level of intoxication on a scale from one to seven. Results indicated no significant relationship between reported level of intoxication at the time of the offence and whether all main details of the offence were self-reported, t(42) = .34, p > .05. To further examine this issue, the relationship between the official description of drug and alcohol use and reporting of main details was examined. Again, there was no significant relationship between the presence of drugs and/or alcohol in the official report and if the offender mentioned all of the main details of the homicide offence, $\chi^2 = (1) = .83$, p > .05.

Time Since the Homicide. There was a possibility that length of time since the homicide offense could negatively influence the ability of offenders to recall major details of the crime. However, results indicated that there was no significant relationship between the period of time that had expired since the homicide and the reporting of the main details of the offence, t(43) = .48, p > .05.

Level of emotionality/trauma (EMS and IES). To examine possible differences in the memory/event characteristics reported by participants scoring higher and lower on the PCL-R, a multivariate analysis of variance (MANOVA) was conducted with two items from the EMS as dependent variables. The level of reported anxiety/stress that the participant experienced during the incident (on a scale from 1 to 7) and how vivid and clear the participant felt his memory currently was for the event (also on a scale from 1 to 7) were the dependent measures. Psychopathy status (psychopaths versus non-psychopaths) was the independent variable. The MANOVA was not significant, F(2, 1)

41) = .63, p > .05; neither level of anxiety, F(1, 42) = .68, p > .05, nor vividness/clearness, F(1, 42) = .49, p > .05 was significant within the model. Both psychopaths (M = 5.3, SD = 2.5) and non-psychopaths (M = 5.9, SD = 1.9) reported experiencing a moderate to extreme level of stress at the time of the incident. Further, psychopaths (M = 5.2, SD = 2) and non-psychopaths (M = 5.9, SD = 1.7) both reported that their current level of memory for the homicide offence was moderately to completely clear.

I also examined the relation of the total score on the IES with the likelihood that the participant had reported all of the main details of the offence. Scores between 26-50 on the IES are considered to be in the moderate range, with scores above 50 indicating a high level of trauma (e.g., Horowitz, Wilner, & Alvarez, 1979). Results were non-significant, indicating that the mean IES score for individuals who reported all of the details of the offence (M = 34.26, SE = 3.1) was very similar to the IES score for those who did not (M = 36.76, SE = 4.1), t(42) = -.49, p > .05. Finally, I examined potential different levels of reported trauma (based again on IES total) across both psychopaths and non-psychopaths for their homicide offence. Although psychopaths reported being less traumatized by the homicide incident (M = 29.2, SE = 6.5) than non-psychopaths (M = 36.9, SE = 2.5), this result was non-significant, t(43) = -.1.3, p > .05. (and both groups reported a moderate range of trauma associated with the incident).

Instrumentality of the homicides as a function of psychopathy

Overall, 11 (22%) homicides were purely instrumental, 13 (26%) were instrumental/reactive, seven (14%) were reactive/instrumental, 16 (32%) were purely reactive, and three (6%) could not be coded. Possible differences in the violence

committed by the psychopathic and non-psychopathic groups were examined.⁴ Results indicated that there was a significant difference between the two groups, F(1, 46) = 4.19, p < .05, $\eta^2 = .09$ (see Figure 1).⁵ Homicides perpetrated by psychopaths were associated with a lower degree of reactivity (M = 1.9, SE = .30) than homicides committed by non-psychopaths (M = 2.8, SE = .20). Specifically, 88.9 % of the psychopaths in the sample committed primarily instrumental homicides, compared to 42.1% of the non-psychopaths. There also was a significant correlation between the continuous PCL-R total scores (0-40) and the instrumental ratings. Higher scores on the PCL-R were associated with higher levels of instrumental violence, F(47) = .33, P < .05.

To examine the relative contributions of Factor 1 (interpersonal and affective traits) and Factor 2 (anti-social behavioural features) in predicting the degree of instrumentality within the homicides, a regression model consisting of Factor 1 and Factor 2 (which were entered simultaneously into the model) was conducted. The regression model was significant, R = .405, F(2,44) = 4.30, p < .05. While the partial correlation for Factor 1 (controlling for Factor 2), was significant r(47) = .405, p < .001, the partial correlation for Factor 2 (controlling for Factor 1) was not, r(47) = -.001, p > .05, suggesting that Factor 1 played an important role in predicting the level of instrumentality in the crime.

Type of homicide: Official report vs. self-report

As mentioned, the coders coded the offenders' self-reports concerning their homicides in the same manner as for the official descriptions. When examining the

⁴ As mentioned, form our theoretical framework we conceptualized the ratings as representing a continuum. We also analyzed the instrumental/reactive data categorically using a nonparametric approach and obtained the same pattern of results.

⁵ The three 'unable to code' files were excluded from this analysis

offender's self-report for their homicide offence, the coders classified, only 4 (8%) homicides as purely instrumental, 9 (18%) as instrumental/reactive, 7 (14%) as reactive/instrumental, 24 (48%) as purely reactive, and 2 (4%) could not be accurately coded.

Psychopathy scores were dichotomized (psychopaths versus non-psychopaths) based on a PCL-R cut-off score of 30. A 2 X2 mixed analysis of variance (ANOVA) was conducted to concurrently examine whether psychopaths and non-psychopaths differed in the level of instrumentality evidenced in their official homicide descriptions and whether the self and official reports differed on this dimension as a function of psychopathy. The analysis included a between-subjects variable; 2 (psychopathy) and a within subjects variable; X 2 (official versus self-report). The dependent variable was the instrumentality/reactivity score (recall that scores further away from 0 represented a more reactive description of the crime, while scores closer to 0 represented a more instrumental description of the crime). The analysis revealed a reliable main effect of report type, F(1,41) = 34.4, p < .001, $\eta^2 = .46$. Instrumental/reactive scores were significantly lower for the official report (M = 2.44, SE = .35) than for the self-report (M = 3.0, SE = .18), suggesting that, overall, the offenders described their crimes as more reactive than the official reports (see Figure 2). Specifically, 62.2% of the offenders described their offence as more reactive, while 37.8% of the offenders' self-reports were consistent with the official version. Although the main effect of psychopathy was not significant, F(1,41) = 1.86, p = >.05, $\eta^2 = .04$, a significant interaction between psychopathy and

⁶ In addition to the four self-reports that were eliminated from the analysis, the three files that were 'unable to code' were also removed.

report type was observed, F(1,41) = 8.2, p < .01, $\eta^2 = .17$. Simple effects analyses were conducted at each level of the report factor in an effort to clarify the interaction. A significant difference was observed across levels of psychopathy for the official report, t(41) = -2.09, p < .05. In the official reports, crimes conducted by psychopaths were rated as reliably more instrumental (M = 1.89, SE = .31) than crimes conducted by non-psychopaths (M = 2.8, SE = .21). This difference, however, disappeared for the self-reports, t(41) = -.44, p > .05. When describing their own crimes, psychopaths described their offences as being as reactive (M = 3.00, SE = .37) as non-psychopaths (M = 3.18, SE = .18) described theirs. Please refer to Figure 3. Further, please refer to Figure 4 for the percentages of both psychopaths and non-psychopaths who claimed their offence was more reactive than the official report.

