

**Severe Sexual Violence: Addressing the
Relationship Between Sexual Violence, Sexual
Sadism, and Sexual Homicide**

by

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Abstract

The notion that sexual murderers constitute a unique type of offender can be traced back to Krafft-Ebing's (1886/1965) seminal work *Psychopathia Sexualis* where he makes an explicit link between sexual sadism and sexual homicide. Thought to be driven by sexually sadistic fantasies, sexual homicide is often thought to be a behavioural manifestation of sexual sadism. Known as the unique offender hypothesis much of the empirical literature on sexual homicide posits the sexual murder as severely sexually violent and qualitatively different from other types of offenders. More recently, the differential outcome of a sexual assault hypothesis has challenged the long-standing assumption that the sexual murderer is unique. It suggests that sexual homicide may be the result of a series of situational factors present during a sexual assault, and not necessarily sexual sadism. These conflicting findings reflect the theoretical and methodical issues surrounding the scientific study of sexual violence, sexual sadism, and sexual homicide. At the present time there exist few models of sexual homicide and there have been even fewer attempts to test these models empirically. Further complicating matters are the measurement and operationalization issues associated with sexual sadism.

This study has three overarching goals. First, to examine the convergent and predictive validity of a series of crime scene variables empirically associated with sexual sadism. Second, to concurrently inspect the utility of both the unique offender hypothesis and the differential outcome of a sexual assault hypothesis. Finally, this study will test the theoretical factors common to prominent sexual homicide models.

Overall, the results of this study demonstrated that select crime scene indicators are valid measures of sexual sadism. Moreover, sexual murderers do not constitute one homogenous group of offenders. Instead, there was evidence suggesting the unique offender hypothesis and the differential outcome of a sexual assault hypothesis are both valid. Finally, the core features of existing sexual homicide models (i.e., low self-esteem and deviant sexual preferences) are important in the prediction of sexual homicide.

Keywords: Sexual Violence; Sexual Sadism; Sexual Homicide; Deviant Sexual Fantasies; Deviant Sexual Preferences; Paraphilias

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Chapter 1.

Introduction

Historically, sexual violence has garnered a tremendous amount of attention both from the general public and researchers alike. Furthermore, severe sexual violence such as violent sexual assault, sexual sadism, and sexual homicide simultaneously horrify and fascinate us. It is largely accepted that the scientific study of severe sexual violence began when Krafft-Ebing chronicled the behaviours of exceptionally sexually violent men (amongst other deviant sexual behaviours) and coined the term *sexual sadism*. Named after the French writer Marquis de Sade, Krafft-Ebing (1886/1965) described an individual who was sexually aroused by violence, humiliation/power, and consumed by deviant sexual fantasies. Since the writing of Krafft-Ebing (1886/1965), there have been many attempts to describe the sexually sadistic offender both clinically and criminologically. As Proulx and Beauregard (2009) correctly point out, the sadistic sex offender has received numerous labels over the years, such as the “assaultive” offender (Gebhard, Gagnon, Pomeroy, & Christenson, 1965), the offender characterized by a “fusion of aggression and sex” (Cohen, 1971), the “organized” sexual murderer (Ressler, Burgess, & Douglas, 1988), the “compulsive” sexual murderer (Revitch & Schlesinger, 1981), the murderer “motivated to carried out fantasies” (Beech, Fisher, & Ward, 2005) and the “sexually motivated” sex murderer.

Despite their differences, most accounts of sexual sadism have at least two things in common. First, when describing this group of offenders, researchers seem to highlight the fact that the sexual sadists’ offences are sexually motivated. More specifically, the crimes of sexual sadists are excessively violent and this violence is sexually arousing. Second, sexual sadism is often thought to underlie, and be the driving force of, sexual homicide. In fact, many of the contemporary examples of sexual sadists

include sexual murderers such as Ted Bundy, Kenneth Bianchi (the Hillside Strangler), and John Wayne Gacy. Despite the relationship between sexual sadism and sexual homicide, recent empirical evidence has suggested that the link between sexual sadism and sexual homicide is complex. Not all sexual murderers are sexual sadists (Beauregard & Proulx, 2005), and not all sexual sadists are sexual murderers (Groth & Birnbaum, 1970; Knight & Prentky, 1990; Lalumière, 2005). Despite this conceptual overlap, much of what is known about sexual sadism stems from the sexual homicide literature, strengthening the already prevalent notion that sexual homicide is a manifestation of sexual sadism (Yates, Hucker, & Kingston, 2008).

Methodological issues, including measurement concerns, have been the largest obstacles to completely understanding the relationship between sexual aggression, sexual sadism, and sexual homicide (Marshall & Kennedy, 2003). Few reliable and valid measures of sexual sadism exist for a number of reasons (Marshall & Kennedy, 2003). Sexual assault is a complex phenomenon and many of the behaviours exhibited by sexual sadists are also common to individuals who sexually assault (e.g., violence during the offence, sexual arousal to sexual violence). These similarities make differentiating sadists from nonsadists extremely difficult because current operationalizations of sadism involve latent measures, which often rely on self-report information from the offender (e.g., feelings of power and control) or on information that is overlooked or unavailable (e.g., humiliation of victim). Existing measures of sexual sadism have been shown to be unreliable, and in particular, suffer from poor interrater reliability (Marshall, Kennedy, & Yates, 2002). More recently, there have been promising developments in the measurement of sexual sadism using scales comprised of more objective measures such as crime scene indicators, which do not rely on self-report information from the offender (Marshall & Hucker, 2007). Although only in the first stages of development, several studies have suggested that scales using crime scene indicators are able to discriminate between sadists and nonsadists (Nitschke, Osterheider, & Mokros, 2009).

Refining methodologies and measurement tools to reliably identify sexual sadists are important steps towards better understanding the relationship between sexual sadism and sexual homicide. The previously mentioned issues surrounding the study of

sexual sadism and sexual homicide are seeded in the theoretical and empirical literature which often did not make a clear distinction between sexual violence, sexual sadism, and sexual homicide.

1.1. Research Overview

1.1.1. Sexual Sadism and Sexual Aggressors of Women

It is generally recognized that sexual aggressors of women are not a heterogeneous group of offenders. They tend to differ on a variety of behavioural indicators such as impulsivity, levels of aggression, hostility, and sexualization. Despite the various attempts to categorize these offenders based on their motivation and level of aggression, sexual aggressors of women can broadly be distinguished between those who are sexually motivated and those whose are motivated by anger, aggression, hostility, or disregard for the feelings of the victim (Barbaree, Seto, Serin, Amos, & Preston, 1994). Of those who are thought to be sexually motivated, there has consistently been a group of sexually sadistic offenders identified across studies (Brittain, 1970; Gebhard et al. 1965; Gratzer & Bradford, 1995; Groth & Birnbaum 1970; Knight & Prentky, 1990; Proulx, Blais, & Beauregard, 2006; Warren, Hazelwood, & Dietz, 1996). These offenders have by and large been a mix of rapists (Gebhard et al. 1965; Groth & Birnbaum, 1970; Knight & Prentky) and sexual murderers (Brittain, 1970; Gratzer & Bradford, 1995; Proulx et al., 2006; Warren et al. 1996). Early researchers contended that there was very little difference between sexually sadistic offenders who rape and those who kill. Gebhard et al. (1965) were one of the first to identify a group of sexually sadistic rapists based on motivation. They identified seven distinct types of offenders, including amoral, drunken, and explosive. Only the assaultive type was considered to be sadistic. Constituting a total of 20% of all rapists, the assaultive type was characterized by high levels of planning and exhibited much violence during the offence. This type of offender usually had a criminal background and often used weapons during his offences. There were increased levels of violence present during the offence, which appeared to be necessary for sexual gratification. Similarly, Cohen, Garofalo, Boucher and Seghorn (1971) and Groth, Burgess and Holmstrom (1977)

identified sadistic offenders in their typologies. Both groups of authors described their sadistic types as expressive types of offenders whose aggression exceeded what was needed to commit the crime. However, they differed with respect to the actual sexual motivation. Whereas Cohen et al. (1971) envisioned a synergy, or fusion, of sexual and aggressive drives, Groth et al. (1977) assumed the sadistic type offender gained sexual gratification from the degradation and humiliation of women. The most recent attempt to develop a taxonomy of sexual aggressors of women that included a sadistic type was that of Knight and Prentky (1990). According to Knight and Prentky, the sadistic type of offender shows little differentiation between sexual and aggressive drives, is belligerent, highly aggressive, and is characterized by deviant sexual fantasies.

The described traits of the sadistic rapist are almost identical to those consistently associated with the sadistic sexual murderer. When describing a sexually sadistic sexual murderer, Brittain (1970) describes the sexually sadistic murderer as withdrawn, isolated, consumed by deviant sexual fantasies, and like the rapists described earlier, sexually aroused to cruelty and violence. Sadistic sexual murderers carefully plan their offence (Brittain, 1970; Dietz, Hazelwood, & Warren, 1990) and are excessively violent during their offence and often tortured their victims (Gratzer & Bradford, 1995). Due to unmistakable behavioural similarities between sexually sadistic rapists and sexually sadistic murderers, it is often proposed that sexual sadism is a contributing factor to sexual murder. Based on these early findings there are a number of things that stand out from the literature on sexual sadism. First, researchers have consistently identified a group of sexually sadistic sexual aggressors against women. Second, much of the early research on sexual sadism overlaps with sexual homicide, and often considers sexual homicide to be a manifestation of sexual sadism.

1.1.2. Sexual Sadism as a Contributing Factor in Sexual Homicide

Much of the sexual homicide research has focused on the offender's motivations, crime scene behaviour, and presence of deviant sexual fantasies. According to Grubin (1994) there are a number of ways in which a homicide can be linked to a sexual offence. An offender can kill a victim simply as a means of silencing the victim, the death may be accidental, the offender may violently react to the victim's resistance and

kill her, or there may be a sexual component to the offence whereby the offender is sexually aroused by the actual act of killing (lust murder). The sexual arousal to the act of murder has direct implications on the study of sexual sadism and sexual homicide. In fact, sexual sadism is thought to underlie lust murder and as a result, there have been a variety of studies investigating the link between sexual sadism and sexual murder/lust murder (Brittain, 1970; Dietz et al., 1990; Ressler, Burgess, & Douglas, 1988). According to Yates, Hucker and Kingston (2008), much of what is known about sexual sadism is derived from a small number of studies that were conducted on sexual murderers (Brittain, 1970; Dietz et al., 1990; Warren et al., 1996). By and large, these studies have mainly been descriptive and have provided behavioural and psychological characteristics of the sexual murderer. For instance, according to the FBI data, sexual sadists are exclusively male, mainly white, planned their offences, did not know their victims, and displayed some form of torture or physical assault. What is not clear from the literature is whether the indicators of sexual sadism are identifying sexual murderers who are sexually aroused by violence, or whether sexual sadism is an underlying phenomenon of sexual murder. Despite this uncertainty, researchers have identified an assortment of sexual homicide typologies, often using the presence of sexual sadism as one of the discriminating factors (Holmes & DeBurger, 1988; Ressler et al., 1988).

Beauregard and Proulx (2002) for instance, created a typology of sexual serial murderers using a variety of indicators, including crime scene behaviours, acts committed during the crime, deviant sexual fantasies, and the use of pornography. The authors proposed a two-cluster classification model: angry sexual murderers and sadistic sexual murderers. In line with the traditional features of sexual sadism, the sadistic sexual murderers were more likely to premeditate their offence, select their victim, humiliate, torture, and mutilate their victim. Despite the focus on sexual homicide, it is important to mention that several other groups of offenders are thought to be motivated by sexually sadistic drives (e.g., child molesters and rapists). Much of the vagueness surrounding the exact relationship between sexual sadism, sexual aggression, and sexual homicide may be attributed to the relative lack of sexual sadism and sexual homicide theory.

1.1.3. Etiological Theories of Sexual Sadism and Sexual Homicide

As mentioned previously, much of what is known about sexual sadism is derived from the sexual homicide literature. The reciprocal nature of this body of research has resulted in few (if any) theoretical models treating sexual sadism and sexual homicide as separate independent phenomena. As a result of this condition, the following etiological models often assume that sexual homicide is an extension, or expected pathway, of sexual sadism.

There are very few theories that directly attempt to account for the development of sexual sadism and/or sexual homicide. Most theories attempting to account for the development of sexual sadism and/or sexual homicide can be grouped into pseudo-developmental, paraphilic/deviant sexual preference models, psychodynamic, and brain dysfunction or impairment models.

The pseudo-developmental perspective stipulates that the origins of sexual sadism and sexual homicide can be traced back to the formative years. More specifically, it has been stated that specific exposure to risk factors may lead someone to develop sexually sadistic tendencies. These models or hypotheses are typically based on a pseudo-developmental perspective considering that they are accounting for a limited number of developmental factors assessed, rather than at specific developmental periods or stages. Furthermore, the reason why or the mechanisms by which these risk factors are linked to sexual sadism has not been made explicitly clear. Some of the risk factors identified in the scientific literature include: juvenile criminality (Arrigo & Purcell, 2001; Langevin et al., 1985; Burgess, Hartman, Ressler, Douglas, & McCormack, 1986), tumultuous parental relationships (Dietz et al., 1990; MacCulloch, Snowden, Wood, & Mills, 1983; Hickey, 1997; Proulx, Blais, & Beauregard, 2006), criminogenic home environments (i.e., exposure to violence, sexual abuse or humiliation) (Burgess et al., 1986; Dietz et al., 1990; Gratzler & Bradford, 1995; Proulx et al., 2006; Ressler et al., 1988), high levels of sexual behaviour as a juvenile (Arrigo & Purcell, 2001; Langevin et al., 1985; Proulx et al. 2006), social isolation (Arrigo & Purcell, 2001; Burgess et al., 1986; Hickey, 1997) and cruelty to animals or children (Brittain, 1970; Burgess et al., 1986; Langevin et al., 1985; Ressler et al., 1988) were all found to be recurrent developmental themes in sexual sadists and sexual homicide. The Motivational Model of

Sexual Homicide (Burgess et al., 1986), The Trauma Control Model (Hickey, 1997), and The Integrated Model of Paraphilias (Arrigo & Purcell, 2001) are all considered pseudo-developmental models of sexual homicide.

The paraphilic/deviant sexual preferences model (Abel et al., 1987 American Psychiatric Association, 2000; Arrigo & Purcell, 2001; Hickey, 1997) assumes that sexual sadism is a deviant sexual preference and is like any other paraphilia, such as voyeurism or fetishism. The paraphiliac/deviant sexual preference model assumes that an individual prefers sexually deviant behaviour to nonsexually deviant behaviour (Lalumière & Quinsey, 1994). More specifically, the paraphiliac/deviant sexual preference model stipulates that: 1. the preferred behaviours are sexually arousing and sexually gratifying (i.e., infliction of pain) and; 2. the preferred behaviours are more sexually arousing or sexually gratifying than sexual behaviours without such components. How someone specifically acquires a deviant sexual preference is controversial, but many researchers broadly assume that some form of conditioning or social learning is involved. It is often assumed that an offender acquires a deviant sexual preference through direct masturbatory (operant) conditioning (McGuire, Carlisle, & Young, 1965), through the simultaneous experience of emotions, various psychological states, psychological disorders and sexual arousal (Meloy, 2000), or through a more complex process of masturbatory (operant) conditioning, social filters, and maintenance (Laws & Marshall, 1990). MacCulloch, Gray, & Watt (2000) recently expanded their model of operant conditioning including a process known as sensory preconditioning. Sensory preconditioning allows for associations to be formed between two (or more) unrelated stimuli repeatedly presented together (also called a stimulus compound). For MacCulloch et al. (2000), sexual sadism is the result of a repeated association between sexual arousal and an aggressive emotional state (e.g., anger, anxiety, fear, etc.). Through the process of sensory preconditioning, if the sexual sadist experiences anger (or any other emotional state experienced during the initial association with sexual arousal) he becomes sexually aroused. Unfortunately there is a paucity of studies, specifically examining the applicability of operant conditioning. Broader applications of social learning theory have also been applied to sexual homicide (Chan, Heide, & Beauregard, 2011). Similar to other models of sexual homicide, the authors contend that sexual homicide is the product of social learning and routine

activities. Experiencing sexual and or physical abuse, sexual murderers learn behaviours that are conducive to sexual offending by directly learning sexually violent behaviours from their primary caregivers which are then reinforced by “primary social groups”, such as violent pornography (Chan et al., 2011, p. 238). Socially isolated, the sexual murderer indulges in sexually deviant fantasies to gain control and sexual satisfaction. Unfortunately, deviant sexual fantasies become insufficient to satisfy the offender and he begins actively searching for victims. The offender finds his victims through his routine activities (i.e., convergence of motivated offender and potential victim), captures him/her, and enacts his violent sexual fantasies eventually killing his victim.

The psychodynamic approach to sexual homicide is the assumption that sexual homicide is the result of a domineering mother, which produces an inordinate amount of hatred and rage towards women in general (Meloy, 2000; Stone, 1994). Primarily based on the hypothesis that early childhood experiences between the offender and the mother cause the offender to develop feelings of sexual attraction towards their mother as the result of poor sexual boundaries. This confusing relationship results in the offender using defense mechanisms to symbolically express their feelings of rage and sexually desires towards their mothers on unrelated women. Unfortunately, other than working from a common assumption, the psychodynamic approach to understanding sexual homicide has produced few testable models. Revitch and Schlesinger’s (1981, 1989) model of sexual homicide is a phenomenological-descriptive model and suggests that there are two types of sexual murderers: Catathymic and Compulsive. Both types of murderers harbour a deep-seated hatred for women, have explosive sexual crimes triggered by a stressful event, and feel a great sense of relief from the murder. According to Revitch and Schlesinger (1989), the Compulsive offender is likely to become a serial sexual murderer. Revitch and Schelsinger’s model of sexual homicide is based on the clinical analysis of 43 case studies and only nine individuals in their sample were sexual murderers. Although the sexual murderers described by Revitch and Schlesinger bear striking similarities to established empirically driven types of sexual murderers (most notably the FBI’s Organized and Disorganized Offenders), this two-type model, much like most psychodynamic models of sexual homicide, is difficult to operationalize and test due to the reliance on self-reported data.

Others have taken a more strictly biological perspective in accounting for the development of sexual sadism. Brain damage or brain dysfunction has been cited as one of the main contributing factors in the development of not only sexual sadism, but all paraphilias. The limbic system, comprised of the amygdala, the hippocampus, and the hypothalamus, is the area of the brain thought responsible for the regulation of aggression and sex. Disease, or damage, in particular areas of the limbic system is thought to simultaneously activate aggressive and sexual impulses, sometimes producing sexual sadism (Money, 1990). According to this perspective, because both aggression signals and sex signals occur at the same time, the individual is unable to distinguish between the individual impulses, and easily associates aggression and sex, resulting in aggressive behaviours becoming sexually arousing to the individual. Although Money (1990) claims that disease and damage are in and of themselves enough to produce sexually sadistic behaviour, he identifies a host of other contributing causes that co-occur with brain damage that are more likely to produce a sexually sadistic person. These contributing factors include: hereditary dispositions, hormonal functioning, pathological relationships, and sexual abuse.

Notwithstanding several differences, sexual homicide models share many common factors including social isolation, low self-esteem, and deviant sexual interests (Arrigo & Purcell, 2001; Burgess et al., 1986; Dietz et al., 1990; Hickey, 1997; McGuire, Carlisle, & Young, 1965; Langevin et al., 1985; MacCulloch et al., 2000; Proulx, Blais, & Beauregard, 2006; Revitch & Schlesinger, 1981; Revitch & Schlesinger, 1989; Ressler et al., 1988). Interestingly, there is little variation in the hypothesized causal mechanisms by which these factors affect sexual homicide. It is thought that turbulent relationships with the offenders' primary caregiver (often involving physical or sexual abuse) cause the offender to develop low self-esteem resulting in an inability to develop and maintain both social and sexual relationships. These social disabilities push the offender to become socially isolated whereby the sexual murderer retreats into a fantasy world filled with deviant sexual desires and violence (Arrigo & Purcell, 2001; Burgess et al., 1986; Dietz et al., 1990; Hickey, 1997; McGuire, Carlisle, & Young, 1965; Langevin et al., 1985; MacCulloch et al., 2000; Proulx, Blais, & Beauregard, 2006; Revitch & Schlesinger, 1981; Revitch & Schlesinger, 1989; Ressler et al., 1988).

Despite these similarities and the fact that low self-esteem and deviant sexual interests are the core of most of the prominent models of sexual homicide to the current author's knowledge, there have been few, if any, attempts to test these core theoretical elements. The scarcity of theory testing may be partially explained by emerging evidence suggesting that sexual murderers may be influenced by factors other than sexually sadistic drives.

1.1.4. Sexual Sadism and Sexual Homicide: The Assumption of a Unique Type of Offender

A common theme throughout the empirical literature on sexual sadism and sexual homicide is that both sexual sadists and sexual murderers are qualitatively different from other types of sexual offenders because they derive sexual pleasure from violence, power/control, and or humiliation of their victims (Brittain, 1970; Gebhard et al. 1965; Gratzer & Bradford, 1995; Groth & Birnbaum 1979; Healey, Beauregard, Beech, & Vettor, in press; Knight & Prentky, 1990; Proulx et al. 2006; Warren et al. 1996). The notion that the sexual murderer is a unique type of offender, driven by sexually sadistic impulses, has remained largely unchallenged until recently. Influenced by the existing literature on nonsexual homicide, sexual homicide researchers have found remarkable similarities between factors affecting an escalation from a violent crime to homicide, and from a sexual assault to sexual homicide (Beauregard & Mieczkowski, 2012; Beech, Fisher, & Ward, 2005; Beech, Oliver, Fisher, & Beckett, 2006; Mieczkowski & Beauregard, 2010). Specifically, studies have demonstrated that nonsexual violent crimes, such as robberies and physical assaults were much more likely to escalate to homicide when there was a lethal weapon present (e.g., knife or gun versus blunt object) (Felson & Messner, 1996), whether the victim is known to the offender (Felson & Messner, 1996), whether the offender was intoxicated during the offence (Felson & Steadman, 1983), and whether the victim retaliates during the crime (i.e., victim precipitation) (Felson & Steadman, 1983; Wolfgang & Ferracuti, 1967). Remarkably, these same situational factors have been demonstrated to influence the lethality of sexual assaults, suggesting that at the very least, sexual homicide is a heterogeneous phenomenon (Beauregard & Mieczkowski, 2012; Beech et al., 2005; Beech et al., 2006; Mieczkowski & Beauregard, 2010).

1.1.5. Conceptual and Definitional Issues with Sexual Sadism.

Although mounting evidence points to the varied nature of sexual homicide, many of the past and present problems associated with defining sadism stem from an overall lack of conceptualization and operationalization. According to Marshall and Kennedy (2003), researchers seem to agree only on one thing; sadists are sexually aroused by some form of violent or humiliating behaviour (or fantasies), and/or the victim's reaction to this behaviour (being frightened, scared, or being in pain). Aside from this agreement, there is considerable debate as to the essential manifestations of sexual sadism.

Some researchers subscribe to a deviant sexual preference model assuming that sexual sadists are sexually aroused to violence (Abel et al., 1984; Groth & Birnbaum, 1979; Knight & Prentky, 1990; Knight, Prentky, & Cerce, 1994). Sexual sadism then is a paraphilia, much like voyeurism or fetishism. Offenders are sexually aroused to violence (both sexual and nonsexual) and not to consenting sexual activity. Others assert that sexual sadists are not aroused by violence per se, but rather by the feelings of power and control produced by violence (Brittain, 1970; Dietz, Hazelwood, & Warren, 1990; Grubin, 1994; Levin & Fox, 1985; MacCulloch et al., 1983). For this group of researchers, humiliation, degradation, subjugation, suffering, and violence produce fear, terror, pain, and panic in the victim, which make the sadist feel powerful and subsequently sexually arouses them. Similarly there are also a group of researchers who assert that humiliation is the key element of sexual sadism (American Psychiatric Association, 1994; Rada, 1978). Rada (1978) claims that the humiliating acts performed by the sexual sadist provide more sexual satisfaction than the actual act of sexual intercourse. It is unclear whether this group of researchers sees the humiliating acts of the offender as a specific manifestation of control and power, or as a sexual preference for humiliation. Regardless of this uncertainty, humiliation has become one of the most cited indicators of sexual sadism and is one of the main diagnostic criteria for clinically diagnosing sexual sadism.

Despite the conceptual differences associated with defining sexual sadism, there are currently two classification systems for diagnosing sexual sadism: The International Classification of Diseases, 10th revision (ICD-10) and the Diagnostic and Statistical

Manual of Mental Disorders, fourth edition, text revision (DSM-IV-TR) (Kingston & Yates, 2008). In the ICD-10 sexual sadism is under the blanket term sadomasochism, broadly defined as a preference for sexual activity that involves bondage or the infliction of pain or humiliation. If the subject prefers to be the recipient of such stimulation, this is called masochism; if the subject prefers to provide the stimulation, it is called sadism (World Health Organization, 2007). Although, there is evidence to suggest that both sadism and masochism do co-occur in some individuals, the grouping of both preferences by the ICD-10 is questionable. Many of the current studies on sexual sadism assume that sadism and masochism are distinctly separate phenomena despite their comorbidity (Yates et al., 2008). Unlike the ICD-10, the DSM specifically separates the two disorders (American Psychiatric Association, 2000).

Although the link between sexual sadism and sexual homicide is established, one of the main obstacles associated with understanding the exact link between these two phenomena is the unreliability of sexual sadism measures (Marshall & Kennedy, 2003). There are few established methods of identifying and measuring sexual sadism. The two primary methods are a clinical diagnosis (using either the DSM or the ICD-10) or scales. While clinical diagnoses have been shown to be unreliable and suffering from poor interrater reliability, sexual sadism scales are being developed to overcome the shortcomings of other methods. In order to understand the nature of the relationship between sexual sadism and sexual homicide, the present study will address the utility of a clinical diagnosis of sexual sadism in predicting sexual homicide

1.2. Study Aim

Due to the significant amount of theoretical and empirical overlap between sexual violence, sexual sadism, and sexual homicide, the overarching goal of this study is to contribute to the growing body of empirical research suggesting that sexual homicide is a heterogeneous phenomenon. More specifically, this study will contribute to the scientific understanding of sexual sadism and sexual homicide through three individual studies. First, the study will explore the common factors of prominent sexual homicide models in an attempt to provide empirical support for key factors implicated in the

development of sexual homicide. Second, the study will simultaneously explore the utility of the sexual murderer as a unique offender hypothesis and the differential outcome of a sexual assault hypothesis. Third, the study will investigate the ability of crime scene behaviours to differentiate sexual sadists from nonsadists and determine whether crime scene behaviours associated with sadist can predict sexual homicide. These goals will be accomplished through the following research questions and study aims:

1. Research question one: Using a series of crime scene variables empirically associated with sexual sadism and sexual homicide, is it possible to reliably measure sexual sadism? Can these crime scene behaviours of sexually sadistic offender differentiate sexual murderers from rapists?

Study one aim. Study three has two primary goals. The first goal is to investigate the convergent validity of a series of crime scene indicators of sexual sadism with that of a clinical diagnosis of sexual sadism. Although the DSM remains the main tool for identifying sexual sadists (at least in North America), few studies have attempted to establish convergent validity between those identified as sexual sadists per the DSM with some other measure of sexual sadism aside from information stemming from phallometric assessment. Secondly, the study will explore the predictive validity of crime scene indicators in differentiating sexual aggressors against women from sexual murderers. Specifically, the utility of sexual sadism crime scene markers in accounting for the escalation from sexual assault to sexual homicide will be examined.

2. Research question two: Is there empirical evidence to support the sexual murderer as a unique type of offender hypothesis or the differential outcome of sexual assault hypothesis?

Study two aim. Study two has two primary goals. First, using a sample of sexual assaults that either resulted in physical injuries or the death of the victim, the study aims to concurrently test both the *sexual murderer as a unique type of offender hypothesis* and the *differential outcome of a sexual assault hypothesis* using latent class analysis. Secondly, the study will identify offender characteristics, situational factors, and modus operandi characteristics associated with each type of offender (i.e., class).

3. Research question three: Is there empirical evidence to suggest that key theoretical factors common to all sexual homicide models (e.g., low self-esteem and deviant sexual interests) have an effect on sexual homicide? Are low self-esteem and deviant sexual interests core characteristics of sexual murderers?

Study three aim. This study sought to investigate the impact of the core features (i.e., the influence of deviant sexual interests and low self-esteem) of prominent sexual homicide models have on the prediction of sexual homicide; specifically, The Motivational Model of Sexual Homicide, The Trauma Control Model, The Integrated Paraphilic Model.

1.3. Methodology

1.3.1. Procedures for Overall Study

Procedures for all the following studies are the same. All analyses use secondary data. A research assistant solicited the participation of convicted offenders. All research assistants (graduate students in criminology) were trained by a licensed psychologist. The offenders who chose to participate signed a consent form explaining that the data would be used for research purposes only. Data were coded by research assistants using three sources of information: a semi-structured interview with each offender; victim statements regarding the offence (not present for sexual homicide); and police reports of the event. In the event there was a discrepancy between interview data and official data, official data were used.

1.3.2. Sample

Each individual study uses a subsample of a larger sample comprised of sexual offenders and sexual murderers. The sample is comprised of sexual offenders (i.e., sexual aggressors of women, sexual aggressors of children, and sexual murderers) who received a prison sentence of at least two years at a maximum-security institution in Québec, Canada between April 1994 and June 2000. All of the subsamples include

individuals who inflicted physical injuries beyond forced sex (e.g., beating the victim, or any other injury beyond defensive wounds) of adults. A more extensive description of each sample can be found in the individual methods sections of each paper.

Sexual murderers were oversampled in the current study to allow for the exploration of the differential factors associated with sexual violence and sexual homicide. Specifically, the sample of sexual murderers is a nonrandom sample of sexual homicide offenders incarcerated in a federal maximum-security penitentiary in the province of Quebec, Canada and the United Kingdom. The Quebec sample includes offenders who either received their prison sentence between 1994 and 2000 or who were currently serving their sentence between 1994 and 2000. As a result, the sample includes offenders who committed their crimes in previous decades (e.g., 1970's and 1980's) onwards (n = 85). Similar to the Canadian sample, the United Kingdom sample of sexual murderers is oversampled, nonrandom, and includes offenders who either committed their crime between 1998 and 2000 or who were serving their sentence during the same time frame (n = 46). It is important to note that whether an offender killed his victim is a measure of lethality in the study. It is argued that the act of actually killing as a measure of lethality allows for the simultaneously assessment of the two competing hypothesis. Specifically, by using death as a measure of lethality it allows for: first, the assessment of crime scene indicators in identifying sexual murderers described in the empirical literature (i.e., those who are successful at killing their victim), and second, it potentially identifies situational factors associated with successfully, unsuccessfully, or accidentally killing a victim during a sexual assault. There were no significant differences between the Canadian and United Kingdom samples.

For all samples, sexual murderers were identified as: men who had committed a homicide where there was forensic evidence of a sexual element to the killing, the offender later admitted to the sexual element of the crime, or there was a suspected sexual motive to the crime. Suspicion of a sexual motive was determined by investigators and had to meet at least one element of Ressler, Burgess, and Douglas' (1988) definition of sexual homicide: (a) victim's attire or lack of attire, (b) exposure of the sexual parts of the victims body, (c) sexual positioning of the body, (d) insertion of

foreign objects into the victim's cavities, (e) evidence of sexual intercourse (oral, anal, or vaginal), and (f) evidence of substitute sexual activity, interest, or sadistic fantasy.

Overall, participation in the study was voluntary and had a high participation rate (93%). Graduate students who were trained by a licensed psychologist collected data through semi-structured interviews with the offender. These interviews were then corroborated with police records, institutional files, and victim impact statements. If there was a discrepancy between information reported by the offender and case information, official data were used.

1.4. Study Summaries

1.4.1. Study One

Overall, study one provided support for common factors found in most sexual homicide models. Specifically, study one demonstrated that the core features of sexual homicide models (i.e., low self-esteem and deviant sexual preferences) were significant in predicting sexual homicide. Moreover, these factors remained significant even after controlling for crime scene behaviours associated with sexual sadism and situational factors associated with an escalation in violence during a sexual assault.

1.4.2. Study Two

Study two findings provided concurrent evidence for both the differential outcome of a sexual assault hypothesis and the sexual murderer as a distinct offender hypothesis. Specifically, study two suggested that sexual murderers do not constitute one homogenous group of offenders. Instead, there was evidence of heterogeneity with varying degrees of lethality. The results of this study simultaneously support both the unique offender hypothesis and the differential outcome of a sexual assault hypothesis.

1.4.3. Study Three

Despite the conceptual and operational difficulties associated with sexual sadism, the results of study three were able to demonstrate that a variety of crime scene variables were related to a DSM diagnosis of sadism. Various crime indicators may be able to help clinicians not only identify sexually sadistic offenders but possibly direct future research on the possibility of different types of sadistic offenders.

Chapter 2.

Study One – Sexual Sadism In The Context of Rape and Sexual Homicide: An Examination of Crime Scene Indicators

2.1. Abstract

This study investigates the convergent and predictive validity of behavioural crime scene indicators of sexual sadism. The study is based on a sample of 268 adult males sentenced to a federal penitentiary in Canada. Information regarding crime scene behaviours was gathered from police records, a clinical interview with a psychologist, and semi-structured interviews with the offender. A series of logistic regressions were performed to determine whether behavioural crime scene indicators of sexual sadism were associated with an official diagnosis of sexual sadism and were able to distinguish between sexual aggressors against women and sexual murderers. Findings suggest that several crime scene behaviours overlap with an official diagnosis of sexual sadism as well being able to distinguish between sexual aggressors of women and sexual murderers. Importantly, the majority of crime scene behaviours associated with a clinical diagnosis of sexual sadism are not the same as those associated with sexual homicide.

2.2. Introduction

Over the years, there have been several attempts to describe the individual characteristics and behaviours of the sexually sadistic offender. In fact, Proulx and Beauregard (2009) correctly point out that sadistic sex offenders have received numerous labels, such as the “assaultive” offender (Gebhard, Gagnon, Pomeroy, & Christenson, 1965) and the offender characterized by a “fusion of aggression and sex” (Cohen, Garofalo, Boucher, & Seghorn, 1971). Similarly, the empirical literature on sexual homicide has identified a subgroup of sexual sadists, referred to as the “organized” sexual murderer (Ressler, Burgess, & Douglas, 1988), the “compulsive” sexual murderer (Revitch & Schlesinger, 1981), the murderer “motivated to carry out fantasies” (Beech, Fisher, & Ward, 2005) and the “sexually motivated” murderer (Brittain, 1970). Several things stand out from these numerous labels. First, when describing this group of offenders, researchers seem to highlight the fact that the offence is sexually motivated. In other words, the act of sexual assault, whether it escalates to a sexual homicide or not, is driven by the need for sexual gratification through the infliction of pain. Also, sexual sadism often co-occurs with sexual homicide and is thought to underlie the phenomenon. This suggests that, amongst all types of rapists identified by researchers (e.g., Cohen, 1971; Groth and Birnbaum, 1979; Knight & Prentky, 1990), sexual sadists might be one of the groups most likely to escalate their violence to a homicide. Furthermore, the criminal behaviour of sexual sadists is often described as highly planned and structured, compulsive and ritualized, as well as violent. Finally, the numerous labels used by the scientific community might be indicative of a lack of consensus about what sexual sadism is and how it is defined. In other words, researchers are not satisfied by the generally agreed upon clinical definition of sexual sadism and its measurement in the Diagnostic and Statistical Manual of Mental Disorders (Hucker, 1997; Yates, Hucker, & Kingston, 2008). The current study addresses these points, first, by determining whether these crime-scene indicators correspond to sexual sadism as measured by the DSM, and second, by inspecting whether crime-scene indicators of sexual sadism can reliably discriminate sexual assaulters from sexual homicide offenders.

2.2.1. Conceptual and Definitional Issues with Sexual Sadism

Defining sexual sadism has been one of the more challenging obstacles in the understanding sexual sadism. There appears to be a general consensus that sexual sadists are sexually aroused by either: (1) some form of violent or humiliating behaviour (e.g., Abel, 1989; Groth & Birnbaum, 1979; Knight & Prentky, 1990; Knight, Prentky, & Cerce, 1994), (2) the victim's reaction to this behaviour (e.g., being frightened, scared, or being in pain) (Marshall & Kennedy, 2003), or (3) the resulting feeling of power and control as a result of the violence inflicted (Brittain, 1970; Dietz, Hazelwood, & Warren, 1990; Grubin, 1994; Levin & Fox, 1985; MacCulloch, Snowden, Wood, & Mills, 1983). Some researchers have argued that the sexual sadist can be characterized by a deviant sexual preference for violence. This sexual preference is thought to be the product of a "synergy" or "fusion" of both sexual and aggressive drives (Abel, 1989; Groth & Birnbaum, 1979; Knight & Prentky, 1990; Knight, Prentky, & Cerce, 1994). Others, like Gratzer and Bradford (1995), suggest that violence is not a sufficient condition to elicit a sexual arousal, but the "control of another person through domination, degradation, or infliction of pain for the purpose of sexual pleasure" (p. 450) (see also, Proulx, Aubut, McKibben, & Côté, 1994). According to this perspective, it is not so much the violence, but the humiliation, degradation, subjugation, and suffering producing fear, terror, pain, and panic in the victim, which make the sadist feel powerful and sexually aroused. Rada (1978) further claims that the humiliating acts performed by the sexual sadist provide more sexual satisfaction than the actual act of sexual intercourse. It is unclear whether the humiliating acts of the offender are a specific manifestation of control and power, which is sexually arousing to the sadists, or as a sexual preference for humiliation per se. Despite these conceptual differences, the definition of sexual sadism provided by Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association (APA), 2000) is the most widely used to identify sexually sadistic individuals.