The same mixed analysis of variance was again conducted to examine whether the results may have potentially been affected by the severity of the crime. Specifically, it was possible that offenders who had been charged with 1st degree murder may have been more likely to exaggerate the reactivity of their offence than offenders convicted of manslaughter, independent of psychopathy. Therefore, legal description (either first degree murder, second degree murder, or manslaughter) of the offence was included in the model as a covariate. Results indicated that the original interaction between report type and psychopathy was still significant, F(1, 40) = 7.9, p < .01, while legal severity of the crime was not significantly related to report type, F(1, 40) = .02, p > .05, suggesting that severity of the crime did not significantly influence the main findings.

The original 2 X 2 mixed analysis of variance was also conducted with all of the primarily reactive homicides eliminated from the analysis. This served to provide a more

specific indication of psychopaths and non-psychopaths tendency to exaggerate the reactivity of their offence when considering only the primarily instrumental homicides. This additional analysis was important as initial analyses had revealed that none of the offenders had exaggerated the instrumentality of their offence. The sample for this analysis was 8 psychopaths and 14 non-psychopaths. With this limited sample size, the interaction between psychopathy and report type was still marginally significant, F(1, 20) = 2.4, P = .1. Specifically, the official reports for both psychopaths (M = 1.6, SE = .18) and non-psychopaths (M = 1.5, SE = .14) were rated at a similar level of instrumentality. However, for their self-reports, psychopaths were exaggerating the reactivity of their offence (M = 2.9, SE = .36) more than the non-psychopaths (M = 2.2, SE = .27), demonstrating the same finding (direction of results) as our original analysis on the entire sample.

To further examine the relative contributions of Factor 1 (interpersonal and affective traits) and Factor 2 (anti-social behavioural features) in predicting the agreement (yes/no) between the self-report and official for type of homicide, a regression model consisting of Factor 1 and Factor 2 (which were entered simultaneously into the model), was conducted. The regression model was significant, r = .44, F(2,40) = 4.9, p < .05. While the partial correlation for Factor 1 (controlling for Factor 2), was significant r(43) = .463, p < .01, the partial correlation for Factor 2 (controlling for Factor 1) was not, r(43) = .056, p > .05, suggesting that Factor 1 played an important role in predicting the agreement between the self-report and official for type of homicide.

Further, I examined the relation between PCL-R continuous scores (ranging from 0 to 40) and self versus official instrumentality difference scores. Higher difference

scores reflect the level of exaggerated reactivity in the self-report of the homicide offence. A correlational analysis was conducted to examine the influence of psychopathy total, Factor 1, and Factor 2 on the differences scores. Results indicated that while psychopathy total, r(43) = .361, p < .05, and Factor 1 significantly predicted a higher level of self-reported reactivity r(43) = .514, p < .01, Factor 2 did not, r(43) = .111, p > .05. When the same analysis was conducted examining only the 8 psychopaths and 14 non-psychopaths who had committed a primarily instrumental homicide, psychopathy total was marginally significant in predicting a higher level of self-reported reactivity r(22) = .390, p = .07. Factor 1 still significantly predicted a higher level of self-reported reactivity, r(22) = .57, p < .01, while Factor 2 still was non-significant, r(22) = .106, p > .05.

Main Details

Overall, 62.2 % of the offenders reported all the main details during the main portion/free recall stage of the interview, while 37.8 % left out at least one main detail. Further, psychopaths were significantly more likely than non-psychopaths to leave out some/any of the major details of the homicide offence $\chi^2 = (1) = 4.0$, p < .05. Specifically, 33.3% of the psychopaths provided all main details, compared to 69.4% of the non-psychopaths. Therefore, 66.7% of the psychopaths did not report all of the main details, compared to 30.6% of the non-psychopaths (see Figure 5).

IV. Discussion

As has been witnessed throughout human history, psychopathic individuals exhibit a marked propensity toward exploiting others through the use of manipulation and aggression or violence (e.g., Hare, 2003). They are highly egocentric, lack empathy and remorse, and have few inhibitions against lying or aggressing to serve their own internal or external needs (e.g., Porter & Woodworth, 2004). Offering the first study of its kind, this thesis concurrently examined the nature of psychopathic violence in the context of homicide (how the act was *committed*) and deceit in the context of an interview about the offense (how the act is self-*described*). The findings based on this innovative methodological approach provided important information about the manner in which psychopathic individuals engage in violence and applicable knowledge about how psychopaths employ deception, often subtly, in their self-report long after the commission of the violent act.

Homicide is a heterogeneous crime in terms of the characteristics of both the perpetrator and act. Some homicides are highly planned, instrumental crimes whereas others are impulsive and involve a lack of premeditation. I focused specifically on potential differences in the type of violence committed by psychopathic and non-psychopathic offenders. These results provided strong evidence that violence by psychopaths is multifaceted and different from that of other offenders. I replicated Woodworth and Porter's (2002) findings demonstrating that psychopaths were significantly more likely to commit instrumental, "cold-blooded" homicides than non-psychopaths, according to the official offense descriptions. In fact, psychopaths had almost always perpetrated well planned out, calculated homicides (89% of the homicides

committed by psychopaths in the current sample were primarily instrumental) that did not contain any substantial reactive, impulsive component.

These results again bring into question the assumption that the behaviour of psychopaths is truly impulsive and provides further support for Woodworth and Porter's (2002) proposed "selective impulsivity" theory. This theory suggests that psychopaths' impulsive aggression in other contexts may not be as uncontrollable as it seems. It would appear that when the potential consequences of a violent response are severe (for example, life imprisonment), psychopaths can inhibit their behaviour, and/or delay their vengeful behaviour (which then would become an instrumental homicide). Instead of using impulsive homicidal aggression, they are more likely to plan and execute an instrumental murder, perhaps with a belief that an arrest for this type of crime is less likely (e.g., Cleckely, 1941; Porter & Woodworth, 2004). Alternatively, they may derive enjoyment from the process of planning and committing of predatory violence (e.g., Porter & Woodworth, 2004). Supporting this explanation, previous research has indicated an association between psychopathy and sadistic interests; psychopaths enjoy inflicting pain on others and their violence often has a thrill-seeking motive (e.g., Hart & Hare, 1997; Porter et al., 2003).

The results of this thesis further replicated Woodworth and Porter's (2002) finding that instrumental violence was related to the Factor 1 interpersonal and affective features of psychopathy, and not to the Factor 2 social deviance/behavioural criteria (see also, Patrick & Zempolich, 1998). It would appear that while Factor 2 behavioural features may have a more direct and obvious relationship with criminal offending and recidivism (e.g, Walters, 2003), the Factor 1 core emotional and interpersonal traits of

psychopathy may help to better explain the specific types of violence in which psychopaths choose to engage.