2.2.2. Measurement of Sexual Sadism

Diagnostic and Statistical Manual of Mental Disorders (DSM)

Few valid and reliable clinical methods have been proposed to measure sexual sadism in sex offenders (e.g., Hollin, 1997; Kingston & Yates, 2008). The DSM has been the most widely used clinical tool to assess for the presence of sexual sadism. But the description and diagnostic criteria of sexual sadism have changed over the years (APA, 1952; 1968; 1987; 1994). In its current form, the DSM-IV-TR (APA, 2000) states that in order for an individual to receive a diagnosis of sexual sadism, there must be “recurrent, intense sexually arousing fantasies, sexual urges, or behaviours involving acts (real not simulated) in which the psychological or physical suffering (including humiliation) of the victim is sexually exciting to the person” which are present for at least 6 months (p. 573). The diagnostic criteria also require the presence of significant distress or (social, occupational, etc.) impairment as a result of these urges and/or behaviours. The presence of deviant sexual fantasies is often used to identify the sexual sadist and is considered to be a common feature of sexual sadism (Brittain, 1970; Dietz et al., 1990; Knight & Prentky, 1990; MacCulloch et al., 1983; Marshall & Kennedy, 2003; Ressler et al., 1988). The fantasies of sexual sadists are thought to reflect the same themes of violence, dominance, and humiliation that characterize their crime scene behaviours when they act upon them (e.g., Hazelwood, Dietz, & Warren, 1992). Researchers have claimed that not only are deviant sexual fantasies thought to be present in virtually all sexual sadists, but also there is assumed to be a strong compulsion to act on them (Holmes & Holmes, 1996).

Several issues have been raised regarding the use of the DSM as a diagnostic tool to assess for the presence of sexual sadism. Some have argued that the reliance on an offender to admit to his deviant sexual fantasies is one of the major pitfalls of being able to properly identify sexually sadistic offenders (Marshall & Kennedy, 2003), because offenders are reluctant to admit to sexually sadistic fantasies (Marshall, Anderson, & Fernandez, 1999). Furthermore, recent empirical evidence conducted by Marshall and colleagues suggests that despite clear diagnostic criteria, clinicians cannot agree on the core features of sexual sadism (Marshall, Kennedy, & Yates, 2002; Marshall, Kennedy, Yates, & Serran, 2002). These studies indicated that exercising of

control, power, domination, humiliation/degradation, and cruelty were the only features most clinicians appear to agree as relevant to identifying sadists, whereas indicators such as excessive violence (such as beating a victim), strangulation, abduction, confinement, and anal sex were not consistently identified as important indicators. Additionally, indicators such as suffocation, post mortem wounding, anal or vaginal penetration with object, and sadistic sexual fantasies were not consistently associated with a diagnostic of sexual sadism. Criticism over the DSM definitions, description and diagnostic criteria has lead clinical researchers to develop alternative measures of sexual sadism¹.

Phallometric Studies on Sexual Sadism

Some researchers have relied on what is considered a more objective method of measuring sexual interests through the use of phallometric assessments. Phallometric assessment measures sexual arousal to violence by exposing the subject to various audiotaped descriptions of violence (both sexual and nonsexual) and measuring the level of sexual arousal through changes in the volume/circumference of the penis (Barbaree, Seto, Serin, Amos, & Preston, 1994; Fedora et al., 1992; Proulx et al., 1994; Quinsey, Chaplin, & Varney, 1981; Seto & Kubban, 1996). Phallometric studies have not been able to consistently identify sexually sadistic rapists and nonsexually sadistic rapists based on their sexual arousal to nonsexual violence. The inconsistent findings are unclear and could be due to a multitude of factors. One possible explanation is that not all phallometric protocols, including the stimuli used to assess sexual arousal to violence, are equally valid. An alternative explanation is that the inconsistent finding could be a result of the fact that these empirical studies have typically identified sexual sadists using the diagnostic criteria of the DSM, to which phallometric data were compared. The lack of significant differences found in earlier studies might reflect, not so

¹ Other methodologies have been used, such as combining official and clinical data with information obtained from self-report questionnaires (Knight, Prentky & Cerce, 1994). The MASA developed by Knight et al. (1994) includes a subscale measuring a sadism subscale that is comprised of three items - bondage, synergy of sex and aggression (sexual arousal to aggression), and sadistic fantasies. Unfortunately, the items used to measure each of the three components of sexual sadism were not presented, nor were the association between these components and a clinical diagnostic of sexual sadism using the DSM criteria. Furthermore, the three item sub-scale of sadism showed relatively high internal consistency, but relatively low test-retest reliability.

much the lack of validity of phallometric assessment in assessing sexual sadism, but the poor validity of the DSM diagnosis for reasons mentioned above. Proulx et al. (1994), however, have shown that it was not so much the violence that best discriminates between rapists and nonrapists, but the presence of humiliation in scenarios depicting a rape scene. This might further reinforce the idea that humiliation might be one of the key behavioural indicators of sexual sadism. However, Proulx et al. (1994) did not examine the association between sexual arousal to their scenarios of rape with humiliation and a clinical diagnosis of sexual sadism, thus limiting the conclusion that can be drawn from this study.

Sexual Sadism and Crime-Scene Behaviours

More recent studies have relied on inventories focusing almost exclusively on the crime scene behaviours of convicted sex offenders to measure sexual sadism. Proulx, Blais and Beauregard (2006) identified eight criteria regrouped into two categories (i.e., Scale A, Scale B) to measure sexual sadism in a sample of sexual murderers and sexual aggressors of women (Table 1). Offenders who showed at least one of the first categories of behaviours or two in the second were classified as sadists. Proulx et al. (2006) used mainly crime-scene variables that could be coded using official data (i.e., police report). In fact, three of the four items included in scale A and all items included in scale B were based on official, crime-scene data. The only indicators not based on crime-scene data reflected the presence of sadistic fantasies and were based on data collected through a semi-structured interview. This indicator, therefore, suffered from the same limitations as the one found in the DSM due to its exclusive reliance on self-report data. Using those criteria, 45% of the homicide offenders were classified as sadists, as opposed to 25% of rapists. The reliability of the scale of sadism was not assessed. Furthermore, their measure of sadism was not cross-tabulated with those with a clinical diagnosis of sexual sadism although group comparisons were conducted with available phallometric data. The study findings highlighted that, while sadists and nonsadists did not differ in their arousal to nonsexual violence, sadists showed increased arousal to both rape with humiliation and rape with physical violence. The results, therefore, showed some convergent validity between the Proulx et al. (2006) measure of sexual sadism and phallometric data.

Table 1. Sexual Sadism Indicators in Marshall and Hucker (2006) and Proulx (1999) Sexual Sadism Scales

Marshall and Hucker	Proulx
	<u>Scale A</u>
1. Offender is sexually aroused by sadistic acts	1. Presence of intense and recurring sexual fantasies
2. Offender exercises power/control/domination over victim	2. Torture of victim prior to death
3. Offender humiliates or degrades the victim	3. Ritualized violence
4. Offender tortures victim or engages in acts of cruelty on victim	4. Post mortem intercourse
5. Offender mutilates sexual parts of the victim body	<u>Scale B</u>
6. Offender has a history of choking consensual partners during sex	1. Marks of violence on erogenous zones (anus, vagina, breasts)
7. Offender engages in gratuitous violence towards the victim	2. Burns inflicted prior to or after the murder
8. Offender has a history of cruelty to other persons or animals	3. Insertion of objects into body cavities
9. Offender gratuitously wounds victim	
10. Offender attempts to, or succeeds in, strangling, choking, or otherwise asphyxiating victim	
11. Offender keeps trophies (e.g., hair, Underwear, ID) of victim	
12. Offender keeps records (other than trophies) of offence	
13. Offender carefully pre-plans offence	
14. Offender mutilates	
15. Offender engages in bondage with consensual partners during sex	
16. Victim is abducted or confined	
17. Evidence of ritualism	

More recently, Kingston, Seto, Firestone and Bradford (2010) attempted to support the construct validity of sexual sadism by examining both the predictive and concurrent validity of a series of sexual sadism indicators. The sexual sadism markers used in their analyses were a DSM diagnosis of sexual sadism, level of nonsexual violence during the offence, severity of sexual violence, and sexual arousal to nonsexual and sexual violence. Kingston et al. used the Sex Offender Risk Appraisal Guide (SORAG) as means of controlling for the level of risk. Results indicated that the SORAG was the best predictor of violent recidivism while none of the other behavioural indicators uniquely contributed to the prediction of violent recidivism. Both the SORAG scores and phallometric scores significantly predicted whether an offender sexually recidivated. Despite these results there are potential conceptual issues with Kingston et al.'s findings. The authors equated increased levels of nonsexual and sexual violence during the course of the crime to sexual sadism markers when empirical evidence has suggested that the mere presence of violence, sexual or otherwise, is present in many sexual assaults (Marshall & Kennedy, 2003). Given the complex nature of sexual violence and its relationship to sexual sadism, an incident of sexual recidivism cannot be unequivocally equated to recidivating in a sexually sadistic manner. Conversely, because some of the indicators used in the study show predictive validity of sexual recidivism, it does not necessarily support the construct validity of sexual sadism.

Marshall and Hucker (2006) also proposed a list of indicators to measure sexual sadism (Table 1). Their list was composed of 17 items tapping various behavioural aspects. The authors argued that these 17 items were tapping an underlying trait (sexual sadism) that can be measured along a continuum with a higher score (higher number of indicators) suggesting the presence of sexual sadism. In line with Proulx et al. (2006), their list included an item reflecting the offender's sexual arousal to sadistic acts, thus relying on self-report data and being subject to the offender's biases in revealing his sexual fantasies. Furthermore, Marshall and Hucker (2006) included lifestyle (i.e., items 6 and 15) and developmental (i.e., item 8) indicators, which required some knowledge of the offender's history and background. They also included in that list items that reflect post-crime behaviours (i.e., items 11 and 12). The remaining 11 items were pre-crime (i.e., item 13) or crime-scene behaviours. Of interest, the authors included one item (i.e., item 10) that alludes to killing or attempting to kill the victim, further reinforcing the idea

of a connection between sexual homicide and sexual sadism. Nitschke, Osterheider and Mokros (2009) assessed the validity of Marshall and Hucker's sexual sadism scale using a sample of 50 male forensic patients who had been diagnosed as sexually sadistic (i.e., DSM-IV-TR) and, 50 male nonsexually sadistic patients chosen at random from a forensic hospital in Germany. Using Mokken scaling, the authors determined that 10 of the 17 items included in the original scale were most useful in identifying sexual sadists (items 1, 2, 3, 4, 5, 7, 11, 14, 16, 17 in Table 1)². Nitschke and colleagues determined, using a cutoff score of four items, that Marshall and Hucker's instrument was able to discriminate between sadists and nonsadists. According to the authors, Mokken scaling is beneficial because it provides information regarding both the relative importance of the items being analyzed and the overall strength of the scale. Furthermore, Nitschke and colleagues concluded that gratuitous violence, the exercising of power and control, humiliation of victims, and being sexually aroused by these acts were the most important items in discriminating sexual sadists from other sexual offenders.

2.2.3. Aim of Study

The current study has two primary goals. The first goal is to investigate the convergent validity of a series of crime scene indicators of sexual sadism with that of a clinical diagnosis of sexual sadism. Although the DSM remains the main tool for identifying sexual sadists (at least in North America), few studies have attempted to establish convergent validity between those identified as sexual sadists per the DSM with some other measure of sexual sadism aside from information stemming from phallometric assessment. Secondly, the study will explore the predictive validity of crime scene indicators in differentiating sexual aggressors against women from sexual murderers. Specifically, the utility of sexual sadism crime scene markers in accounting for the escalation from sexual assault to sexual homicide will be examined.

² The authors also added an additional item that was not in Marshall and Hucker's original scale (i.e., insertion of object(s) into victims' body) – but the item did not contribute to the overall scale.

2.3. Methodology

2.3.1. Sample

The sample was comprised of 268 adult males having been convicted of a sexual crime and sentenced to a federal penitentiary in the province of Québec, Canada. This group included two subsamples, a group of sexual aggressors (n=182), and a sample of sexual murderers (n=86). The sample of sexual aggressors of women includes consecutive admissions at the penitentiary between 1994 and 2000. All sexual aggressors of women were convicted of sex crime against a female 16 years or older at the time of the offence(s). For more details about the sample and sampling procedures refer to Lussier, LeBlanc, and Proulx (2005). Sexual murderers included individuals who were either: (1) admitted to the penitentiary between 1994 and 2000, or (2) were already serving their sentence for sexual homicide during that period in a penitentiary in the province of Quebec. Using Ressler and colleagues' (1988) definition of sexual homicide, offenders had to meet at least one of the following criteria to be included in the sexual murderer group: (a) victim's attire or lack of attire, (b) exposure of the sexual parts of the victim's body, (c) sexual positioning of the victim's body, (d) insertion of foreign objects into the victim's body cavities, (e) evidence of sexual intercourse (oral, anal, or vaginal), and (f) evidence of substitute sexual activity, interest, or sadistic fantasy. For more details about the sampling, see Beauregard and Proulx (2002). Descriptive information about the sample can be found in Table 2. On average the sample was 34 years old, Caucasian, with a high school diploma, and single at the time of the offence.

Table 2. Descriptive information about the sample (n=268)

Variables	Mean (SD, range)
Age	33.8 (9.7, 18-75)
Total number of conviction for nonsexual violent offence	1.7 (1.7, 0-9)
Total number of convictions for sexual offences	0.7 (0.8, 0-4)
Highest level of education completed	<u>Prevalence % (n)</u>
Elementary	19.4 (52)
Secondary	70.5 (189)
Post secondary	10.1 (27)
Marital status	
Single	55.8 (149)
Common-law or married	31.5 (84)
Separated or divorced	12.7 (34)
Ethnicity	
White	85.8 (230)
Black	7.5 (20)
Other	6.7 (18)
Occupational status at time of incarceration	
Social assistance	44.2 (117)
Employed	38.1 (101)
Unemployed	38.8 (50)
Sexual aggressors against women	68 (182)
Sexual murderers	32 (86)
Crime Scene Indicators	
Premeditation	67 (178)
Selection of victim	31 (81)
Kidnap and illegal confinement	9 (25)
Physical restraints	14 (38)
Use of excessive force	94 (253)
Mutilation of victim	10 (26)
Humiliation	42 (106)
Specific characteristics searched by offender	30 (60)
Use of weapon	50 (134)
Time spent with victim	35 (89)

2.3.2. Procedures

A research assistant solicited the participation of convicted offenders. All research assistants (graduate students in criminology) were trained by a licensed psychologist. The offenders who chose to participate signed a consent form explaining that the data would be used for research purposes only. Data were coded by research assistants using three sources of information: a semi-structured interview with each offender; victim statements regarding the offence (not present for sexual homicide); and police reports of the event. In the event there was a discrepancy between interview data and official data, official data were used.

A total of 84.7% of offenders had only one victim. Only 8.6% of offenders had two victims and 6.7% had three or more victims. Because the vast majority of offenders (84.7%) only had one victim, data were coded using information available on the first victim.

2.3.3. Variables

Crime Scene Variables

The indicators of sexual sadism inspected here reflect the offender's behaviours during the crime event. Therefore, historical/developmental (e.g., history of cruelty against an animal, history of choking a partner) and psychological indicators (e.g., violent sexual fantasies; sexual arousal to violent cues) of sexual sadism were excluded from the study. Crime scene variables were selected by reviewing the clinical and empirical literature on sexual sadism and selected variables consistently identified as markers for both non-homicidal and homicidal sexual sadists. Sexual sadism indicators were drawn from empirical studies (Beauregard & Proulx, 2002; Dietz et al., 1990; Gratzer & Bradford, 1995; Knight & Prentky, 1990; Marshall & Fernandez, 2000; Marshall & Kennedy, 2003; Marshall et al., 2002; Marshall & Yates, 2004; Proulx et al., 2006), clinical or behavioural accounts of sexually sadistic offenders (APA, 2000; Brittain, 1970; Groth, Burgess, & Holmstrom, 1977; Hucker, 1997; Marshall & Hucker, 2006; Ressler et al., 1988; Yates, Hucker, & Kingston, 2008) and studies using sexual

sadism scales (Knight & Cerce, 1999; Marshall & Hucker, 2006; Proulx, 1989). Of these ten items selected for the study (Table 3.), five were also found in Marshall & Hucker's (2006) scale – i.e., premeditation, kidnapping and confinement, the use of physical restraints (i.e., bondage), mutilation, and humiliation. The inclusion of the remaining four items (i.e., selection of victim, specific characteristics sought by the offender, time spent with the victim, and use of weapon) were guided by empirical research indicating that these items are associated with sexually sadistic offenders (both murderers and non-murderers) (e.g., Beauregard & Proulx, 2002; Dietz et al., 1990).

Table 3. Crime scene indicators of sexual sadism

Variable	Coding
Premeditation – reflects the amount of preparation the offender put into the planning of his crimes	0 = no evidence of premeditation, 1 = evidence of premeditation
Selection of victim – refers to whether the victim(s) were pre-selected by the offender before the offence. Note this reflects the fact that the offender had multiple possible targets and chose his victim from a group of possible victims and not by simply taking the first available victim	0 = offenders did not select victim, 1 = evidence of victim selection
Kidnap and illegal confinement – indicates whether the offender kidnapped or confined his victim during the course of his crime	0 = no evidence of kidnap and confinement 1= evidence of kidnap and confinement
The use of physical restraints – reflects whether the offender used physical restraints to bind his victim. It was coded as 0 = no, 1 = yes (14% of offenders used physical restraints on their victim)	0 = no evidence of physical restraints 1= evidence of physical restraints
Use of excessive force – refers to whether an offender used levels of force in excess of those needed to gain the victims compliance	0= no evidence of excessive force 1= evidence of excessive force
Mutilation – refers to whether the victim was mutilated during the crime. It does not indicate post-mortem mutilation	0 = no evidence of mutilation 1 = evidence of mutilation
Humiliation – refers to whether the offender humiliated their victim. Humiliation consisted of verbal or physical humiliation.	0 = no evidence of humiliation 1 = evidence of humiliation
Specific characteristics sought by offender – refers to whether an offender sought out distinct victim characteristics to commit his crime	0 = no evidence of searching for specific characteristics 1= evidence of searching for specific characteristics
Time spent with victim – reflects the duration of the crime event from the onset to its termination.	0 = less than one hour 1 = more than one hour
Use of a weapon – refers to whether the offender used a weapon during the course of the offence	0 = no 1= yes

Diagnosis of Sexual Sadism

After conducting a clinical interview with the offender and reviewing the correctional files of the offender (e.g., description of the index crime, previous psychological assessment, psychological assessments such as the Minnesota Multiphasic Personality Inventory-II (MMPI-II) results, etc.), a psychologist made a diagnosis of sexual sadism based on DSM-III-R criteria, the reference used at the time. Research assistants coded the presence (coded as 1) or absence (coded as 0) of a clinical diagnosis of sexual sadism based on the assessment intake. At intake a total of 9.3% (n=19) of the sample was diagnosed as a sexual sadist. For a detailed review of the variables used in the analysis and their respective coding refer to Table 3. All offenders were assessed by psychologists in the first six weeks of being incarcerated, and assessed for risk classification and treatment needs

Control Variables

Several control variables were used in the study to avoid possible confounding effects due to socio-demographic differences. Although not specifically implicated in the sexual sadism scientific literature, these control variables were included because they have been shown to influence both violent and sexual offending in previous studies. Age refers to the age of the offender at the time of the interview. On average the offenders in the study were 33.8 years old (SD = 9.7, range = 18 – 75). The ethnic background of the offender has been included to rule out any possible cultural effects in crime scene behaviours. The sample was predominantly white (85.8%), followed by Black (7.5%), and other (e.g., Asian, Aboriginal, and Middle Eastern) (6.7%). Education refers to the highest level of education obtained by the offender at the time of his arrest. On average, subjects in the study were largely high school educated (70.5%). A rather large proportion (19.4 %) finished only elementary school and 10.1% had some form of post-secondary education.

2.3.4. Data Analysis

The convergent validity (Shadish, Cook, & Campbell, 2002) of the crime scene indicators of sexual sadism was examined. Associations between crime scene indicators

of sexual sadism and a diagnosis of sexual sadism were examined using a series of cross-tabulations and examining both the chi square statistics and phi coefficient³. It was hypothesized that all crime scene indicators would be positively and significantly related to the diagnosis of sexual sadism because: (1) the crime scene indicators and official diagnoses are tapping the same underlying disposition, and (2) it is thought that the psychologists used crime scene variables to provide a diagnosis of sexual sadism. The predictive validity of the crime scene indicators of sexual sadism was examined with respect to sexual homicide. As suggested in the scientific literature, it was hypothesized that sexual murderers might show more indication of sexual sadism markers than non-murderers. The predictive validity was examined in a two-step process. First crime scene indicators were examined individually to determine whether sexual homicide offenders were different than sexual aggressors on any of the behaviours. Second, only significant markers were entered into a series of logistic regression models to identify the indicators that best discriminate between the two groups.

2.4. Results

2.4.1. Convergent Validity of Crime Scene Indicators

The association between all crime scene indicators and a clinical diagnosis of sexual sadism are presented in Table 4. In terms of premeditation, those with a diagnosis of sexual sadism were more inclined to premeditate their crimes (89.5%) than those without such a diagnosis (62%). Although very few offenders kidnapped and confined their victims, sadists were more likely to do so (16.9% of sadists versus 5.9% of nonsadists). Similarly, sadists were more likely to use physical restraints (33.3%) as opposed to nonsadists (10.9%). As one would expect, those who were diagnosed with sexual sadism tended to humiliate their victims more than those without a sadistic

³ A scale was created using all ten crime scene variables. Polychoric and tetrachoric correlations were used due to the dichotomous nature of the variables. Offenders in the sample had a mean sexual sadism score of 3.74, SD = 1.59, range 0-8. The Cronbach's Alpha of the scale was .44, indicating a poor scale.

diagnosis (63.2% versus 36.7%). Despite the fact that only some of the nonsadistic group mutilated (3.2%), the majority of those offenders mutilating their victims were diagnosed as sexual sadists (21.1%). All sadists used excessive amounts of force (100%). The nonsadist group also tended to use excessive force (92.4%). The majority of sadist offenders used a weapon during the offence (63.2%), and they did so in a higher proportion than nonsadistic offenders (42.2%).

Table 4. Convergent validity analysis of the crime scene indicators and a diagnosis of sexual sadism

Indicators		Nonsadists	Sadists	χ^2
Premeditation	No	70 (38%)	2 (10.5%)	5.69 *
	Yes	114 (62%)	17 (89.5%)	
Selection of victim	No	132 (72.5%)	9 (52.9%)	ns
	Yes	50 (27.5%)	8 (47.1%)	
Kidnap and confine	No	174 (94.1)	16 (84.2%)	ns
	Yes	11 (5.9%)	10 (16.9%)	
Physical restraints	No	163 (89.1%)	12 (66.7%)	7.43*
	Yes	20 (10.9%)	6 (33.3%)	
Use of force	No	14 (7.6%)	0 (0%)	ns
	Yes	171 (92.4%)	19 (100%)	
Mutilation	No	179 (96.8%)	15 (78.9%)	11.72**
	Yes	6 (3.2%)	4 (21.1%)	
Humiliation	No	112 (63.3%)	7 (36.8%)	5.02 *
	Yes	65 (36.7%)	12 (63.2%)	
Specific characteristics	No	98 (70%)	8 (72.7%)	ns
	Yes	42 (30%)	3 (37.8%)	
Use of weapon	No	107 (57.8%)	7 (36.8%)	ns
	Yes	78 (42.2%)	12 (63.2%)	
Time spent with victim	Less than 1 hour	123 (66.5%)	12 (63.2%)	ns
	More than 1 hour	54 (30.5%)	7 (36.8%)	

* p<.05, **p<.01, ***p<.001

2.4.2. Multivariate Analyses of Convergent Validity

Initially, individual sexual sadism indicators were analyzed using a logistic regression model to determine the items that showed the most unique convergence with a diagnosis of sexual sadism (Table 5). When considered simultaneously, only four indicators remained significantly associated with a diagnosis of sexual sadism. Study findings show that individuals with a diagnosis of sexual sadism were more likely to mutilate their victims (OR = 7.96, $p < .01$, 95% C.I. = 2.02 – 31.32), premeditate their crimes (OR = 5.21, $p < .05$, 95% C.I. = 1.17 – 23.77), use physical restraints during the commission of their offence (OR = 4.07, $p < .05$, 95% C.I. = 1.37 – 12.05), and humiliate their victims (OR = 2.95, $p < .05$, 95% C.I. = 1.10 – 7.87). Premeditation, mutilation, and humiliation remained significant after controlling for the offenders' age, ethnicity, and education. Model 2 (controlling for the offender's age, ethnicity, and level of education) was a good fit to the data (Hosmer-Lemeshow, $\chi^2 = 3.11$, $p = .925$) and the model accounted for only 10% of the variance (Cox & Snell's $R^2 = .104$). Overall, the model was better at identifying nonsadists than sadists (nonsadists: 99% correctly identified, sadists: 6% correctly identified).

Table 5. Logistic regression analysis of crime scene indicators and their association with sexual sadism (clinical diagnosis) and sexual homicide

Variable	Sexual Sadism		Sexual Homicide	
	Exp(B)	(95% CI)	Exp(B)	(95% CI)
Premeditation	5.219	(1.170 - 23.777)*	1.009	(.584 - 1.74)
Selection of victim	2.347	(.858 - 6.420)	1.739	(1.004 - 3.011)*
Kidnap and confine	2.966	(.750 - 11.736)	1.465	(.629 - 3.410)
Physical restraints	4.075	(1.378 - 12.053)*	.994	(.475 - 2.080)
Mutilation	7.956	(2.021 - 31.322)**	3.931	(1.701 - 9.084)**
Humiliation	2.954	(1.108 - 7.878)*	.332	(.181 - .610)***
Specific characteristics	.875	(.221 - 3.462)	.444	(.229 - .862)*
Use of weapon	2.352	(.855 - 6.246)	2.889	(1.686 - 4.951)***
Time spent with the victim	.753	(.281 - 2.016)	1.992	(1.162 - 3.417)*

Note- Dependent variable – nonsadist = 0, sadist = 1. Reference category = nonsadist (0). All independent variables are coded as 0=absence, 1=presence. Reference Category is absence (0) for all variables

* p<.05, **p<.01, ***p<.001

2.4.3. Predictive Validity of Crime Scene Indicators

First, the group-comparisons between murderers and non-murderers were conducted using a series of cross-tabulation for each of the sexual sadism items (Table 6). All the sexual murderers (100%) in the sample used more force than was necessary to subdue the victim. Likewise, 91.2% of rapists were exceedingly violent. Sexual murderers were also more prone to use a weapon. Just over two thirds of sexual murderers (67.4%) used some sort of weapon to commit their crime, while 41.8% of rapists used a weapon. Rapists tended to display higher levels of humiliation. Three quarters of the sexual murderers (75.7%) did not humiliate the victim, while just under one half of the rapists (49.2%) did. Sexual murderers tended to mutilate their victims more so than rapists. While the majority of rapists (94.5%) did not mutilate their victims, 18.6% of sexual murderers did mutilate their victims. Sexual murderers spent marginally more time with their victims as opposed to rapists. Forty six percent of sexual murderers spent over one hour with their victim, while only 29.3% rapists spent the equivalent

amount of time. Four of the crime scene variables in the study did not discriminate between sexual murderers and rapists. Both sexual serial murderers and rapists were equally likely to premeditate their crimes. Neither group showed a marked tendency towards victim selection, the use of physical restraints, or to kidnap and confine their victims.

Table 6. Predictive validity of crime scene behaviours of rapists and sexual murderers

Indicators		Rapists	Sexual Murderers	χ^2
Premeditation	No	60 (33.1%)	28 (32.9%)	ns
	Yes	121 (66.9%)	57 (67.1%)	
Selection of victim	No	129 (72.9%)	51 (60.7%)	ns
	Yes	48 (27.1%)	33 (39.3%)	
Kidnap and confine	No	167 (91.8%)	76 (88.4%)	ns
	Yes	15 (8.2%)	10 (11.6%)	
Physical restraints	No	155 (85.6%)	72 (85.7%)	ns
	Yes	26 (14.4%)	12 (14.3%)	
Use of force	No	15 (8.8%)	0 (0%)	7.5**
	Yes	167 (91.2%)	86 (100%)	
Mutilation	No	172 (94.5%)	70 (81.4%)	11.4**
	Yes	10 (5.5%)	16 (18.6%)	
Humiliation	No	91 (50.8%)	56 (75.7%)	13.6 ***
	Yes	88(49.2%)	18(24.3%)	
Specific characteristics	No	77 (63.6%)	63 (79.7%)	5.9 *
	Yes	44 (36.4%)	16 (20.3%)	
Use of weapon	No	106 (58.2%)	28 (32.6%)	15.4***
	Yes	76 (41.8%)	58 (67.4%)	
Time spent with victim	Less than 1 hour	123 (70.7%)	46 (53.5%)	6.36*
	More than 1 hour	51 (29.3%)	40 (46.5%)	

* p<.05, **p<.01, ***p<.001

2.4.4. Multivariate Analyses of Predictive Validity

A series of logistic regression analyses were run on specific sexual sadism indicators to determine which ones discriminate between rapists and sexual murderers (rapists were used as reference category) (Table 5.). Given the violent nature of the offenders in the sample and the fact that it would be predicting excessively violent crimes (e.g., sadism and sexual murder), it was deemed that leaving the variable excessive levels of force in the analysis would provide distorted statistical results. As such it was removed from the analysis due to the tautological nature of the variable. Compared to rapists, sexual murderers were more likely to specifically select their victim (OR = 1.73, $p < .05$, 95% C.I.= 1.00 – 3.01). Sexual murderers were also much more likely to mutilate their victims as compared to rapists (OR = 3.93, $p < .01$, 95% C.I.= 1.70 – 9.08). Interestingly, sexual murderers were less likely to humiliate their victims (OR = .33, $p < .001$, 95% C.I.= .18 - .61) or search out specific victim characteristics (OR = .44, $p < .05$, 95% C.I.= .22 - .86). Finally, sexual murderers were more likely to use a weapon during their crime (OR = 2.88, $p < .001$, 95% C.I.= 1.68 – 4.95) and spend more than an hour with their victim (OR = 1.99, $p < .05$, 95% C.I.= 1.16 – 3.41). When controlling for the offenders' age, ethnicity, and education, selection of victim (OR = 2.65, $p < .05$, 95% C.I.= 1.16 – 6.04), mutilation (OR = 4.48, $p < .05$, 95% C.I.= 1.21 – 16.52), use of weapon (OR = 3.44, $p < .01$, 95% C.I.= 1.56 – 7.55) remained significant predictors of sexual murderers. Both humiliating the victim (OR = .14, $p < .001$, 95% C.I.= .06 - .34) and searching for specific characteristics (OR = .40, $p < .05$, 95% C.I.= .16 - .99) remained significant predictors of the rapist group. Model 2 (controlling for the offender's age, ethnicity, and education) was a good fit to the data (Hosmer-Lemeshow, $\chi^2=8.10$, $p=.423$) and the model accounted for 27% of the variance (Cox & Snells $R^2=.270$). The model predicted sexual aggressors of women better than it predicted sexual murderers. The model was somewhat better at identifying sexual aggressors of women than sexual murderers. In fact, 61% of the sexual murderers were correctly predicted while 88% of the sexual aggressors against women were correctly identified.

2.5. Discussion

2.5.1. Convergent Validity of the Indicators

This study began by investigating the convergent validity of a series of crime scene indicators with an official diagnosis of sexual sadism. The results of this study suggest that only 40% of the indicators used in the analyses appeared to be related to a clinical diagnosis of sexual sadism based on the DSM-III-R criteria. Premeditation, the use of physical restraints, mutilation, and humiliation were significantly related to receiving an official diagnosis of sadism. The finding that humiliation is significantly related to an official diagnosis of sexual sadism is not surprising given that one of the explicit requirements for a DSM diagnosis of sexual sadism is that an individual is sexually aroused to the physical or psychological suffering (i.e., humiliation) of his victim. The mere presence of humiliation may have been used either as a direct (i.e., if the offender admitted to being sexually aroused from humiliating their victim) or an indirect measure (i.e., if the offender excessively humiliated his victim in conjunction with other sexual sadism markers) of sexual arousal to humiliating acts. These results are similar to that of Marshall et al. (2002) who found that the most common feature of sexual sadism was sexual satisfaction from humiliating their victims. However, these results should be interpreted cautiously, as there were no direct measures of sexual arousal to humiliation, violence, or otherwise. On the other hand, offenders who humiliated their victim were more likely to receive a diagnosis of sexual sadism suggesting that psychologists may have relied on this behaviour in diagnosing sexual sadism.

Two more important findings need to be highlighted. First, aside from humiliation, many of the prototypical indicators of sadism were found to be associated with an official diagnosis of sadism. These results are in line with much of the scientific literature on sexual sadism: an individual who carefully plans his crimes while perhaps torturing his victim (Marshall & Kennedy, 2003). Much like humiliation, the presence of mutilation was found to be a significant predictor of an official diagnosis of sadism. Again, this finding was not unexpected given both the empirical evidence that supports its importance in diagnosing sexual sadism (Marshall et al. 2002) and its prevalence in the scientific

literature (Beauregard & Proulx, 2002; Marshall & Kennedy, 2003). However, seven of the 10 items that were expected to be significantly related to a diagnosis of sadism were not. Nonsadists were just as likely to select a specific victim, kidnap and confine their victims, and search for specific victim characteristics as sadists were. Interestingly enough nonsadists and sadists used excessive amounts of force during the course of their crime. Although these results were unanticipated, they are not completely unreasonable given the sample is comprised of violent rapists and sexual murderers. After all, selection of victim, the seeking of specific characteristics and the use of excessive force has been reported for both sexual sadism and sexual homicide alike (Dietz et al., 1990; Proulx et al., 2006).

The multivariate analysis of the crime scene indicators of sexual sadism provided additional information about the convergent validity. More specifically, the multivariate analyses helped to identify those indicators providing independent and additional information about the individuals' meeting the DSM criteria of sexual sadism. Hence, when controlling for other socio-demographic variables such as age, ethnicity, and level of education, the study's findings showed that mutilation, humiliation, and premeditation emerged as the most robust indicators of a clinical diagnosis of sexual sadism. These three crime scene indicators therefore might represent key behaviours of the offender's offending process that guide clinicians in establishing a diagnosis of sexual sadism. These findings are not surprising given that premeditation has been cited as one of the main markers of sexual sadism in the clinical and behavioural literature (e.g., Brittain, 1970; Dietz et al. 1990; Krafft-Ebbing, 1886/1965; Marshall et al., 2002). Similarly, the presence of humiliation is not unexpected as it is perhaps the most salient behavioural criteria of the DSM's diagnosis of sexual sadism and empirical evidence suggests that it is perhaps the most important clinical indicator of sexual sadism (Marshall et al., 2002; Marshall & Kennedy, 2003). Although not explicitly a diagnostic criteria for sexual sadism in the DSM, Marshall and colleagues have shown that clinicians consider mutilation to be an important indicator of sexual sadism. Furthermore, mutilation has consistently been found as one of the key characteristics of the offending behaviours of sadistic sexual murderers (Beauregard & Proulx, 2002; Dietz et al. 1990; Gratzer & Bradford, 1995; Proulx et al., 2005; Warren et al., 1996). Given the inherent link between sexual sadism and sexual murder, it is not surprising that mutilation remains significant even

after controlling for other sexually sadistic behaviours. After all, some of the earliest academic works of sexual sadism were based on the clinical behaviours of sexual murderers (Brittain, 1970; Dietz et al. 1990).