The second major issue addressed in this thesis was the manner in which psychopaths and non-psychopaths describe their homicidal violence following their conviction and incarceration, relative to the information contained in the "gold star" document (the Criminal Profile Report) describing the crime, and contained in their official files. As reviewed earlier, psychopathic individuals show a high level of egocentricity and a profound emotional deficit (as evidenced from studies of language, psychophysiology, neurology, and behaviour). Various theoretical perspectives, from evolutionary (e.g., "cheater strategy") to social/communication views (e.g., "social artistry") all point to a strong association between psychopathy and deceptive behaviour (also see Cleckley, 1976; Hare, 2003). Therefore, in line with evidence for their deceptive orientation in general, in this study it was predicted that psychopaths would be more prone to alter the details of the offense in a self-exculpatory fashion than other homicide offenders who, in all likelihood, would be more affected by their conscience and remorse for their actions. My results were consistent with this main hypothesis, indicating that psychopaths were significantly more likely than non-psychopaths to frame their offense as being more reactive, or more of a "crime of passion", than the official report had indicated. Whereas psychopaths were significantly more likely than their counterparts to have perpetrated primarily instrumental homicides (according to the official version), this difference was eliminated when examining the self-report descriptions. Therefore, if an interviewer were attempting to obtain information about the offense based solely on a psychopathic offender's self-report, he/she would get the

impression that their homicide had been more impulsive and reactive than in reality (and no more instrumental than those committed by the non-psychopathic offenders).

Psychopathic offenders who had almost all carefully planned and perpetrated a homicide were presenting in their narratives as though the offense was relatively reactive. When I broke down the sample into just offenders who had committed primarily instrumental offences, it was apparent that although non-psychopaths also had a tendency to exaggerate the reactivity involved in their homicide offence, it was not to the same extent as the psychopathic offenders.

The following case example from the file information helps to illustrate this point. Based on the official report, a participant in the current sample who scored a 31 on the PCL-R had assaulted, raped, robbed, and finally strangled a female co-worker after she agreed to drive him home from work one evening. There was considerable evidence that the offender had carefully planned this incident, including purchasing a gun and knife in advance of the offence, and detailing to an acquaintance what he planned on doing to the victim (the acquaintance did not believe the offender at the time). Further, he had asked her for a ride home on the night that he knew she was scheduled to make the weekly bank deposit for the business. Despite originally denying his guilt, the offender ultimately confessed to the offense and was sentenced to a lengthy period of incarceration. Based on the official report, the coder rated this offense as a "1" (purely instrumental). During the study interview, the offender reported that he absolutely had no plans to murder or harm the victim on the night of the offense. Instead, in his version, after they got into a verbal argument which she initiated, he had killed her in a rage.

⁷ No potentially identifying information is provided, and certain descriptive details have been altered to ensure the confidentiality of the perpetrator and victim.

Further, he stated that he had only taken the money after the fact, because he had "accidentally" murdered her. Based on his transcribed description, another coder rated the homicide as a "3" (primarily reactive with an instrumental component). Therefore, staff in the legal system (e.g., a judge or jury, an institutional psychologist) could come to very different conclusions concerning the dynamics of the offense, the motivation and ultimately the offender's level of culpability based on the self report.

The instrumentality data also were analyzed in terms of Factor scores. Results revealed that the tendency to exaggerate the reactivity of the homicides was *strongly* related to Factor 1 scores, but not the Factor 2 scores. It would appear that the interpersonal and affective characteristics of psychopathy that are related to Factor 1 account for not only the type of violence in which an offender will engage, but also the manner in which they discuss it. This is not surprising considering that the items that comprise Factor 1 are interpersonal and affective traits, including the two items relating directly to deceptive behaviour: conning/manipulation and pathological lying. It also is likely that the shallow affect and lack of guilt traits included in the Factor 1 characteristics of psychopathy contribute to a psychopath's ability to discuss the homicide offence in a self-exculpatory fashion with little regard for the victim. As has been cautioned many times by researchers and clinicians alike (e.g., Cleckley, 1976; Hare, 1998a), one should certainly not assume that self-reported emotional arousal (or reactivity/affective lability contributing to an offense) in psychopaths is sincere.

There are a number of other potential explanations for the current findings. The most obvious is that psychopaths are simply more prone than non-psychopaths to deceiving in all contexts and, particularly, when deception serves a self-exculpatory

function. As such, during the interviews psychopaths continued in their persistent pattern of interpersonal deceit by exaggerating the reactivity of their offense, suggesting a crime of passion rather than a premeditated, cold-blooded crime (as indicated by most of their official descriptions). As suggested above, with no elements of "conscience" such as remorse or empathy, there is little moral incentive to inhibit an attempt at self-exculpation for their heinous acts. It also may be that psychopaths do experience "duping delight" (e.g., Hare, 2003) and will display habitual or pathological lying across social interactions in general. Here, psychopaths (and to a lesser extent non-psychopaths) were less than forthcoming about their true level of criminal responsibility when discussing their homicide even when there were no real consequences for successful deceit. All offenders in this sample had been convicted and were assured that their data would remain completely anonymous.

Taken together, the evidence suggests that psychopaths may view aggression as a useful tool with which to satisfy a selfish need. They view violence "cognitively" as a means to an end, attach little emotion to such behaviour, and as hardly different from other instrumental actions (e.g, Porter & Woodworth, 2004). With little remorse, psychopaths are more likely than non-psychopaths to describe their violent actions as being more reactive and less planned than the official file would suggest. Again, this deception could serve an instrumental function (i.e., to attempt to reduce his/her apparent culpability for the crime).

As this was the first study to compare the self-report of offenders to the official report description (Woodworth & Porter, 2002), it was unclear how the non-psychopathic participants would describe their offenses. Specifically, it was unclear whether they

would describe their offenses in a similar manner to the official report, or if they would imply that it had been either more reactive or more instrumental than was indicated in the official information. Results indicated that in *all* cases where the type of homicide description was discrepant with the official report, it was because the participant described his offence as being more reactive than the official version. Therefore, there were no apparent cases in which non-psychopathic participants exaggerated or boasted about the instrumentality of the offense. This was consistent with the psychopathic offenders, where the exaggeration of instrumentality was also certainly a conceivable possibility, especially given the grandiosity associated with psychopathy.