This study examined the usefulness of sexual sadism indicators as a means of escalation from rape to sexual murder. Interestingly enough, the study found that 60% of the crime scene indicators examined were different between rapists and sexual murderers. Rapists and sexual murderers were no more likely to premeditate their crime, select their victim, kidnap and confine, or use physical restraints during the course of their crime. The planning and the selection of a victim may all indicate a well-thought behavioural script to sexually coerce someone (Beauregard, Proulx, Rossmo, Leclerc, & Allaire, 2007). Again, given the nature of this sample, these results are not particularly surprising. Of importance is the comparison between rapists and sexual murderers. Sexual murderers, however, were more likely to use force, to mutilate, to use a weapon as well as to spend more time with their victim during the crime event. Conversely rapists were more likely to humiliate and to seek out specific victim characteristics. These findings suggest that there may be two different types of sadistic sexual offenders: sadistic sexual aggressors (i.e., sadistic rapists) and sadistic sexual murderers. These two types of offenders may in fact be differentiated by the presence of humiliation and mutilation. When comparing the factors associated with a diagnosis of sexual sadism and those associated with sexual homicide, only humiliation and mutilation of the victim were significantly associated to both. This finding could be interpreted as there being differential manifestations of sexual sadism by rapists and sexual murderers. More specifically, it could be that humiliation is a more central aspect of the sadistic sexual aggressor of women, while mutilation might be more specific to the sadistic sexual murderers. Put differently, the sadistic rapists might get more pleasure from the verbal aggression that involves humiliation, while the murderers might need extreme physical violence (such as mutilation) to obtain sexual gratification. These indicators, therefore, along with humiliation and seeking specific victim characteristics, might not be reliable factors showing a risk to escalate to a sexual homicide. However, the reliability of humiliation for sexual murderers needs to be interpreted carefully. In the case of sexual murderers, the victim has been killed and is therefore unable to provide information to police regarding the presence or absence of humiliation, or the murderer

may minimize the influence humiliation may have had in the homicide. Additionally, the presence of humiliation may have been overlooked by crime scene investigators because there was no physical evidence of humiliation or it may have simply been overshadowed by the presence of mutilation.

This study is not without its limitations. This study is based on a relatively small sample of convicted offenders incarcerated in a Canadian penitentiary. The findings, therefore, may not apply to non-Canadian sex offenders as well as those that have not been caught by the police and convicted for their crime. Moreover, the study is limited by the crime scene variables included in the study. Only one crime per offender was analyzed to inspect sexual sadism, whereas clinicians will rely on any or all information available to them. Also, the study did not take into account whether the rapists attempted to kill or had the intention of killing her victim but did not due to circumstantial factors not taken into in the empirical analyses.

2.6. Conclusion

Given the many definitions and definitional problems associated with sexual sadism, the results of this analysis were not completely unexpected. Despite these difficulties the study was able to demonstrate that just under half of the crime scene variables used in the study were in fact related to a DSM diagnosis of sadism. Individually, premeditation, the use of physical restraints, mutilation, and humiliation were able to distinguish sadists from nonsadists. Further analysis indicated that mutilation, humiliation, and premeditation emerged as the most robust indicators explaining the unique variance of a clinical diagnosis of sexual sadism and whether an offender was a rapist or sexual murderer. The finding that humiliation, mutilation, and premeditation are key predictors of sexual sadism is unsurprising given the empirical and clinical evidence of their importance (Marshall & Kennedy, 2003). However, the overlap of humiliation and mutilation with different offender types suggests that there might be two different types of sexually sadistic offenders (i.e., sadistic sexual aggressors and sadistic sexual murderers) with associated crime scene behaviours. Taken as whole, these indicators may be able to help clinicians not only identify sexually

sadistic offenders using crime scene variables but possibly direct future research on the possibility of different types of sadistic offenders.

Chapter 3.

Study Two – Is The Sexual Murderer A Unique Type Of Offender? A Typology of Violent Sexual Offenders Using Crime Scene Behaviours

3.1. Abstract

The empirical literature on sexual homicide has posited sexual murderers as a unique type of offender that is qualitatively different from other types of offenders. However, recent research has suggested that sexual homicide is a dynamic crime and that sexual assaults can escalate to homicide when specific situational factors are present. This study simultaneously explored the utility of the sexual murderer as a unique type of offender hypothesis and the sexual homicide as a differential outcome of sexual assaults hypothesis. This study is based on a sample of 342 males who were convicted of committing a violent sexual offence, which resulted in either physical injury or death of the victim. A series of latent class analyses (LCA) were performed using crime scene indicators in an attempt to identify discrete groups of sexual offenders. Additionally, the effects of modus operandi, situational factors, and offender characteristics on each group were investigated. Results suggest that both hypotheses are supported. A group of offenders was identified who almost exclusively killed their victims and demonstrated a lethal intent by the choice of their offending behaviour. Moreover, three other groups of sex offenders were identified with a diverse lethality level, suggesting that these cases could end up as homicide when certain situational factors were present.

3.2. Introduction

Historically, the study of sexual homicide has suggested that sexual murderers are a unique type of offender and are qualitatively different from other types of sexually violent offenders (Ressler, Burgess, Hartman, Douglas, & McCormack, & D'Agostino, 1986). Prior research suggested that sexual murderers could be differentiated from nonsexual murderers on such characteristics as sexual motivation (Ressler, Burgess, & Douglas, 1988), victim characteristics (Chéné & Cusson, 2007; Firestone, Bradford, Greenberg, Larose, & Curry, 1998a; Oliver, Beech, Fisher, & Beckett, 2007), pre-crime factors (Chéné & Cusson, 2007; Langevin, 2003), crime scene behaviours (Chéné & Cusson, 2007; Firestone et al., 1998a; Firestone, Bradford, Greenberg, & Larose, 1998b; Langevin, Ben-Aron, Wright, Marchese, & Handy 1988; Ressler et al., 1986; Salfati & Dupont, 2006), developmental factors (Nicole & Proulx, 2007), psychopathology (Langevin et al., 1988; Proulx & Sauvêtre, 2005), and deviant sexual preferences (Dietz, Hazelwood, & Warren, 1990; Langevin, 2003). Conversely, there is emerging research that has suggested that sexual murderers are not qualitatively different from offenders who sexually assault (Beauregard & Mieczkowski, 2012, Mieczkowski & Beauregard, 2010). This perspective assumes that situational factors and not constitutional factors differentiate sexual homicide from sexual assault. Situational factors, such as the presence of a weapon, or whether the offender was intoxicated at the time of the crime could result in an escalation in violence and possibly result in homicide. The current study simultaneously investigates both perspectives through the use of a typological approach on a sample of violent sexual offenders who caused physical injuries – or death – to their victims.

3.2.1. Sexual Murderer as a Distinct Type of Sex Offender Hypothesis

The notion that sexual murderers constitute a unique type of offender can be traced back to Krafft-Ebing's (1886) seminal work *Psychopathia Sexualis* where he makes an explicit link between sexual sadism and sexual homicide. Specifically, Krafft-Ebing (1886) identifies at least three distinct types of sexual sadists that are likely to kill

their victims for a sexually satisfying purpose: (1) sexual sadists who gain sexual enjoyment from stabbing or injuring their victim, (2) lust murderers who find the act of homicide sexually exciting, and (3) sexual sadists who enjoy mutilating corpses. The latter two types are intrinsically linked to sexual homicide in that the offender either finds murder sexually exciting or the offender kills to mutilate dead victims.

This link between sexual sadism and sexual homicide has continued to be a differential feature, and often times a causal explanation, of sexual homicide (see Chan & Heide, 2009). Specifically, early empirical research suggested that sexual sadism was the driving force behind the sexual murderers desire to kill (Brittan, 1970; Burgess, Hartman, Ressler, Douglas, & McCormack, 1986; Dietz et al., 1990; Langevin et al., 1988; Ressler et al., 1986). Furthermore, the sexually sadistic fantasies of sexual murderers were reflected in their crime scene behaviours and often involved acts such as binding, torturing, mutilating, and humiliating their victims (Ressler et al., 1986). Although the proposition that sexual sadism was the driving force of sexual homicide was not new, the Federal Bureau of Investigation (FBI) is considered to be the first to have developed an empirically based typology of sexual homicide (Ressler et al., 1986). Using a sample of 36 convicted sexual murderers, the FBI proposed a dichotomous typology – the *Organized* and *Disorganized* offenders. Using a mixture of crime scene behaviours and background variables (e.g., familial structure, intelligence, childhood upbringing) the authors developed behavioral profiles. Based on the offender's behaviour at the crime scene and his choice of victim, law enforcement could infer personality, developmental, and lifestyle characteristics, which in turn could aid in the investigation and apprehension of the offender. The *Organized* offender is intelligent, carefully plans his⁴ offence, leaves very little evidence at the crime scene, and chooses stranger victims (Ressler et al., 1986). This well-defined script (i.e., the offenders knowledge structure or sequence of decision making), was thought to represent the *Organized* offenders deviant sexual fantasy to kill his victim (i.e., sexually sadistic fantasy). Conversely, the *Disorganized* offender often attacks victims he knows, does not plan his attack, and kills in anger (Ressler et al., 1986). According to the FBI, the

⁴ The possessive pronoun 'his' is used because the vast majority of sexual murderers are male – See Chen et al. 2009.

Disorganized offender is not aware of a sexually deviant need to murder his victim but instead was violently angry at the time of the offence and situational factors (e.g., witness present in the area or cooperation from the victim) influenced the lethality of the offence.

The FBI typology has been partially supported by empirical research (Beauregard & Proulx, 2002; Proulx, Beauregard, Cusson, & Nicole, 2007; however not in Canter, Alison, Alison, Wentink, 2004). Similar to the FBI, Beauregard and Proulx (2002) found evidence for two types of sexual murderers: the sadistic and the angry types. In many respects both the sadistic offender and angry offender resemble the FBI's *Organized* and *Disorganized* offenders respectively. Like the *Organized* offender, the sadistic sexual murderer plans his crime and targets strangers.

Additional research has identified more than two types of sexual murderers (Beech, Fisher, & Ward, 2005; Beech, Oliver, Fisher, & Beckett, 2006). Unlike the FBI, Beech and colleagues have consistently identified three distinct types of sexual murderers: (1) the calculated pain infliction, (2) the grievance driven murderers, and (3) the rape plus murder group (Beech et al., 2006). Interestingly, both the calculated pain infliction and grievance drive groups resemble both the FBI's and Beauregard's typologies (*Organized/Disorganized* and sadistic/anger respectively). The calculated pain infliction group, much like the *Organized* and sadistic groups, are motivated to kill to carry out deviant sexual fantasies. These offenders have rich fantasy lives, plan their crimes, are more likely to mutilate their victims and often kill their victims by strangulation or stabbing (Beech et al., 2006). Grievance driven murderers harbor a great deal of anger towards women in general and often kill their victims in a fit of rage. Similar to the *Disorganized* and anger offenders, there is little evidence that the crime is driven by deviant sexual fantasies. Rather this type of offender appears to excessively attack his victim during a sexual assault which often results in death. The rape plus murder group differs from existing typologies in that this type of offender is not sexually motivated to kill nor does he murder in a fit of rage during a sexual assault. According to Beech et al. (2005; 2006), this type of offender kills his victim in order to avoid detection. The rape plus murder group reports having deviant sexual fantasies but these fantasies do not involve murder. In fact, many of the differential factors associated with previous sexual

homicide typologies, such as targeting a specific type of victim (i.e., strangers versus known victims), a specific method of killing (e.g., strangulation), or excessive violence during the crime, are not defining characteristics for the rape plus murder group (Beech et al., 2006). Collectively, these findings suggest that there might be additional types of sexual murderers or various pathways to sexual homicide.

3.2.2. Sexual Homicide as a Differential Outcome of Sexual Assaults Hypothesis

Several researchers have suggested that sexual homicide is a complex phenomenon and although there is evidence that some sexual murderers kill because of individual psychopathology (i.e., sexual sadism) or excessive rage, there is also mounting evidence that sexual homicide may be one of many outcomes of a sexual assault (Beauregard & Mieczkowski, 2012; Beech et al., 2005; Beech et al., 2006; Mieczkowski & Beauregard, 2010). Mieczkowski and Beauregard (2010) found that the likelihood of a sexual assault escalating to sexual homicide was influenced by a complex combination of victim characteristics, situational characteristics, and crime scene characteristics. The most lethal combination of event characteristics identified were when the offender uses a weapon during the crime (see also Chan & Heide, 2009), does not commit intrusive sexual acts on the victim, but spends more than 30 minutes with the victim. It was suggested that this inability to perform sexually despite a long time with the victim enrages the offender and with ready access to a weapon, the sexual assault is very likely to end with murder. This novel thinking was influenced by the existing literature on nonsexual homicide, which also found that situational factors can be used to explain an escalation from a violent crime to homicide (Felson & Steadman, 1983; Felson & Messner, 1996; Wolfgang & Ferracuti, 1967). Specifically, researchers have demonstrated that violent crimes, such as robberies and physical assaults were much more likely to escalate to homicide with the presence of a lethal weapon (e.g., knife or gun versus blunt object) and if the victim is known to the offender (Felson & Messner, 1996). In addition to weapon use, other contextual factors have been demonstrated to influence the lethality of nonsexual homicides. Whether the offender was intoxicated during the offence (Felson & Steadman, 1983) and the reaction of the victim during the

assault (i.e., whether the victim retaliates during the crime) (Felson & Steadman, 1983; Wolfgang & Ferracuti, 1967) have all been shown to increase the likelihood of a lethal outcome in nonsexual physical assaults.

3.2.3. Aim of Study

The existing literature suggests there are at least two perspectives that may be useful in explaining lethal outcomes in sexually violent crimes (Beauregard & Mieczkowski, 2012; Felson & Messner, 1996). According to the first perspective, homicide and criminal violence share the same behaviour and the same processes, differing only in the outcome (Doerner & Speir, 1986; Harries, 1990). Consequently, based on such a perspective, one would expect no distinct patterns of behaviour when examining sexual assaults that result in either physical injuries or the death of the victim. The alternative perspective suggests that there are distinct factors that differentiate murderers from nonmurderers. According to this perspective, some homicide offenders are motivated and have the intention to kill the victim. Therefore, the lethal outcome is not incidental nor is it due to situational factors (Beauregard & Mieczkowski, 2012; Felson & Messner, 1996). Using a sample of sexual assaults that either resulted in physical injuries or the death of the victim, the current study aims to explore these two hypotheses using a typological approach with crime scene indicators. If the hypothesis of no difference is correct, then the study should expect to find types of sexual offenders that are not really distinguishable based on their crime scene behaviour. Moreover, the study should find sexual murderers distributed randomly across the different types. On the other hand, if the second hypothesis is correct, the study should expect to find different types of sexual offenders that are easily distinguishable based on their crime scene behaviour. Moreover, the typological approach should provide us with at least one type of sexual offenders who mainly kill their victims.

3.3. Methodology

3.3.1. Sample

The sample consists of 342 males who were convicted of committing a violent sexual offence, which resulted in either physical injury or death of the victim (nonhomicidal sex offenders – 61.7% n = 211, homicidal sex offenders – 38.3%, n = 131)⁵. It is important to note that the sample includes only offenders who inflicted physical injuries that go beyond forced sex (e.g., beating of the victim, or any other physical injury beyond defensive wounds experienced by the victim). The total sample comprises offenders from Canada (n = 229) and the United Kingdom (n = 113). The Canadian sample is comprised of sexual offenders who received a prison sentence of at least two years at a maximum-security institution in Québec, Canada between April, 1994 and June, 2000. Overall, participation in the study was voluntary and had a high participation rate (93%). Graduate students who were trained by a licensed psychologist collected data through semi-structured interviews with the offender. These interviews were then corroborated with police records, institutional files, and victim impact statements. If there was a discrepancy between information reported by the offender and case information official data were used.

Sexual murderers were oversampled in the current study to allow for the exploration of the differential factors associated with sexual violence and sexual homicide. Specifically, the sample of sexual murderers is a nonrandom sample of sexual homicide offenders incarcerated in a federal maximum-security penitentiary in the province of Quebec, Canada. The sample includes offenders who either received their prison sentence between 1994 and 2000 or who were currently serving their sentence between 1994 and 2000. As a result the sample includes offenders who committed their crimes in previous decades (e.g., 1970's and 1980's) onwards. In 1998 all currently incarcerated sexual murderers were contacted and asked to participate in the study. Of the 92 sexual murderers identified, 60 agreed to participate. All other subsequent cases

⁵ All missing values were recoded to reflect the absence of individual behaviours (i.e., no).

of sexual homicide admitted to the penitentiary post 1998 were included in the research project. At the time the data collection ended, there were a total of 85 sexual murderers in the Canadian sample. Sexual murderers who agreed to participate in the study were interviewed using the same interview protocol as sexual aggressors of women.

The United Kingdom sample is comprised of sexual offenders from seven prisons in the United Kingdom between 1998 and 2000 who were awaiting treatment (Oliver, Beech, Fisher, & Beckett, 2007). Data were collected from an interview with the offender and case file the analysis (e.g., police reports, intuitional records). Sexual murderers were identified as: men who had committed a homicide where there was forensic evidence of a sexual element to the killing, the offender later admitted to the sexual element of the crime, or there was a suspected sexual motive to the crime. Suspicion of a sexual motive was determined by investigators and had to meet at least one element of Ressler, Burgess, & Douglas' (1988) definition of sexual homicide: (a) victim's attire or lack of attire, (b) exposure of the sexual parts of the victims body, (c) sexual positioning of the body, (d) insertion of foreign objects into the victim's cavities, (e) evidence of sexual intercourse (oral, anal, or vaginal), and (f) evidence of substitute sexual activity, interest, or sadistic fantasy. Similar to the Canadian sample the United Kingdom sample of sexual murderers is oversampled, nonrandom, and includes offenders who either committed their crime between 1998 and 2000 or who were serving their sentence during the same time frame. It is important to note that whether an offender killed his victim is a measure of lethality in the study. It is argued that the act of actually killing as a measure of lethality allows for the simultaneously assessment of the two competing hypothesis. Specifically, by using death as a measure of lethality it allows for: first, the assessment of crime scene indicators in identifying sexual murderers described in the empirical literature (i.e., those who are successful at killing their victim), and second it potentially identifies situational factors associated with successfully, unsuccessfully, or accidentally killing a victim during a sexual assault. There were no significant differences between the Canadian and United Kingdom samples.

3.3.2. Variables

Crime scene behaviours. Crime scene behaviours associated with lethal outcomes in sexual assaults (i.e., sexual homicide) were selected. Crime scene behaviours were used because they are more objective, less open to interpretation, and do not rely on information from the offender. Only crime scene behaviours supported by empirical research were included in the analyses⁶. All crime scene variables are dichotomous and reflect the presence or absence of a particular behaviour. For all the variables in the study if data were missing it was coded as absent (0). *Level of knowledge between the victim and the offender* (33.3% stranger, 66.7% the offender has seen or spoken to the victim before the offence) reflects whether the offender and the victim knew each other before the offence (Ressler et al., 1986; Langevin et al., 1988; Chéné & Cusson, 2007; Beauregard & Mieczkowski, 2012). Note that “stranger” refers to no prior contact with the victim whereas “has seen or spoken to the victim” refers to friends, family members, acquaintances, and any other previous relationship(s) with the victim. *Use of a weapon* (58.5% no, 41.5% yes) refers to whether the offender used a lethal weapon during the course of the offence (e.g., knife, firearm, blunt object) (Beauregard & Mieczkowski, 2012; Beauregard & Proulx, 2002; Chéné & Cusson, 2007; Mieczkowski & Beauregard, 2010; Salfati & Dupont, 2006). *Use of physical restraints* (86.3% no, 13.7% yes) reflects whether the offender used physical restraints to bind and or restrain his victim (Dietz et al., 1990; Ressler et al., 1986). *Humiliation of victim* (60.2% no, 39.8% yes) refers to whether the offender humiliated his victim during the offence, which includes verbal, physical, or the co-occurrence of verbal and physical humiliation during the crime (Dietz et al., 1990; Healey, Lussier, & Beauregard, 2013; Langevin et al., 1988; Mieczkowski & Beauregard, 2012). *Time spent with victim* (54.7% less than 30 minutes, 45.3% more than 30 minutes) is indicative of the total amount of time between the onset and termination of the offence (Dietz et al., 1990; Langevin et al., 1988; Mieczkowski & Beauregard, 2010). *Mutilation of victim* (91.5% no, 8.5% yes) refers to the whether the victim was mutilated during the crime (Beauregard, Proulx, &

⁶ The crime scene variables used in the study were selected in a two-step process. First, a list of crime scene behaviours specifically related to sexual homicide identified in the empirical literature was generated. Second, the empirically related crime scene variables were crossed referenced with available variables in the Canadian and United Kingdom data sets.