Previous studies have found that psychopaths may be more likely than non-psychopaths to deny (or not acknowledge) the extent of criminality and negative behaviour involved in their offence (e.g., Rogers & Cruise, 2000). A similar pattern was obtained here, with psychopaths being significantly more likely to omit some of the main details of their offence. Some examples of omitted details included degradation of the victim's body, stealing money, stalking the victim before the homicide, and aspects of the sexual assault. Arguably, failing to report significant (and often particularly negative or incriminating) details can be conceived of as deception by omission (e.g., Ekman, 2002). Indeed, denial of the full extent of the criminality involved in the offence and externalization of responsibility have both been associated with antisocial personality characteristics in general (Lilienfeld, 1996). However, it must be noted that when the official report and self-report were compared across other important characteristics of the homicide offence, the two types of reports were consistent. This was not entirely unexpected considering that any offenders who were currently denying their offence (or

appealing their conviction) were not asked to participate in the current study. In fact, there appeared to be extremely little blatant "lying," or altering of the facts of the offence by either psychopaths or non-psychopaths. It might be argued that psychopaths were attempting to appear credible in some ways while using subtle deception in others. This further demonstrates that more sensitive and/or indirect measures of analyzing the self-report of the offender (such as the instrumental-reactive coding scheme) may be particularly useful means of comparing differences between the two types of reports.

There are a number of important implications of these findings. First, they reinforce the need to do a thorough review of the offender's file in the context of a forensic assessment. While the veracity of the self-report of offenders should generally be questioned, in particular, little weight should be given to a psychopathic offender's self-report for his/her homicide offence in court or prison. For example, reactive violence is often viewed as involving a lower level of culpability, and may be related to a lower presumed criminal responsibility and a lower risk rating in a psychological assessment. Interestingly, the results indicated that there was no relationship between the severity of the legal sentence and an exaggeration of the reactivity during the offence. Further, the results may be relevant in the institutional treatment context. For example, a psychopathic offender who downplayed the instrumentality involved in his offence and falsely described his actions as being highly reactive could be placed in a treatment program for anger issues, when this might not be particularly useful or appropriate. Additionally, examining any potential changes over time (i.e., less exaggeration and increasing similarity to the official report) in the self-report could be beneficial as a gauge of the offender's progress in treatment. That is, as the offender assumes increasing

responsibility for the crime one would expect that his/her account would become more honest. By using the coding scheme employed in this study, treatment facilitators could examine whether an offender no longer exaggerates the level of reactivity. The degree of cognitive distortion regarding the offence is often one focus in treatment, and this could become a key consideration in evaluating any potential gains that the inmate may have made through the treatment process.

Additionally, a closer consideration of an offenders' self-reports (and how they frame/conceptualize their homicide offence) can provide useful feedback for professionals within a correctional setting. Previous studies have suggested that feedback is one of the crucial elements of deception detection training, and will potentially increase the success rate of lie detectors (e.g., Hartwig, Granhag, Stromwall, & Andersson, 2004; Porter, Woodworth, & Birt, 2000). Professionals can consider the veracity of information provided on the offender's self-report (particularly concerning the reactivity of the offence) and then compare this self-report with the official report. This could provide them with immediate and useful feedback regarding their estimation of the truthfulness of the interviewee, potentially improving their credibility assessment skills.

This dissertation had several strengths. One major strength was its originality. This study was the first to examine the relationship between the self-report and official report of homicide offences using an innovative approach to account for more subtle indicators of deception. It often has been suggested that for both practical and theoretical applications, the instrumental-reactive distinction is one of the most useful taxonomies for lethal and non-lethal violence (e.g., Block & Block, 2002; Eaves, Douglas, Webster, Ogloff, & Hart, 2000). Approximately half of the homicides contained a combination of

instrumental and reactive violence, supporting the recent contention that violence is a complex phenomenon that often combines elements of both instrumental and reactive violence (e.g., Bushman & Anderson, 2001). For the first time, I demonstrated that a consideration of the instrumentality (or alternatively, the reactivity) of the offence can also provide useful information pertaining to an offender's self-report. For this study, I was provided access (including interviews) to an impressive number of homicide offenders (considering the numerous challenges in obtaining this type of sample), as well as thorough descriptions of their homicide offence. In fact, this was the first psychological study of homicidal violence and subsequent self-report ever conducted. Further, it displayed highly reliable inter-rater coding for both the coding scheme and the PCL-R scores. Finally, to my knowledge, only one previous study examined whether individuals reliably classify their own actions as reactive or instrumental. Barratt, Stanford, Dowdy, Liebman, and Kent (1999) had 216 college students assess their own violent behaviours using a 22 item "aggressive acts" questionnaire. Results indicated that student participants reliably classified their acts as either reactive or instrumental. Despite some methodological concerns regarding the Barratt et al. (1999) study (e.g., it is unclear how they compared across the official and self-reports), the results of the current study suggest that forensic and non-forensic samples may differ considerably in this regard.

One potential limitation of this thesis was a limited sample size. This stemmed from the fact that homicide is a low base rate crime (small population of homicide offenders from which to draw a sample) and the pragmatic difficulties of recruiting and interviewing high security incarcerated inmates. However, despite the small sample, for

all main hypotheses tested the findings were statistically significant, attesting to the strength of the effects. Another potential limitation concerned ground truth. That is, although I relied on the Criminal Profile Reports, the "gold star" of what occurred during the homicide, this only was the official best "estimate" of the truth in the absence of a video recording of the incident. Finally, although I theorize that psychopaths had intentionally exaggerated the reactivity of their violence, another possibility is that this pattern reflected an unintentional, perhaps "unconscious" process of self-exculpation. Regardless of the underlining motivation, the results clearly show that these differences in the self-reports of psychopaths and non-psychopaths do exist, and should be considered by professionals engaged in the interview process. In fact, almost all of the psychopaths in the sample distorted/minimized the level of instrumentality in their crimes, making it an expectancy in the interview setting.

It was also possible that other factors might have influenced the offenders' recall of the offence. However, there was no significant relationship between drug and alcohol use (as measured by *both* the offender's self-reported level of intoxication and the official report). Further, although I considered the possibility that the passage of time might impair the participants' memory for the event, there was no relationship between the amount of time since the homicide and the reporting of main details. Finally, both psychopaths and non-psychopaths reported having between a moderate and completely clear memory of their homicide, and the two groups also did not report experiencing different levels of emotion or trauma regarding the offence.

Future Research

In this dissertation, I replicated our earlier research indicating that psychopaths engage in primarily instrumental homicide, and, further, demonstrated that they have more of a tendency than non-psychopaths to frame these offences as being more reactive than the facts would suggest. Additional research would now be useful comparing particular items and/or subtypes of the psychopathic disorder. For example, Hare's PCL-R 2nd edition (2003) breaks psychopathy into four different sub-types based on interpersonal, affective, lifestyle, and antisocial traits. Future studies could investigate the influence of each of these sub-types on both violent behaviour and deceptive interview behaviour. While the current (and past) results have already found that Factor 1 (interpersonal and affective) differences largely account for the relationship between psychopathy and instrumentality (as well as the subsequent exculpating self-report), a more specific understanding of the personality dynamics would certainly be of interest. In fact, one could conduct an item analysis to examine results across all of the 20 items of the PCL-R. For example, it would be interesting to examine whether high scores on the two main deception items on the PCL-R (conning and manipulation and pathological lying) would correlate strongest with our current self-report results. To accomplish this type of analysis, researchers would need a sample for whom access to the original PCL-R scoring with all of the items was possible, rather than just the Factor 1, Factor 2, and total scores (which was the case for a substantial portion of our sample).

Other useful research could include a consideration of psychopaths who are currently functioning in the community, often referred to as 'white collar' psychopaths (Babiak, 2000). Psychopaths with higher cognitive functioning may be as likely to

commit violence as are other psychopaths, but are much less likely to be caught for such acts. Ishikawa et al. (2001) tested a community sample of 16 "unsuccessful" and 13 "successful" psychopaths (classified based on their PCL-R score and whether they had received criminal convictions) on measures of autonomic stress reactivity and executive functioning (referring to the capacity for initiation, planning, abstraction, decisionmaking). The two groups had engaged in a substantial and similar amount of criminal behaviour, including violence. The results indicated that the successful psychopaths exhibited greater autonomic reactivity to emotional stressors and stronger executive functioning than unsuccessful psychopaths. This suggested that psychopaths who are less likely to be caught and convicted for their violent acts have the capacity for better planning and decision-making than their unsuccessful counterparts. While Ishikawa et al. (2001) did not address the type of violent acts perpetrated by successful and unsuccessful psychopaths, I suggest that successful psychopaths may have been more likely to use premeditated, instrumental violence than their counterparts. If a sample could be obtained, an examination of the instrumental-reactive nature of "successful" psychopaths' violence, as well as his/her self-report for the incident, could provide an important extension of the these results. In fact, it is quite likely that future research on psychopathic individuals in the community will ultimately lead to an improved definition of the disorder (e.g., Kirkman, 2002).

As mentioned above, my results are particularly compelling as many of the motivations (e.g., avoid incarceration, shorter sentence) to provide a less than complete and accurate self-report were not present for the participants, who were all already convicted and incarcerated. Despite the current results, it is certainly possible that more

differences would be obtained if the self-report of the offenders could be analyzed before they were convicted (when the stakes are much higher). Future studies might also compare neurological differences across offenders who commit either instrumental or reactive homicides. For example, there is limited research to suggest that reactive murderers demonstrate a lack of prefrontal functioning while predatory (instrumental) homicide offenders have relatively intact prefrontal functioning (e.g., Raine et al., 1998). Neurological studies specifically examining differences between offenders who commit instrumental and/or reactive violence would be useful, and could have implications for understanding the nature of their self-report and future treatment options.

There are also several other lines of work that could help reveal the nature of psychopathic violence and deception. For example, there are no published experimental studies in which psychopaths and non-psychopaths have been asked to provide both honest and dishonest information, and then differences in 'how' they lie (across both non-verbal and verbal behaviour) have been analyzed. Further, it would be interesting to examine how psychopaths and non-psychopaths self-report their criminal and violent behaviour in general. For example, for less serious crimes (in terms of implications such as sentencing) it is possible that psychopaths would be less motivated to provide exculpatory accounts. The main difficulty for conducting this type of study is in obtaining and coding detailed official versions for offences that are less serious than homicide (e.g., assault, robbery). Finally, future research should also be conducted examining the suitability of self-report measures for psychopathy such as the PPI (Lilienfeld & Andrews, 1996). While limited studies (e.g., Benning, Patrick, Hicks, Blonigen, 2003) have supported its predictive utility, the current results concerning the

exculpatory nature of a psychopath's self-report suggest that the usefulness of self-report measures such as the PPI for diagnosing psychopathy, may be limited at best.

In summary, there is already a clear established relation between psychopathy and aggressive behaviour (e.g., Hart & Hare, 1997; Cooke & Mitchie, 2001). In fact, psychopaths probably commit more non-sanctioned violence than any other members of society (e.g., Porter & Woodworth, 2004). Therefore, a critical agenda for researchers in forensic psychology should be to gain a better understanding of their violence. There is a great need to continue exploring cognitive, affective, and interpersonal manifestations of psychopathy. I have highlighted the need to examine more closely the quality of psychopath's aggressive and violent behaviours, as well their self-report for this behaviour. The current study replicated Woodworth and Porter's (2002) findings demonstrating that psychopaths are significantly more likely to commit instrumental homicides. In addition, it extended these results in an important way with a novel methodological approach. The instrumental-reactive conceptualization was employed for the first time as a gauge of credibility in evaluating the self-report of psychopaths and non-psychopaths. Results indicated that while some of the non-psychopaths exaggerated the reactivity involved in their homicide offence, psychopaths were significantly more likely to exaggerate the reactivity of their offence (to a level where their self-report described their offence as no more instrumental than the offences of non-psychopaths). Further, psychopaths were observed to engage in other arguably exculpatory types of self-report, such as being significantly more likely to omit some of the main details of their homicide offence. These results have important implications for the interrogation and treatment of offenders. They also bring us one step closer to a complete

understanding of psychopathy and violent behaviour, and provide us a glimpse of how psychopaths think about and describe their own violence long after its occurrence.

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Appendix A

Impact of Event Scale

On	you experienced the an eve approx. date)	nt	(life e	vent)	
abou frequ	w is a list of comments made by people after s it the event you <u>just finished describing</u> and ch lently these comments were true for you <u>DUR</u> did not occur during that time, please mark the	eck each ite ING THE PA	m, indica I <i>ST SEVI</i>	ting how	
		Frequency			
	Comments	Not at All	Rarely	Sometimes	Often
1.	I thought about it when I didn't mean to.	О		a	
2.	I avoided letting myself get upset when I thought about it or was reminded of it.	٥	0	ø	٥
3.	I tried to remove it from memory.	O		O	0
4.	I had trouble falling asleep or staying asleep, because of pictures or thoughts about it that came into my mind.	ø	0	0	o
5.	I had waves of strong feelings about it.		0	a	٥
6.	I had dreams about it.	o			0
7.	I stayed away from reminders of it.	a		O	O
8.	I felt as if it hadn't happened or it wasn't real.	o		О	
9.	I tried not to talk about it.				0
10.	Pictures about it popped into my mind.	O		О	
11.	Other things kept making me think about it.	o		O	
12.	I was aware that I still had a lot of feelings about it, but I didn't deal with them.			0	O
13.	I tried not to think about it.	O	a	0	٥
14.	Any reminder brought back feelings about it.				

15. My feelings about it were kind of numb.

Appendix B

Emotional Memory Survey

Please answer the questions below about the event you just described to the interviewer by circling the answer that best applies to your experience.