St-Yves, 2007). Note that this item does not include post mortem mutilation. *Variety of sexual behaviours* (73.1% less than three, 26.9% more than three) indicates whether the offender engaged in multiple types of sexual behaviour with the victim during the offence. Studies show that sexual murderers are sexually driven and submit their victims to a wide variety of sexual behaviours including coercive and deviant behaviour (Beauregard & Mieczkowski, 2012; Dietz et al., 1990; Mieczkowski, & Beauregard, 2010).

Covariates of lethal outcomes.

A series of covariates empirically related to lethal outcomes in sexual assaults were analyzed to determine the differential effects of each individual covariate on class membership. The types of covariates include modus operandi characteristics (MO), situational factors, and offender characteristics (Beauregard & Mieczkowski, 2012; Mieczkowski, & Beauregard, 2010).

Modus operandi variables.

Premeditation (45.6% no evidence of premeditation, 54.4% evidence of premeditation)⁷ refers to whether the offender planned his crimes. *Selection of victim* (78.4% no, 21.6% yes) refers to whether the victim was preselected by the offender before the offence. Note that this reflects the fact that the offender had multiple possible targets and chose his victim from a group of possible victims. *Distinct characteristics sought by offender* (87.1% no, 2.9% yes) refers to whether the offender specifically sought out distinct victim characteristics (e.g., physical features or other preferences) to commit his crime. *Time of day the offence was carried out* (74.9% night, 25.1% day) refers to whether the offence was carried out during daytime (i.e., 6 am to 5:59 pm) or night-time (i.e., 6 pm to 5:59 am). *Victim is a prostitute* (92.7% no, 7.3% yes) refers to

⁷ Premeditation refers to a thought process, which manifests itself by preparation and planning. A sexual crime is premeditated when the offender prior to its commission plans it. The premeditation is *structured* when its level of planning is elaborate and involves specific components such as the victim's identity, specific victim characteristics, locations at which the crime will be committed, strategies to commit the crime, et cetera.

whether the victim was known to be a prostitute or was engaged in prostitution activities at the time of the crime.

Situational variables.

Offenders reaction to victim resistance (21.3% noncoercive, 78.7% coercive) refers to whether the offender reacted coercively (i.e., use of threats or violence) to the victim resistance. *Victim resistance – verbal* (90.9% no, 9.1% yes) refers to whether the victim verbally resisted the offenders' attack. *Victim resistance – physical* (49.7% no, 50.3% yes) refers to whether the victim physically resisted the offenders' attack. *Use of alcohol before or during the offence* (42.4% no, 57.6% yes) refers to whether the offender used alcohol before or during the offence. *Use of drugs before or during the offence* (71.6% no, 28.4% yes) refers to whether the offender used drugs before or during the offence.

Offender variables.

Angry during the offence (38.3% no, 61.7% yes) refers to whether the offender was angry during the offence. *Sexually aroused during the offence* (78.9% no, 21.1%) refers to whether the offender was sexually aroused during the offence. *Deviant sexual fantasies* (28.9% no, 71.1% yes) refers to whether the offender had admitted to having deviant sexual fantasies.

3.3.3. Data Analysis

Latent class analysis (LCA) was used to identify groups of violent offenders based on their crime scene behaviours. LCA is a technique that identifies distinct subgroups, types, or categories of individuals using categorical indicators (Collins & Lanza, 2010). Analogous to other latent variable factor models, LCA theorizes that a latent variable is measurable by a series of indicators (Collins & Lanza, 2010). LCA is different from other latent variable techniques in that the latent variables in LCA are categorical. LCA attempts to create mutually exclusive categorical groups that are qualitatively different from one another (Collins & Lanza, 2010). Empirical crime scene indicators of sexual violence were entered into a latent class analysis (LCA) in an attempt to identify discrete categories of sexually violent offenders. A series of criteria

were used to determine the best fit to the data. First, both the Akaike information criterion (AIC; Akaike, 1987) and Bayesian information criterion (BIC; Schwarz, 1978) were used to evaluate the fit of competing models. Both the AIC and BIC are penalized fit statistics. More parsimonious models produce lower AIC and BIC statistics while less parsimonious models have higher AIC and BIC statistics (Collins & Lanza, 2010). Second, classification errors were assessed. Models with lower classification errors are statistically more accurate than models with higher classification errors at predicting group membership. Third, in addition to statistical benchmarks, researchers must also give consideration to the theoretical and empirical interpretation of the model(s). Models producing acceptable fit statistics may not be theoretically or empirically valid. As such, a balance must be found between fit statistics, parsimony and the interpretability of the model. Once a baseline model was established, a variety of covariates were analyzed in order to determine their effect on the latent class model. Given the exploratory nature of the study and the relative low sample size, each covariate was analyzed independently. For each factor an odds ratio (OR) and standard error (SE) is reported. Finally, in an attempt to further understand the classes, the study analyzed the prevalence of nonhomicidal sex offenders and homicidal sex offenders within each of the classes using crosstabs. All LCAs were conducted using LatentGOLD 4.0 (Vermunt & Magidson, 2005).

3.4. Results

The mean age of the offenders in the sample at the time of the interview is 35.4 years (SD = 10.5, range 15 – 78). The vast majority of the sample is Caucasian (85%), the remainder of the sample being divided between those offenders from African descent (9%) and “other” (6%). A slight majority of the sample was single at the time of their offence (54.4%), while 23.2% were in common law, and 10% were married at the time of the offence. The remaining portion of the sample had been in a previous relationship and were either separated (2.6%) or divorced (9.6%).

3.4.1. Latent Class Analysis

According to the AIC and BIC (see Table 7) the two-class, three-class, and four class solutions were an appropriate fit to the data. A series of conditional bootstraps (Bootstrap -2LL Diff) were conducted to test which model was statistically superior (Vermunt & Magidson, 2005). Results of the conditional bootstraps suggested that the three-class and four class models were superior to the two-class model ($p < .001$). Results comparing the three-class solution to the four-class solution were not significant. The nonsignificant conditional bootstrap coupled with similar classification errors (0.18 - 0.19) pointed to few differences between the respective models. However when the item response probabilities of the two classes were investigated further, qualitative differences emerged⁸. Based on the small difference in classification errors and the qualitative differences a four-class model was chosen.

Table 7. Fit indices of baseline latent class models

Fit Indices						
No. of Classes	Likelihood Ratio, G ²	Degrees of Freedom	AIC	BIC	Npar	Classification error
1	195.47	120	2715.03	2741.88	7	0.00
2	129.78	112	2665.34	2722.86	15	0.07
3	90.93	104	2642.50	2730.70	23	0.18
4	74.23	96	2641.80	2760.68	31	0.19
5	60.71	88	2644.27	2793.83	39	0.26

Item-response probabilities can range from 0.0 - 1.0. An item-response of 0.0 indicates that there is no probability that a respondent will provide a given response in a given latent class. Item-response probabilities approaching 1.0 suggest a high likelihood a respondent will provide a given response in a given latent class. In general, item-response probabilities above .65 are considered to be indicative of class membership

⁸ The four-class model resulted in a division of one particular class in the three-class model. This division produced two separate classes which are qualitatively different (see Table 7) The remaining two classes were stable (i.e., item response probabilities and class proportions) in the three-class and four-class models further supporting the decision to adopt the four-class model.

(Collins & Lanza, 2010). Labels of the classes were generated by simultaneously interpreting the item response probabilities (Table 8), the distribution of offender within classes (Table 9), and the effects of covariates on class membership (Table 10). The latter benchmark provided pivotal information regarding the lethality of the offence (i.e., whether the classes were primarily comprised of nonhomicidal or homicidal sex offenders).

Table 8. Item-response probabilities for four-class model

Item	<i>Angry</i> low/moderate lethality (.44)	<i>Situational</i> <i>Precipitated</i> moderate/high lethality (.29)	<i>Sadistic</i> low lethality (.18)	<i>Predatory</i> high lethality (.09)
Level of knowledge between victim and offender				
Stranger	.34	.19	.21	.96
Has seen or spoken to the victim	.66	.81	.79	.04
Use of weapon during crime				
No	.95	.35	.30	.17
Yes	.05	.65	.70	.83
Use of physical restraints				
No	.99	.78	.62	.99
Yes	.01	.22	.38	.01
Humiliation of victim				
No	.68	.76	.02	.82
Yes	.32	.24	.98	.18
Time spent with victim				
Fewer than 30 mins	.72	.56	.26	.25
More than 30 mins	.28	.44	.74	.75
Mutilation of victim				
No	.99	.89	.86	.72
Yes	.01	.11	.14	.28
Variety of sexual behaviours (at least three)				
No	.71	.99	.29	.81
Yes	.29	.01	.71	.19

Table 9. Type of offender cross-tabulated with four-class model

Type of offender	<i>Angry</i> low/moderate lethality	<i>Situational Precipitated</i> moderate/high lethality	<i>Sadistic</i> low lethality	<i>Predatory</i> high lethality
Rapists	71.9% (123)	38.6 % (34)	87.0% (47)	24.1% (7)
Murderers	28.1% (48)	61.4% (54)	13.0% (7)	75.9% (22)
Chi- Square	59.36 (3), p < .001			
Phi	.417, p < .001			

Table 10. Effect of covariates on class membership - four-class model

Covariates	<i>Angry</i> low/moderate lethality	<i>Situational</i> <i>Precipitated</i> moderate/high lethality	<i>Sadistic</i> low lethality	<i>Predatory</i> high lethality	p-value
<u>Modus Operandi</u>					
Premeditation	0.19	5.20 (.64)	2.94 (.44)	3.25 (.57)	p < .01
Selection of victim	1.07	0.93 (1.08)	1.08 (1.10)	33.81 (1.28)	p < .05
Distinct characteristics	0.08	12.18 (1.52)	14.73 (1.33)	181.27 (2.55)	ns
Time of day (during the day)	0.12	7.90 (.48)	13.59 (.52)	8.67 (.65)	p < .001
Victim is a prostitute	0.00	101.49 (2.85)	1.30 (4.00)	23.57 (2.91)	ns
<u>Situational Factors</u>					
Offender reaction to resistance (coercive)	0.00	171.71 (2.83)	4.17 (.52)	11.35 (1.82)	p < .01
Victim resistance - verbal	0.10	9.39 (1.06)	2.49 (1.48)	11.58 (1.05)	p < .05
Victim resistance - physical	0.23	4.34 (.86)	3.89 (.41)	24.04 (1.08)	p < .001
Use of alcohol before or during offence	0.62	1.61 (.37)	1.61 (.40)	7.92 (.92)	p = .07
Use of drugs before or during offence	0.45	2.20 (.52)	3.32 (.47)	4.26 (.63)	p < .05
<u>Offender Characteristics</u>					
Angry during the offence	1.88	0.53 (.47)	2.45 (.43)	20.08 (2.17)	p < .01
Sexually aroused during the offence	-	0.00 (2.85)	0.54 (.43)	1.01 (.66)	ns
Deviant sexual fantasies	0.42	2.37 (.43)	2.06 (.44)	2.15 (.61)	ns

Multinomial logistic regression of MO, situational factors, and offender characteristics. Odds ratios presented. Standard errors in parentheses. Latent class I was used as reference category. All ORs for membership in each class were computed using the *Angry – low moderate lethality* group as the reference category.

* In order to provide more qualitative information about the *Angry – low/moderate lethality* class an ORs was calculated in relation to the *Situational precipitated – moderate/high lethality* class. This was accomplished by taking the 1/OR) of the *Situational precipitated – moderate/high lethality* class. Standard errors were not calculated.

The first class, labeled as the *Angry – low/moderate lethality* sex offenders, constituted 44% of the sample. Offenders in this class predominantly offend against a person they know (.66) and do not use a weapon during the course of their offence (.05). Offenders in this class do not use physical restraints to confine their victims (.01) or

spend extended amounts of time with their victim (.28). Additionally, the results suggested that the *Angry – low/moderate lethality* offender is unlikely to be sexually motivated during the attack (i.e., variety of sexual behaviours) (.29) or driven to humiliate their victim (.32). Offenders in this class do not mutilate their victims (.01). The majority of offenders in the *Angry – low/moderate lethality* group are nonhomicidal sex offenders (71.9%, n = 123).

The second class, the *Situational Precipitated – moderate/high lethality* sex offenders, represent 29% of the sample. These offenders are remarkably similar to the *Angry – low/moderate lethality* offenders in many respects. Typically *Situational Precipitated – moderate/high lethality* offenders tend to choose victims they know (.81) and are unlikely to use physical restraints (.22). There is little evidence that their offence is sexually motivated (.01) although they are somewhat likely to humiliate their victims (.24). Interestingly, very few offenders mutilate their victims (.11). Based on the item response probabilities, the primary difference between the *Angry – low/moderate lethality* offender group and the *Situational Precipitated – moderate/high lethality offender* group is that a weapon is present during the offence of the latter (.65). The majority of offenders in the *Situational Precipitated – moderate/high lethality* group are homicidal sex offenders (61.4%, n =54).

The third class, labeled as the *Sadistic – low lethality* offenders accounted for 18% of the sample. *Sadistic – low lethality* offenders were likely to use a weapon during their offence (.70). As expected, these offenders are characterized by high levels of humiliation (.98) and are the most sexually driven of the classes (i.e., variety of sexual behaviours) (.71). *Sadistic* offenders are unlikely to mutilate their victims (.14) and almost exclusively target victims they know (.79). They may use physical restraints (.38), which could be related to the fact that these offenders are likely to spend more than 30 minutes with their victims (.74).. The vast majority of offenders in the *Sadistic – low lethality* group are nonhomicidal sex offenders (87.0%, n =54).

The fourth class, the *Predatory – high lethality* offenders constitutes the smallest proportion of the sample (9%). These offenders target strangers almost exclusively (.96) and demonstrate high levels of weapon use during their crime (.83). Although the level of

mutilation of these offenders is low (.28), it is noteworthy that it is the highest of all classes. Similar to the *Sadistic – low lethality group*, the *Predatory – high lethality* offenders are very unlikely to use physical restraints (.01) but are very likely to spend more than 30 minutes with their victim (.75). These offenders are unlikely to either humiliate their victim (.18) or engage in a variety of sexual with their victim (.19). The majority of offenders in the *Predatory – high lethality* group are homicidal sex offenders (75.9%, n = 22).

3.4.2. Covariates of Latent Class Membership

Both the *Angry – low/moderate lethality* and the *Situational Precipitated – moderate/high lethality* groups demonstrate mixed elements of planning. As can be seen in Table 10, the *Situational Precipitated – moderate/high lethality* group is more likely to premeditate their crimes (OR = 5.20, $p < .01$) but is less likely to select a specific victim (OR = 0.93, $p < .05$). Situational factors also permit further distinction between these two types of offenders. There is very little victim resistance in the *Angry – low/moderate lethality* group while the victims of *Situational Precipitated – moderate/high lethality* group resists both verbally (OR = 9.39, $p < .05$) and physically (OR = 4.34, $p < .001$). *Situational Precipitated – moderate/high lethality* offenders are likely to respond to this resistance with physical coercion (OR = 171.71, $p < .01$). Interestingly, the *Situational Precipitated – moderate/high lethality* offenders are less likely to report being angry during the offence (OR = 0.53, $p < .01$) suggesting that other situational factors may contribute to the offender's rage. The *Situational Precipitated – moderate/high lethality* offenders are also more likely to use drugs before or during the offence (OR = 2.20, $p < .05$).

The *Sadistic – low lethality* offenders show increased levels of premeditation (OR = 2.94, $p < .01$) and victim selection (OR = 1.08, $p < .05$) suggesting strong elements of planning. Victims of the *Sadistic – low lethality* offenders are likely to resist verbally (OR = 2.49, $p < .05$) and physically (OR = 3.89, $p < .001$). In response to this resistance, the *Sadistic – low lethality* offenders are likely to use physical coercion (OR = 4.17, $p < .01$). This type of offender is also more likely to use drugs before or during the offence (OR =

3.32, $p < .05$). As expected, the *Sadistic – low lethality* offender is angry during the offence (OR = 2.45, $p < .01$).

There are increased levels of premeditation (OR = 3.25, $p < .01$) and strong evidence that the *Predatory – high lethality* group chooses a specific victim (OR = 33.81, $p < .05$). The victims of the *Predatory – high lethality* group are more likely than any other group to resist verbally (OR = 11.58, $p < .05$) and physically (OR = 24.04, $p < .001$) suggesting that these victims fought extensively in response to the offender's actions. The notion of the excessive violence is further reinforced by the fact that the *Predatory – high lethality* offenders are likely to respond to victim resistance with physical coercion (OR = 11.35, $p < .01$). *Predatory – high lethality* offenders are likely to be under the influence of drugs before or during the offence (OR = 4.26, $p < .01$) and are likely to be angry during the offence (OR = 20.08, $p < .01$).

3.5. Discussion

The discussion of the studies findings will be addressed in two sections. First, a discussion of the offender profiles of sexually violent men and how the findings relate to the empirical literature on sexual homicide. Second, using specific offender profiles the study will discuss the impact the findings have on both the distinct offender, and differential outcome of sexual assault hypotheses.