1.	If a visual image comes with the memory for this event, can you see yourself in the memory (i.e., can you see yourself acting and/or your face in the memory)?						
a. b. c.	I can always see myself in the memory I can never see myself in the memory The memory changes so that I can see myself in the memory image only some of the time.						
2.	Please indicate the how much anxiety or stress, if any, you experienced at the time of this incident						
	1 very little	2	3	4 moderate amount	5	6	7 extreme amount
3.	. Please rate your degree of intoxication from <u>drugs or alcohol</u> when the event occurred (i.e., how high or drunk were you?)						
int	1 t at all oxicated e., no drugs o	2 or alcohol us	3 sed)	4 somewhat Intoxicated	5		7 Extremely Intoxicated
4.	Please indica (on average)		you ta	lked about the ev	ent with	other people	since it happened
	1 never	2	3	4 some times (few times/yea	5 er)		7 many times 7+ times/year)
5.	Please indicate how often you have thought about the event since it happened						pened
	1 never	2	3	4 some times (few times/yea	5 r)		7 many times (7+ times/year)
6.	Please indicate how vivid and clear your memory is for this event						

	1 not at all vivid/clear	2		4 moderately vivid/clear	5	6	7 completely vivid/clear		
7.	Compared to	your other m	emories	s, what is the	quality of	the memory	for this event		
ve	1 ry poor	2	3	4 average	5	6	7 very good		
8.	8. Please respond to <u>each</u> of the following questions by circling yes' or 'no' to indicate whether the statement has been a part of your memory for the event								
	a. Can you s	ee things in	the m	emory?		Yes	No		
	b. Can you h	ear things in	n the m	nemory?		Yes	No		
	c. Can you s	mell things	in the r	nemory?		Yes	No		
	d. Can you p	hysically fe	el thing	s in the me	mory?	Yes	No		
	e. Can you ta	aste things i	n the n	nemory?		Yes	No		
9.	Was there ev	∕er a period	of time	e where you	could not	remember	the event?		
a. b.	Yes No (i.e., I alw	ays remem	bered	the event)					
	If Yes, what was longest period of time that you <u>COULD NOT</u> remember it? Please indicate the length of period of time and how old you were during this time period								
	Longest time many?) age:			(e.g.,	minutes,	days, weel	ks, years & how		
10.	0. To your knowledge, has your memory for this event changed over time?								
a.	Yes								
	If yes, please explain how and why you think it changed:								
b.	No.				······································				

Appendix C

INSTRUMENTAL-REACTIVE CODING SCHEME

REMEMBER: When coding from the self-report, it is based ONLY on the information contained in the self-report.

REMEMBER: When coding from the official file information, it is based ONLY on the information contained in the official report. Although, you can refer to officials comments regarding the official report (e.g., judge and police comments) for guidance, you must completely disregard any explanation/self-report of offender that is accidentally contained within the files.

- 1. Offender's identification (CODE) number: (CODE)
- 2. Offender's location: (Prison)
- 1 = Springhill
- 2 = Dorchester
- 3 = Atlantic
- 3. Origination of the Description: (org)
- 1 = Official file Information
- 2 = Offender's current self-report
- 4. Date of birth: (DOB)

YEAR/MONTH/DAY

- 5. Age (calculation based on offender's age as of December 31, 2002): (Age)
- 6. Marital status: (Marital)

~this includes any marriages (including common-law) in the offender's lifetime.

- 1 = Never married
- 2 = Married once
- 3 = Married more than once
- 4 = Currently divorced or separated: married once
- 5 = Currently divorced or separated: married more than once

7. Legal Description of the Violent Offence: (legal)

- $1 = 1^{st}$ degree Homicide
- $2 = 2^{nd}$ degree Homicide
- 3 = Manslaughter
- 4 = Attempted Murder
- 5 = Assault
- 6 = Sexual Assault
- 7 = Armed Robbery
- 8 = Kidnapping
- 8. How many years ago was violent offence (based on days since homicide/other violent offence): (tim_off)
- 9. Age when committed violent offence: (Age vio)
- 10. Total number of violent offences committed by the offender: (tot vio)

~an indication of the total number of violent offences the offender has committed. Include the current homicide. Include all convictions BUT NOT charges.

11. Total number of non-violent offences committed by the offender (tot non)

~an indication of the total number of non-violent offences the offender has committed. Include all convictions BUT NOT charges.

- 12. Approximate time of day of the offence: (approx t)
- 1 = Morning (5:00 AM-11:59 AM)
- 2 = Afternoon (12 PM 4:59 PM)
- 3 = Evening (5 PM 10.59 PM)
- 4 = Late Evening (11 PM 4:59 AM)
- 13. Duration of the event (the actual event, not planning etc.) (dura)
- 1 =Less than half an hour
- 2 = half and hour to 2 hours
- 3 = 2 hours to 5 hours
- 4 = More than 5 hours
- 14. Number of victims: (nu c vic)

~The number of victims from the offenders current violent offence conviction (either deceased in the case of a homicide, or listed as a victim in the official description).

15. Total number of victims: (tot vic)

- ~The total number of victims from all of the offenders violent offence convictions.
- **Will have to wait to enter this number until after you have coded all of their violent offences, then you can add up the total for variable 15.

16. Number of individuals involved in the violent offence: (ind vio)

- 1 = Just the offender being coded
- 2 = The offender and one other individual
- 3 = The offender and two other individuals
- 4 = The offender and three or more individuals
- #5 = Can't Recall

17. Offender's "role" in the violent offence: (role vio)

- ~this variable investigates the "role" of the offender who was convicted of criminal violent offences
- 1 = Offender was primarily responsible for the criminal violent offence (e.g. offender was alone, offender murdered/assaulted the victim while a second individual waited in a car outside).
- 2 = Offender committed the violent offences with one or more other individuals who also had a substantial "role" in the crime (e.g. the offender and one other individual both severely beat a victim).
- 3 = Offender had a minor "role" in the criminal violent offences (e.g. the offender "kept watch" outside while his companion attacked/murdered the victim inside their apartment).
- 4 = Completely unclear what role the offender had in the violent offence.
- #5 offender can't recall/refuses to say

18. Type of violent offence: (vio type)

- 1 = Instrumental violent offence
- 2 = Instrumental/reactive violent offence
- 3 = Reactive/instrumental violent offence
- 4 = Reactive violent offence
- 5 =Unable to determine
- a) You would code a 5 when,
- 1. There is a lack of information due to a: missing or too little information or b: coder is unclear as to what actually happened, how it happened, or why it happened (e.g. an offender's girlfriend is found dead, and he is charged with an violent offence,

- HOWEVER he does not admit to the crime, there is no details regarding how the incident occurred and there is no indication of planning or motivation)
- 2. Coder is completely unclear about what the possible motive or rationale for the violent offence may be. (e.g. the violent offence does not appear to have been provoked or planned). In most cases, this second possibility will be in homicide or violent offences that have been committed against women or strangers for no apparent or obvious reason.
- b) For the purposes of coding a violent offence that has a sexual component: the instrumental/reactive continuum described in 18 below should be considered when determining if the offense should be labeled as instrumental, reactive, or a combination of the two. Sexual violence will not automatically be assumed to be one type of violence or the other.

Please refer to the descriptions below for further information on 18 (1 through 4).

18 (4). Reactive violent offence:

- ~Primary motive appears to be anger or displaying aggression
- ~Evidence of provocation, without a "cooling off" period between the time of the provocation and the time of the violent offence.
 - ~Violent offence crime scene appears careless and spontaneous.
- ~Violence is in response to some type of dispute or interpersonal conflict, without a "cooling off" period between the time of the dispute or interpersonal conflict and the time the violent offences was committed. If there was a "cooling off" period, the files may indicate that the interpersonal conflict or dispute actually led to an instrumental violent offence which was committed for reasons of revenge or retribution, rather than being a reaction to the immediate dispute.
- ~Violent offences appears to be a spontaneous or unplanned consequence of a sexual assault *or encounter* (violence was not initially used to force or manipulate the victim into sexual acts)
- *Please Note: Holmes & Holmes (1998) have described the "cooling off" period as a "singleness of time." Another perhaps more appropriate way to conceive of this is as a "singleness of incident." This is meant to imply that there is no discernable gap between the incident in question and the violent offences.
- Ex 1. The offender and victim engage in an argument at a drinking establishment and within the course of the night the victim is brutally assaulted by the offender = No cooling off period.
- Ex 2. The offender and victim engage in an argument at a drinking establishment and two days later the offender brutally assaults the victim at their place of employment. = cooling off period.

18 (3). Reactive/Instrumental:

~When there is clear evidence of both reactive and instrumental behaviour regarding the violent offence, yet the primary cause could be attributed to Reactive violence.

18 (2). Instrumental/Reactive:

~When there is clear evidence of both instrumental and reactive behaviour regarding the violent offence, yet the primary cause could be attributed to Instrumental violence

18. (1) Instrumental violent offence:

- ~Evidence of planning
- ~Evidence of some type of goal. This could include reasons such as: violent offence that was committed for
 - A. Revenge or retribution for past events (such as stealing from the offender)
 - B. Monetary gain
 - C. Drugs or alcohol
 - E. A female (two individuals competing over the same woman)
 - F. To escape custody/remain at large
 - G. Sexual Motivation (e.g., a sexual assault that is planned out)
- ~Violent offences committed for a clearly identifiable purpose other than "hot-blooded" spontaneous anger, frustration, or provocation.
- *Although <u>not</u> necessarily conclusive evidence; a conviction for 1st degree murder is another indicator that the offender committed a violent offences that would be considered instrumental.

SPACE WILL BE PROVIDED - on the actual coding sheet to put down a brief rationale regarding your decision for variable 18.

19. Sexual violence: (sexual)

- ~would include any evidence of sexual activity/assault/offense either during or after the violent offence. In addition, this variable would include any evidence of a sexual assault/offense preceding the violent offence.
- 1 = No evidence of sexual violence
- 2 = Evidence of sexual violence
- 3 = Unclear (body has decomposed to a degree where investigators are unable to determine aspects of the violent offences such as the possibility of sexual activity)

20. Gender of violent offence victim/s: (gender)

~the gender of the victim (s) for the offender's current violent offence conviction.

- 1 = Male
- 2 = Female
- 3 = Male and Female

21. Relationship of victim to offender: (relate)

~the predominant relationship between the offender and his victim.

- 1 = Male Stranger
- 2 = Female Stranger
- 3 = Involved in a common-law/marriage relationship/serious girlfriend (or has recently split-up from one of the aforementioned)
- 4 = Family member (e.g. immediate family, uncles, aunts, grandparents, cousins, plus immediate family in-laws)
- 5 = Friend (or family friend; or family friend's child)
- 6 = Co-worker/business partner/casual acquaintance
- 22. Specific age of the victim: (age spc)
- 23. General age of the victim: (age gen)
- 1 = Child (0-12)
- 2 = Teen-ager (13-19)
- 3 = Adult (20-64)
- 4 = Senior (65 and over)
- #5 = Can't recall/isn't sure/won't say

24. Relationship of victim (2) to offender: (relate2)

- ~the predominate relationship between the offender and a second victim, if there was more than one victim from the current violent offences (see variable 23 for coding details).
- 25. Specific age of victim (2): (age spc2)
- 26. General age of victim (2): (age gen2)
 - ~see variable 23 for coding details.
- *If there is more than two victims -pick the two victims that appear to have been the primary/most effected victims.

27. PCL-R Score total: (PCL_tot)

- 28. PCL-R score -Factor 1: (PCL_1)
- 29. PCL-R score -Factor 2: (PCL_2)
- 30. PCL-R category: (PCL cat)

~the PCL-R scores will be coded into one of three categories -

- 1 = Low (1-19 on the PCL-R)
- 2 = Medium (20-29 on the PCL-R)
- 3 = High (30-40 on the PCL-R)
- 31. PCL-R's origin: (PCL-ori)
- 1 = Federal Institute
- 2 = Researchers
- 32. Type of weapon: (weap_typ)

~categories for coding the type of weapon used to commit the violent offence;

- 1 = Gun
- 2 = Knife
- 3 = Bare hands (hitting, kicking, biting, scratching, throwing, pushing)
- 4 = An object used for the purpose of bludgeoning, stabbing, strangling or restraining (except for a knife), that has/could be conceived of as a weapon. ex. Club, axe, sword.
- 5 = An object used for the purpose of bludgeoning, stabbing, strangling, or restraining the victim that has not traditionally been thought of as a weapon. ex. Broken glass, rock, piece of wood, eating utensil.
- 6 = Combination of Gun and/or Knife and/or bare hands and/or any type of object
- 7 =No weapon (tampered with the car brakes etc.)
- #8 = Can't recall/refuses to say
- 33. How the weapon was obtained to committ current violent offence: (weap how)
- ~the method by which the offender obtained the weapon that was used during the violent offences.
- 1 = Weapon of opportunity (what was immediately available at crime scene)
- 2 = Weapon of choice (chosen beforehand to help achieve a goal)
- 3 = No Weapon (includes using only hands **or** items that would fall under 7 from variable 34)
- 4 = Unclear if 1. or 2. would be more appropriate.

34. Drugs: (drugs)

- 0 = No drug involvement
- 1 = At the time of the offense, offender was under the influence of 'minor' drugs such as marijuana, hashish, or presciption drugs such as tylenol 3's.
- 2 = At the time of the offense, offender was under the influence of 'major drugs' such as mushrooms, LSD, cocaine, heroin or prescription drugs such as Demerol or morphine.
- 3 = both minor and major drugs
- 4 = Drugs were determined to have played a role in the violent offence, even though the offender was not intoxicated during the commission of the offense
- #5 = offender can't recall/refuses to say
- *An example of (4) would be an offender who was on a cocaine 'binge' for a number of days and had become quite delusional and neurotic. Even if he was NOT under the influence of cocaine at the time he committed the violent offences, the circumstances may still reveal that the drug was a major contributing factor towards the violent offences. Another example would be if the offender was attempting to get drugs when the violent offences was committed.