3.5.1. Offender Profiles of Sexually Violent Men

Angry – low/moderate lethality offender

The *Angry* offenders do not display any of the crime scene behaviours empirically associated with sexual homicide. There was no evidence to suggest that these offenders were sadistically or sexually motivated to commit murder. Nor was there compelling evidence to suggest that this type of offender engaged in extensive planning (i.e., premeditation or was searching for distinct victim characteristics). What is evident from the analysis is that anger is the defining feature of this group. Although other groups in the study displayed anger during their crime, the anger expressed by *Angry*

offenders is not the result of situational factors such as physical or verbal resistance by the victim. Rather, a variety of contextual factors may be more important in determining why some *Angry* offenders kill their victim while others do not. Beauregard and Mieczkowski (2012) showed that various combinations of contextual factors better predicted lethal outcome than others. Although some combinations are particularly more deadly than others (e.g., victim forced to perform a sexual act on the offender coupled with the victim being a stranger), there are several common factors. Specifically, victims are likely to be killed if their assailant is physically or sexually coercive, if the offender is intoxicated at the time of the offence, if the offender is a stranger to the victim, and if there is a weapon present (Beauregard & Mieczkowski, 2012). The profile of the *Angry* offender lacks virtually all of the previously mentioned risk factors and is the second least likely offender to kill their victim. Yet, despite killing comparatively fewer people than other offender types, a little over a quarter (28.1%) of the *Angry* offender group killed their victims. Given the angry and violent nature of these offenders, it may be likely that many of the homicides in this offender group may be accidental and the result of an escalation in violence that was meant to injure but not kill the victim (Wolfgang & Ferracuti, 1967). Alternatively the homicide may have been instrumental, the goal being to remove the witness of a sexual assault (Beauregard & Proulx, 2002; Beech et al., 2006).

Situational Precipitated – moderate/high lethality

Although *the Situational Precipitated* offender is the second next most likely to kill their victim, their crime scene behaviours often contradict much of the empirical evidence on sexual homicide. The *Situational Precipitated* offender is unlikely to offend against strangers, instead targeting victims that he knew. If these offenders did kill their victim there was little evidence that the homicide was sexually sadistic (i.e., elements of humiliation or mutilation). *Situational Precipitated* offenders show elements of premeditation and planning, which is often associated with sexual homicide. However, the planning exhibited by these offenders may involve planning to sexually assault rather than kill, as suggested by the strong association between contextual factors and the *Situational Precipitated* offender group. The *Situational Precipitated* offenders are not angry at the onset of the offence but become increasingly angry when the victim resists the sexual assault. This escalating anger, coupled with a weapon being present and the

offender's substance use at the time of the offence, appears to be key contributing factors in the demise of the victim. The findings are bolstered by empirical research demonstrating that interactions between the offender and the victim, and the presence of a weapon, significantly increase the likelihood of a lethal outcome (Felson & Messner, 1996; Felson & Steadman, 1983; Wolfgang & Ferracuti, 1967). For example, the presence of a weapon and whether the offender is intoxicated has been shown to increase the likelihood that a sexual assault results in homicide (Beauregard & Mieczkowski, 2012). It has been demonstrated that the use of alcohol alone increases the likelihood of lethal outcomes in sexual assaults (Langevin, 2003; Ouimet, Guay, & Proulx, 2000). It is believed that the interaction of these key contextual factors contributed to the demise of the victim. Furthermore, the similarities between contextual factors of sexual and nonsexual homicides suggest that many of the same processes that underlie nonsexual homicides may also be similar for sexual homicides. Whether the victim lives or dies may be determined by access (or choice) to lethal weapons (e.g., guns or knives) versus non-lethal weapons (e.g., weapons other than guns or knives) (see Chan & Heide, 2008; Chan, Heide, & Myers, 2013). Although the study did not investigate the offenders' use of lethal/non-lethal weapons, future research may investigate the type of weapon used and its relation to lethal outcome.

Sadistic – low lethality offenders

In many ways the *Sadistic* offender group resembles the typical sadistic offender described in the empirical literature (see Marshall & Kennedy, 2003). *Sadistic* offenders are sexually driven to commit their crimes and are more likely to force their victim to engage in a variety of sexual acts and more likely to humiliate them. These results are consistent with the empirical literature on sexual sadism and unsurprising given that humiliation and varied sexual acts are considered essential features of sexual sadism (American Psychiatric Association, 2000; Dietz et al., 1990; Krafft-Ebing, 1886; Marshall, Kennedy, Yates, & Serran, 2002; Ressler et al., 1990). Although the *Sadistic* group does not tend to use physical restraints, it is worth noting that these offenders spend long periods of time with their victim. It has been suggested that the use of physical restraints is an expression of the offender's need to exert control and power over his victim (Marshall & Kennedy, 2003). It is plausible that spending excessive amounts of time with the victim may be a proxy of the offender's need for control. *Sadistic* offenders may bring

their victims to isolated locations (e.g., basements or remote areas such as cabins) in order to exert more control over their victims. Similarly, excessive amounts of time may afford the offender with ample opportunity to carry out his intricate deviant sexual fantasies.

Perhaps one of the most interesting findings is the *Sadistic* offender's use of a weapon during the crime. Previous empirical research has suggested that the presence of a weapon increases the likelihood of a lethal outcome (Felson & Messner, 1996). Yet the *Sadistic* offenders in the sample are the least likely to kill their victims despite their reliance on a weapon. There may be at least three possible reasons for this finding. First, similar to the *Sadistic* offender group, the type of weapon used during the course of the crime may be a factor in whether the offender kills his victim. Felson and Messner (1996) demonstrated that the use of a knife or gun during the course of an offence is directly related to lethal outcome, whereas blunt objects and other weapons (i.e., weapons other than a knife or a gun) were negatively related to lethal outcomes. It may simply be the case that the *Sadistic* offenders who killed their victims had access to lethal weapons, whereas the *Sadistic* offenders who did not kill their victim used non-lethal weapons. Second, *Sadistic* offenders may have chosen non-lethal weapons because there was no intent on killing the victim. The *Sadistic* offender does in fact demonstrate high levels of planning and premeditation, but perhaps the planning involved using a weapon to gain compliance rather than killing the victims. This notion is further supported by the lack of evidence for the use of physical restraints during the crime by *Sadistic* offenders (a feature often used to identify sexual sadists) but spending long periods of time with their victim. Third, *Sadistic* offenders may have chosen a nonlethal weapon simply because nonlethal weapons are less likely to kill their victims. *Sadistic* offenders likely enjoy the fear a weapon produces but want to prolong their experience with the victim. In this sense, *Sadistic* offenders may have chosen less lethal weapons because they could inflict more pain and suffering for longer periods of time without killing their victims.

The Predatory – high lethality

The profile of the *Predatory* offender in many respects is consistent with much of the empirical literature describing sexual homicide. Offenders in this group almost

exclusively target strangers (Beech et al., 2006; Ressler et al., 1986), carefully plan their crimes (Ressler et al., 1986), use a weapon (Beauregard & Proulx, 2002), and almost exclusively kill their victims. These results may reflect an offender with a well-thought out behavioral script that likely included killing their victim (Beauregard, Proulx, Rossmo, Leclerc, & Allaire, 2007). However, there is little evidence to suggest that the *Predatory* offender is driven by a need to satisfy sexually sadistic fantasies. This is surprising given the abundance of empirical literature that suggests a strong link between sexual homicide and sexual sadism (Chan & Heide, 2009). There are several potential explanations for this finding. Perhaps the lack of association between humiliation and the *Predatory* offender group is the result of measurement error. The majority of offenders in the *Predatory* group kill their victim and as such instances of humiliation may have gone unnoticed because the victim is dead. Although this may potentially explain why humiliation is not a predominant trait of the *Predatory* offender group, it does not explain why mutilation, a behaviour often cited as an important marker of sexual homicide, is not a defining trait of this group. Beauregard and Proulx (2002) found that humiliation and mutilation were associated with only sexually sadistic murderers. The results of the study call into question the importance of the relationship between sexual sadism and sexual homicide and point to multiple pathways of sexual homicide.

3.5.2. Sexual Murderer as a Distinct Type of Sex Offender Hypothesis

The study found evidence for four distinct types of sexually violent offenders and interestingly, there was variation in the lethality rates between the four groups. Varying in both lethality and factors often associated with sexual homicide (e.g., MO, situational, and offender characteristics) the four groups point to heterogeneity in sexual homicide. Yet, despite these differences, in many ways the *Predatory* offender resembles the organized offender identified by the FBI (Ressler et al., 1986), the sadistic offender identified by Beauregard et al. (2002; 2007), and the calculated pain offender identified by Beech and colleagues (2006). The *Predatory* offender set out to kill his victim sexually, planned his assault, and picked stranger victims perhaps to avoid detection. Situational factors were strongly associated with this type of offender but were

overshadowed by his extensive planning, which involved selecting a victim with specific characteristics. The results suggest that the escalation in violence by the *Predatory* offender to his victim's resistance may have been instrumental (i.e., to accomplish his pre-established goal of raping and killing his victim). Unfortunately the findings do not suggest whether the *Predatory* offender's motive was to kill in order to become sexually aroused (i.e., a lust murderer). However, the presence of a *distinct* type of *Sadistic* offender suggests that the *Predatory* offender's motive may not have been to kill his victim in a sadistic manner (i.e., the offender sexually enjoyed the violence), but rather that he planned to rape and murder his victim.

Previous research on sexual homicide has established a clear link between sexual homicide and sexual sadism (Chan & Heide, 2009). Although the study identified a sadistic offender, very few *Sadistic* offenders killed their victims (only 13%). The *Sadistic* offender also displayed many of the typical behaviours associated with sexual sadism (see Marshall & Kennedy, 2003). Particularly, there was evidence that the *Sadistic* offender in the study was sexually motivated to commit his crimes and did so in a sexually sadistic manner. For example, the *Sadistic* offender committed a wide variety of sexual acts on his victim, was the most likely to humiliate his victim, and spent excessive amounts of time with his victims. It appears as though the *Sadistic* offender's violence was an integral part of the sexual assault (i.e., sexually arousing) and instrumental rather than expressive. If the *Sadistic* offender was sexually aroused by excessive violence (i.e., homicide) then the prevalence of homicide within this group would have been higher. In many respects this finding is in line with the larger body of research on sexual sadism, which suggests that sexually sadistic offenders enjoy the suffering of their victims. Keeping victims alive maximizes this suffering (Marshall & Kennedy, 2003).

The fact that the group of *Sadistic* offenders were the least likely to have killed their victims is contradictory to the large body of research suggesting that sexual sadism is the driving force behind sexual homicide (Dietz et al., 1990; Langevin, 2003; Ressler et al., 1986) or an essential feature for certain types of sexual murderers (Beauregard & Proulx; 2002; Beech et al., 2006). A possible explanation of this discrepancy may be explained by recent research suggesting that sexually sadistic behaviours lie on a

continuum (Marshall & Hucker, 2006; Mokros, Schiling, Eher, Nitschke, 2012; Nitschke, Osterheider, & Mokros, 2009). The more sexual pleasure an individual garners from violence the higher the individual lies on the continuum. The *Sadistic* offenders in the sample who killed their victims may be severe sexual sadists who are sexually aroused by inordinate amounts of violence or murder itself. In fact, these results are similar to Morkros et al. (2012) and Nitchke et al. (2009) who found that only a small number of diagnosed sexual sadists displayed extreme levels of sexual violence.

3.5.3. Sexual Homicide as a Differential Outcome of Sexual Assaults Hypothesis

As discussed previously, there was evidence for two groups of sexually violent offenders whose lethality appears to be influenced by contextual factors rather than qualitative or typological differences – the *Angry* offender and the *Situational Precipitated* offender. Both these types of offenders support the differing outcome in sexual assaults hypothesis because both types of offenders lacked many of the key qualitative characteristics that have differentiated sexual murderers and nonsexual murderers. There is little evidence that the *Angry* offender had any of the typological factors associated with sexual homicide (e.g., sexual sadism, premeditation, selection of specific victim characteristics) nor was there evidence that situational factors were important in determining the lethality of the assault (e.g., access to lethal weapons, victim resistance, alcohol/drugs). The findings suggest that the intent of the *Angry* offender was to sexually assault his victim but due to his high level of anger experienced during the event he may have accidentally killed his victim. The “accidental hypothesis” is strengthened by the evidence suggesting that both sexual and nonsexual homicides may be influenced by a variety of contextual factors such as access to medical services (Doerner & Spier, 1986, Myers, Chan, & Vo, 2009), and the dynamics of the assault itself (i.e., various situational;; factors) (Harries, 1990). It is suspected that similar contextual factors may have influenced whether a sexual assault ended with a lethal outcome, but were unable to address these specific factors in the current study.

As the name suggests, the lethality of the *Situational Precipitated* offender is highly influenced by the context of the sexual offence. His crime does not appear to be

motivated by anger; instead he appears to become enraged by the victim's resistance. Similar to the *Angry* offender, the intent of the *Situational Precipitated* appears to be sexual assault and not murder. There is an absence of sexually sadistic traits and the *Situational Precipitated* offender does not have as high a level of premeditation and planning as the *Sadistic* and *Predatory* offender. The most influential factors of the *Situational Precipitated* offender are situational factors, such as the presence of alcohol and drugs, victim resistance, and the presence of a lethal weapon. The results are similar to previous research on both nonsexual homicide and sexual homicide that have found that the presence of a lethal weapon increases the likelihood of a lethal outcome in violent crimes (Beauregard & Mieczkowski, 2012; Felson & Messner, 1996; Mieczkowski & Beauregard, 2010). It should be noted that the use of a lethal weapon was an important factor in the two groups of offenders who were the most likely to kill their victims: the *Predatory* offender and the *Situational Precipitated* offender. These findings are very similar to Chan and Heide (2008) who demonstrated that lethal weapon use is an important factor in sexual homicide.

3.6. Conclusion

The findings provided concurrent evidence for both the lethal outcome crime during a sexual assault hypothesis and the sexual murderer as a distinct offender hypothesis. Specifically, the study found evidence that sexual murderers do not constitute one homogenous group of offenders. Instead, the study found evidence of heterogeneity with varying degrees of lethality. Considering sexually violent offenders who killed their victims as one "special" group of sex offenders potentially constitute a mistake that could mask the different dynamics involved in the offending process of these offenders. The *Predatory* offender intends to kill his victim, has a plan, and carries out his plan in a sexually violent manner. The *Sadistic* offender takes pleasure in the violence he inflicts on his victims and although he shares many of the *Predatory* offenders traits, there is little evidence that he intends on killing his victim (although in some cases the high level of violence inflicted on the victim and the pleasure gained from it may result in the accidental death of the victim). Certain contextual factors were important to understand the lethal outcome of a sexual assault. Specifically, the

presence of a lethal weapon was important in the escalation from sexual assault to sexual homicide. The presence of a lethal weapon during a sexual assault may be a marker of the dangerousness of a sexual assault and may also increase the likelihood of lethality. There is evidence that the presence of a weapon is an important factor for both offenders who intend on killing their victims and for offenders who do not intend on killing their victims. Together the results of this study point to the heterogeneity of sexual murderers and the importance of contextual factors to sexual homicide.

However, such a study is not without limitations. First, the number of crime scene indicators was relatively small, which may have influenced the findings. Second, the current author did not have access to information about medical services and the influence on lethality. Therefore, it is possible that the current author missed cases of sexual assaults where the original intent of the offender was to kill the victim, but because of access to life saving services, the victim survived. Future studies should try to incorporate such contextual factors in order to examine their impact on the lethality of sexual assaults.

Chapter 4.

Study Three – The Impact of Persistent Deviant Sexual Interests And Persistent Low Self-Esteem on Sexual Homicide: Exploring Theoretical Models of Sexual Homicide

4.1. Abstract

The majority of the scientific literature on sexual homicide has posited the sexual murderer as a unique type of offender who is currently sexually deviant and suffering from low self esteem. Although there is a general consensus that the sexual murderer has low self-esteem, there is considerable debate as to the nature and importance of deviant sexual interests. For instance, some theorists suggest that specific sexually deviant behaviours (e.g., sexual sadism) are important elements, while others assert that deviant sexual interests in general (i.e., paraphilias) are crucial to sexual homicide. Moreover, many of the theoretical models of sexual homicide tout the importance of deviant sexual interests in general while failing to distinguish between deviant sexual interests in general and sexually sadistic interests. Using a sample of violent sexual offenders who have either physically injured or killed their victim ($n = 229$), the current study investigates the impact of persistent deviant sexual interests and low self-esteem on sexual homicide while controlling for situational factors associated with sexual homicide, and crime scene variables associated with sexual sadism. Findings suggest that both persistent deviant sexual interests and persistent low self-esteem are important predictors of sexual homicide. Interestingly, neither crime scene behaviours associated with sexual sadism nor situational factors were important factors in the model. These findings suggest that there is a group of sexual murderers with low self-esteem who are driven by deviant sexual interests and may kill to satisfy their deviant sexual interests.

4.2. Introduction

The empirical literature on sexual homicide suggests that sexual homicide is a heterogeneous phenomenon influenced by both situational factors during a sexual assault (Beauregard & Mieczkowski, 2012; Mieczkowski & Beauregard, 2010) and deviant sexual interests (Burgess, Hartman, Ressler, Douglas, & McCormack, 1986; Ressler, Burgess, & Douglas, 1988). However, the majority of the scientific literature on sexual homicide has posited the sexual murderer as a unique type of offender who is sexually deviant. Specifically, researchers have suggested that a sexual preference for violence, often sexual sadism, is responsible for the offender's desire to kill in a sexual manner (Burgess et al., 1986; Hickey, 1997; Ressler et al., 1988). This violent sexual preference is thought to be represented by deviant and persistent sexual fantasies. In fact, many of the prominent models of sexual homicide, such as the Federal Bureau of Investigation's Motivational Model, clearly state that deviant sexual fantasies and the violent sexual preferences are important factors in sexual homicide (Burgess et al., 1986; Ressler et al., 1988). However, despite the general agreement that deviant sexual interests impact sexual homicide, scholars debate on the type of deviant sexual interests most likely to underlie the phenomenon of sexual homicide. For instance, some theorists suggest that specific sexually deviant behaviours (e.g., sexual sadism) are important elements (Burgess et al., 1986; Douglas et al., 1988; Hickey, 1997) while others assert that deviant sexual interests in general (i.e., paraphilias) are crucial to sexual homicide (Arrigo & Purcell, 2001). Given the consistent agreement that deviant sexual preferences have an impact on the act of sexual homicide, this study evaluates the impact of the core features (e.g., deviant sexual preferences and low self-esteem) of existing models of sexual homicide while controlling for empirical factors related to sexual homicide (e.g., situational factors, crime scene behaviours).

4.2.1. Models of Sexual Homicide

The scientific study of sexual homicide has increased researchers' knowledge of the factors associated with sexual homicide. As mentioned previously, early models of sexual homicide almost exclusively suggested that deviant sexual preferences were one

of the main factors in the development of sexual homicide. Since then many factors, such as developmental factors (Nicole & Proulx, 2007), pre-crime factors (Chéné & Cusson, 2007; Langevin, 2003), and situational factors (Beauregard & Mieczkowski, 2012; Mieczkowski & Beauregard, 2010) have all been shown to be empirically related to sexual homicide. Collectively the empirical literature on sexual homicide suggests that sexual homicide is a heterogeneous crime, meaning that it is impacted by a variety of factors. Heterogeneity notwithstanding, there remains a group of sexual murderers who appear to be driven at the very least by a deviant sexual preference for violence (Healey, Beauregard, Beech, & Vettor, in press). As such, this paper addresses only those models of sexual homicide that state that deviant sexual preferences as one of the main influences on sexual homicide – The Motivational Models of Sexual Homicide (Burgess et al., 1986), The Trauma Control Model (Hickey, 1997), and the Integrated Model of Paraphilic Interests (Arrigo & Purcell, 2001).