35. Alcohol: (alcohol)

- 0 = No alcohol
- 1 = At the time of the offense, offender was under the influence of a small amount of alcohol at the time of the offense (1-2 beers or 1-2 hard alcoholic drinks or 1-2 glasses of wine).
- 2 = At the time of the offense, offender was under the influence of a moderate amount of alcohol (3-6 beers or 3-4 hard alcoholic drinks or 3-5 glasses of wine).
- 3 = At the time of the offense, offender was under the influence of an extreme amount of alcohol (over 6 beers and/or 5-6 hard alcoholic drinks and/or more than 5 glasses of wine). A 3 would also be appropriate in cases where prior to the offence the offenders was reported to have been "binge" drinking or "drinking for the entire day and/or night."
- 4 = Alcohol was determined to have played a role in the violent offences, even though the offender was not intoxicated during the commission of the offense.
- 5 = Offender was under the influence of an undetermined amount of alcohol at the time of the offense.
- #6 = Offender can't recall/refuses to say

36. Drugs and alcohol: (dru alc)

- 0 =neither one applies
- 1 = only variable 36 applies (drugs)
- 2 = only variable 37 applies (alcohol)
- 3 = both variables apply (offender was under the influence of both drugs and alcohol)
- #4 = Unclear based on offender's self-report
- 37. Total number of homicides committed by the offender: (tot hom)

Appendix D

MAIN DETAILS

Main Details:

0 = provides all of the main details of the offense

1 = leaves out some/any of the main details of the offense

Refers to any of the details that are crucial to an understanding of the homicide/violent offense, and/or are pieces of information that are referred to as important in the official report. Examples of main details would include information such as who the victim was, how the victim was murdered/assaulted, where the offense took place, and what type of weapon was used

Appendix E

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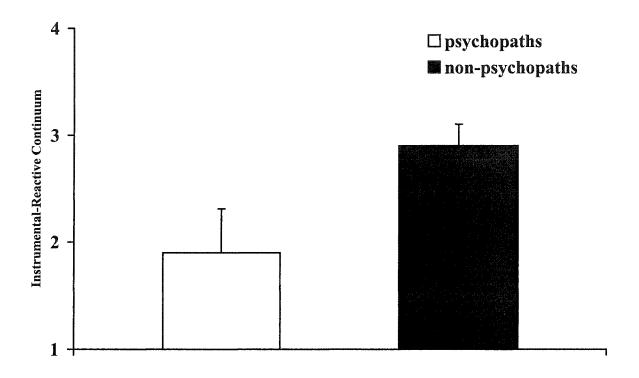


Figure 1: Degree of reactivity associated with psychopaths' and non-psychopaths' official homicide reports

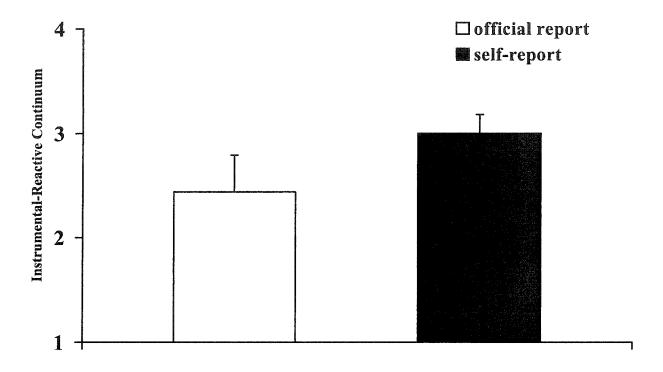


Figure 2: A comparison of the official report and self-reported level of reactivity involved in the homicide offence

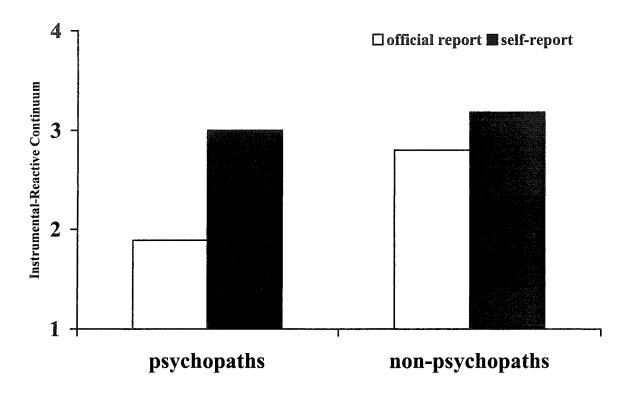


Figure 3: Comparison of the report type of psychopaths and non-psychopaths for level of reactivity involved in the homicide

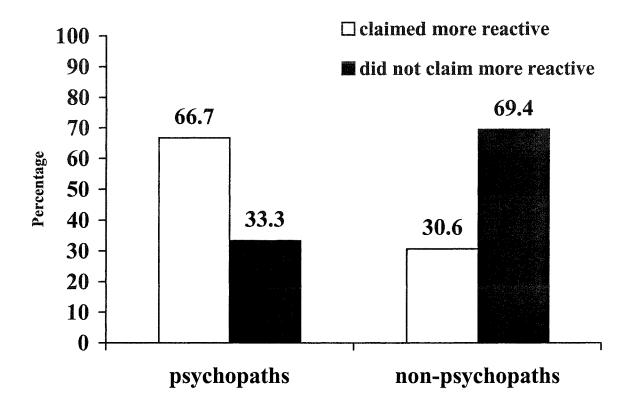


Figure 4: The percentage of psychopaths and non-psychopaths who claimed that their offence was more reactive than the official report.

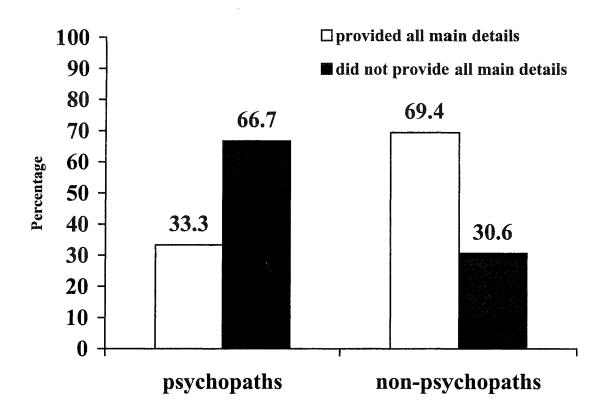


Figure 5: The percentage of psychopaths and non-psychopaths who provided all the main details of their homicide offence.