The Motivational Model of Sexual Homicide

Developed by the Federal Bureau of Investigation (FBI), The Motivational Model of Sexual Homicide is often considered one of the first empirical models of sexual homicide (Burgess et al., 1986; Douglas et al., 1988). Based on a small sample of 36 serial sexual murderers, the model is composed of five interacting factors (ineffective environment, child and adolescent formative events, patterned responses to these events, resultant actions' towards others, and the killer's reactions to his killings). According to the FBI model, sexual murderers come from criminogenic environments where there is a lack of bonding between the offender and his caregiver. The caregiver's neglect, abuse (physical and sexual), and inconsistent parenting, produce a child who is hostile and socially isolated. Due to feelings of isolation, the offender retreats into a world of deviant sexual fantasies, which are thought to be a mechanism by which the budding offender regains control of his life. The model predicts that the fantasy life of the child is sexually violent and has themes of power, dominance, and revenge. Consequently, the child is unable to develop prosocial bonds and becomes increasingly dependent on his deviant sexual fantasies for both his sexual and emotional needs. The rich fantasy life of the offender becomes increasingly ineffective at satisfying his needs, and the offender begins to act out by committing violent crimes such as arson and animal

abuse. An escalation in violence comes to a head if/when he experiences a significant stressor (i.e., interpersonal conflict) and releases his rage in the form of sexual homicide. In the FBI model, deviant sexual preferences are the direct result of ineffective bonding with the offender's caregiver and the resulting social isolation.

The Trauma Control Model

The Trauma Control Model (TCM) is perhaps the most prominent model of sexual homicide (Hickey, 1997). The TCM assumes that there are predispositional factors that contribute to the development of serial murderers. Hickey (1997) does not suggest that any one predispositional factor(s) is more responsible than others for the escalation to serial homicide. Instead, broad factors such as sociological, psychological, biological, environmental, or a combination thereof are thought to be the foundation of the sexual murderer. Individuals with predispositional factors, and who also experience traumatization(s) (e.g., unstable home life, death of a parent, physical abuse, corporal punishments, or any other negative event), are at a greater risk of escalating to sexual homicide. According to Hickey (1997), experiencing a trauma while having one (or many) predispositional factors prompts a triggering mechanism that results in an inability to cope with stress (Hickey, 1997). Hickey (1997) further hypothesizes that the effect of trauma(s) is exponential in that the more the offender experiences, the more likely he is to become violent and aggressive. However, Hickey does not speculate as to whether any one combination or various combinations of experienced trauma (e.g., sexual, physical, and psychological abuse) are more likely to contribute to the development of serial killers.

The traumas experienced at a young age develop into feelings of low self-esteem, inadequacy, and helplessness. The combination of low self-esteem and trauma(s) cause the child to psychologically disassociate because he does not have the skills to cope with the pain and negative feelings. Because they are unable to effectively cope with their negative feelings, a child develops sexually violent fantasies. Although it is unclear as to the exact mechanism of how and why sexually violent fantasies develop, rather than nonviolent fantasies, the TCM predicts that the offender's fantasies will escalate and become increasingly violent. The themes of these violent fantasies are thought to reflect the offender's need for complete control over another person. He will

dominate and humiliate his victim, which is thought to be a manifestation of his original childhood trauma(s). These fantasies serve as trauma reinforcers in that when a problem is experienced externally, the offender will retreat into his fantasy world (where he has complete control) and find relief in his violent fantasies. Facilitators serve to concurrently increase the offender's feelings of low self-esteem/violent fantasies, and disinhibit the offender causing him to act on his fantasies (i.e., commit homicide). Hickey suggests that facilitators can be alcohol/drugs, pornography, or any other stimuli that the offender finds exciting.

The Integrated Model of Paraphilias

The Integrated Paraphilia Model (IPM) of sexual homicide proposed by Arrigo and Purcell (2001) states that sexual homicide (i.e., lust murder) is a paraphilia and that sexual murderers acquire this deviant sexual preference from a complex process of individual predispositions, emotional states, fantasies, feedback loops, and operant conditioning. The IPM is an extension of Hickey's Trauma Control Model and the FBI's Motivations Model of Sexual Homicide. Specifically, The IPM builds on the common assumption that sexual murderers have some sort of predisposition to kill sexually, and come from criminogenic families where violence and sexual abuse are commonplace. These criminogenic environments produce children who are unattached to their caregivers, become severely socially isolated, and have low self-esteem. These factors combined cause the young man to develop violent sexual fantasies as a means of regaining self-esteem and sense of self. Arrigo and Purcell (2001) emphasize the developments of paraphilias on top of existing predispositional factors and criminogenic families and suggest that fantasy and compulsive masturbation are essential features in the development of paraphilias in general and the development of lust murder specifically (Arrigo & Purcell, 2001). The offender's compulsive masturbation, together with the unique risk factors outlined in all sexual homicide models (predispositional factors, formative development, low self-esteem, fantasy development), reinforce the offender's paraphilic fantasies and desire to kill sexually (Arrigo & Purcell, 2001).

Although factors such as predispositional factors and formative development precede low self-esteem in sexual homicide models, it is impossible to measure their effect on sexual homicide because they are not unique to sexual homicide, and specific

hypotheses were not made clear in the original models (e.g., the use of broad predispositional factors such as mental illnesses). Because of this situation, the current study will address the commonalities that can be empirically tested: low self-esteem and the presence of persistent deviant sexual interests.

4.2.2. Self-Esteem and Sexual Violence

The relationship between low self-esteem and sexual offending is complex (Marshall, Anderson, & Champagne, 1997). Most of the empirical research on the relationship between sexual offending and self-esteem adopt an attachment theoretical framework (Marshall & Eccles, 1993; Marshall et al., 1997; Marshall, Hudson, & Hodgkinson, 1993). This framework focuses on the early bonding between caregiver and child and assumes that differential types of attachment experienced in childhood serve as templates for future relationships and sense of self/self-esteem (Bowlby, 1969, 1973, 1980)⁹. Consequently, children who form strong emotional bonds with their caregivers are likely to develop a positive self-esteem and self-worth while children who do not develop adequate bonds with their caregivers are likely to develop a low self-esteem and a low sense of self-worth. A sense of low self-esteem has been linked to behaviours commonly seen in sex offenders such as social awkwardness, an increase in the perceived likelihood of being rejected and or humiliated, social isolation, and low levels of empathy (Marshall et al., 1997).

Given the empirical link between low self-esteem and common negative behavioral traits in sex offenders, several theorists hypothesized that self-esteem is important in explaining child molestation (Finkelhor, 1984), rape (Groth & Birnbaum, 1979), the development of paraphilias (Arrigo & Purcell, 2001; Purcell & Arrigo, 2006),

⁹ An in-depth discussion of child caregiver attachment styles is beyond the scope of this work. For the purposes of this study attachment style refers to: (1) secure – warm parent who is sensitive to their children's needs; (2) Avoidant – expressing few if any feelings of love or warmth to their children; (3) Anxious-ambivalent – little or no support or encouragement for their children (Ainsworth, Blehar, Water, & Wall, 1978; Bell & Ainsworth, 1972). According to Marshall et al. 1993, both the Avoidant and Anxious-ambivalent types are more likely to produce low self-esteem. Please note this typology was used because it was explicitly used in Marshall et al.'s theory.

and sexual homicide (Arrigo & Purcell, 2001; Hickey, 1997; Purcell & Arrigo, 2006). Moreover, low self-esteem is a prominent factor in general theoretical models of sexual offending and sexual violence (Marshall & Barbaree, 1990; Marshall, et al., 1997; Marshall & Eccles, 1993; Marshall, et al., 1993a; Marshall et al., 1993b). The theoretical mechanism by which self-esteem affects sexual offending is fairly consistent across models and is thought to influence the offender's empathy (or the lack thereof) and the development of deviant sexual fantasies through operant conditioning (Marshall et al., 1993a; Marshall & Eccles, 1993). Marshall and colleagues (1993a, 1993b) speculate that inadequate bonding between child and caregiver produces low self-esteem, which in turn produces individuals who are socially isolated, lonely, angry, and resentful. Because individuals with low self-esteem have never had their emotional and/or sexual needs met, they become focused on satisfying their own needs. This chronic self-centered focus is thought to produce deficits in an offender's ability to empathize with their victims.

An interesting and often overlooked aspect of Marshall et al.'s (1993a; 1993b) theory of the effects of self-esteem on sexual offending is the concept of sexual substitution and the subsequent effect on deviant sexual fantasies. Marshall and colleagues (1993a; 1993b) assert that because low self-esteem increases the fear of humiliation and rejection, sex offenders will often rely on sexual fantasies to meet their sexual needs during adolescence. According to the authors, deviant sexual fantasies place no demands on the confidence of the individual and as a result, may be used during masturbation, thereby initiating a conditioning process. Consequently, he becomes conditioned to his deviant sexual preference and chooses victims that are nonthreatening, easily controlled, and submissive in order to fulfill this deviant sexual preference. This method of sexual substitution is important to the offender as it allows the offender to satisfy a need (i.e., emotional or sexual) without the fear of being humiliated and or rejected and further damaging an already fragile self-esteem. There is empirical evidence to support the process of sexual substitution. In particular, scholars have demonstrated that certain types of sex offenders, mainly child molesters, will offend against children not because they have a sexual preference for children, but because they are unable to form prosocial relationships with age appropriate partners (Marshall et al., 1997). Many models of sexual aggression either directly or indirectly stress the importance of sexual substitution. For instance, sexual substitution has been used to

explain offences against children (Finkelhor, 1986), explosive or misplaced anger in rapists (Groth & Birnbaum, 1979; Knight & Prentky, 1990), sexual proclivities in serial murderers (Arrigo & Purcell, 2001; Burgess et al. 1986; Hickey, 1997; Leyton, 1986; Purcell & Arrigo, 2006), and sexual proclivities in nonserial sexual murderers (Beauregard, Proulx, & St-Yves, 2007).

Interestingly, Marshall et al. (1993b) suggest two causal mechanisms by which bonding, self-esteem, and sexual substitution result in sexual offending. The first pathway is thought to be the prototypical pathway and suggests that sexual offenders have strong need for love and intimacy but are unable to achieve these goals in a prosocial way. As such, sexual offending is the direct result of choosing submissive and or easily controlled victims (i.e., children) or engaging in coercive or violent behaviour (i.e., sexual assault). Marshall et al., (1993b) hypothesize that a second pathway may be the result of insecure attachments and low self-esteem coupled with a biological propensity towards high rates of sexual expression. The authors suggest that although this pathway may be rare, it may potentially account for the relatively few offenders who are sexually aroused by deviant sexual preferences involving severe sexual violence (i.e., sexual homicide). Although the second pathway is theorized to be atypical, it has far-reaching implications for sexual homicide models. Specifically it assumes that there is an independent effect of a biological propensity to offend in a violent sexual manner (i.e., persistent deviant sexual preferences) and low self-esteem (i.e., individuals who are socially isolated, angry, with little empathy).

4.2.3. Deviant Sexual Fantasies and Sexual Homicide

Deviant sexual fantasies are an important theoretical factor in sexual homicide (Arrigo & Purcell, 2001; Brittain, 1970; Burgess et al., 1986; Chan & Heide, 2011; Dietz, Hazelwood, & Warren, 1990; Grubin, 1994; Hickey, 1997; Langevin, Lang, & Curnoe, 1998; MacCulloch, Snowden, Wood, & Mills, 1983; Purcell & Arrigo, 2006). Specifically, scholars have suggested that the deviant sexual fantasies of sexual murderers reflect their deviant sexual preference for violence and other paraphilias (Arrigo & Purcell, 2001; Burgess et al., 1986; Hickey, 1997; Purcell & Arrigo, 2006). Much of the scientific literature on sexual homicide and deviant sexual fantasies has assumed that sexual

murderers are sexually sadistic, given their penchant for sexual violence (Marshall & Kennedy, 2003). However, the scientific literature on the relationship between sexual sadism and sexual homicide is mixed and often contradictory. Many of the early studies on sexual homicide delineate a clear distinct relationship between sexual sadism and sexual homicide suggesting that sexual sadism is the driving force behind the offender's need to kill (Brittain, 1970; Burgess et al., 1986; Grubin 1994; Hickey, 1997; Ressler et al., 1988; Warren et al., 1996). Other researchers have shown that sexual murderers are a heterogeneous group of offenders (i.e., influenced by a variety of factors experienced during a sexual assault) and are unlikely to exhibit sexually sadistic behaviours (Healey, Lussier, & Beauregard, 2013; Healey, Beauregard, Beech, & Vettor, in press).

These puzzling results may be explained by the fact that there may be two types of sexually sadistic offenders: the exclusive sexually sadistic offenders and the paraphilic offender. Exclusive sexually sadistic offenders may be unwilling to kill their victims because they want to enjoy the humiliation and pain they inflict on their victims (Healey et al., in press). To the exclusive sexually sadistic offenders, sexual excitement results from the humiliation and violence he enacts on his victim. Killing his victim would minimize the amount of sexual pleasure he gets from his crime. Sexual sadism for the paraphilic offender may be one of many deviant sexual preferences. There is empirical evidence that supports this notion. Persistent and severe paraphilic men have been shown to report more deviant sexual preferences and to be diagnosed with multiple paraphilias (Abel, Becker, Mittelman, Cunningham-Rathner, Rouleau, Murphy, 1987; Langevin, 2003). Langevin (2003) found that sexual murderers were more likely than nonsexual murderers, sexual aggressors, and sexual sadists to have multiple paraphilias such as voyeurism, fetishism, transvestism, and gender disturbances. Sexual murderers were also likely to have a diagnosis of sexual sadism and be sexually polymorphous (i.e., engage in sex with men, women, and children), suggesting persistent deviant sexual preferences.

4.2.4. Aim of Study

Historically, the scientific literature on sexual homicide has theorized the sexual murderer as sexually deviant and driven by a need to fulfill his violent sexual fantasies

(Burgess et al., 1986; Brittain, 1970; Dietz et al., 1990; Hickey, 1997; Krafft-Ebing, 1898/1965; MacCulloch et al., 1983; Ressler, et al., 1988). The majority of the sexual homicide literature has focused on the link between sexual sadism and sexual homicide (see Chan and Heide, 2009). In fact, the early literature on sexual homicide strongly implies a causal link between sexual sadism and sexual homicide (Burgess et al., 1986; Brittain, 1970; Dietz, Hazelwood, & Warren, 1990; Krafft-Ebing, 1898/1965). There is an emerging segment of the sexual homicide literature that suggests that the link between sexual sadism and sexual homicide may be more complex. Some researchers have suggested a link not only between sexual sadism and sexual homicide, but between paraphilias (i.e., deviant sexual interests) and sexual homicide (Arrigo & Purcell, 2001; Hickey, 1997; Purcell & Arigo, 2006). Despite this distinction, the assumption that sexual homicide is closely linked to deviant and often violent sexual interests has remained virtually unchallenged. Recently several researchers established a link between situational factors during a sexual assault and sexual homicide (Beauregard & Mieczkowski, 2012; Felson & Messner, 1996). Specifically, situational factors (i.e., the offender being under the influence of alcohol) during a sexual assault may cause an escalation in violence that may result in sexual homicide. Referred as the differential outcome of a sexual assault hypothesis, it predicts that situational factors, not deviant sexual interests, determine whether a sexual homicide occurs. Although these two approaches to understanding sexual homicide are seemingly incompatible, recent empirical research has suggested that there is a complex relationship between sexual sadism, deviant sexual interests, situational factors, and sexual homicide. Specifically, sexual murderers appear to be a heterogeneous group of offenders (Healey et al., 2013; Healey et al., in press). There is mounting evidence that sexual murderers are influenced by both situational factors during a sexual assault and deviant sexual interests (Beauregard & Mieczkowski, 2012; Healey, et al., 2013; Mieczkowski & Beauregard, 2010). Despite this new evidence, many of the more prominent models of sexual homicide remain untested and the direct effect of deviant sexual interests remains unclear. This study sought to investigate the impact of the core features (i.e., the influence of deviant sexual interests and low self-esteem) of prominent sexual

homicide models (The Motivational Mode, The Trauma Control Model, The Integrated Paraphilic Model) has on the prediction of sexual homicide¹⁰.

4.3. Methodology

4.3.1. Sample

The sample consists of 229 adult males who have been convicted of a sexual offence and sentenced to a federal penitentiary in the province of Québec, Canada. All participants had received at least a two-year prison sentence. Although participation in the study was voluntary, the participation rate was high (93%). Data were collected by graduate students who were trained by a licensed psychologist. Data were collected using both semi-structured interviews with the offenders and official data (police reports, victim impact statements, and institutional records). If there was a discrepancy between the information reported by the offender, official information was used. For the purposes of these analyses, it is important to note that the sample only contains offenders who physically harmed their victim, that is, offenders who used excessive force during the course of the offence (nonhomicidal sex offenders (63.8%, n=146) and homicidal sex offenders (36.2%, n =83)). The sample was restricted to those offenders who inflicted physical injuries on their victims to isolate the effects of each of the theoretical factors in deviant sexual preference models of sexual homicide. By including offenders who physically injured their victims the study was able to simultaneously control for factors associated with deviant sexual preference models of sexual homicide and other empirical factors (i.e., situational factors) associated with sexual homicide during a sexual assault. Excessive force included such behaviours as beating the victim gratuitously, general physical injury, and death. Sexual murderers were identified as individuals who had killed their victim during a sexual assault, the offender admitted to a

¹⁰ Please note that the usage of the term prediction refers to the statistical prediction of sexual homicide and not a prediction of the offender's future behaviour. Given the nature of the data (i.e., retrospective) it is impossible to predict the offender's future behaviour. As such the use of logistic regression in this study was used to provide evidence for or against factors associated with sexual homicide.

sexual element to the crime, or there was a suspected sexual element to the crime. Suspicion of a sexual motive was determined by investigators and had to meet at least one element of Ressler, Burgess, and Douglas' (1988) definition of sexual homicide: (a) victim's attire or lack of attire, (b) exposure of the sexual parts of the victims body, (c) sexual positioning of the body, (d) insertion of foreign objects into the victim's cavities, (e) evidence of sexual intercourse (oral, anal, or vaginal), and (f) evidence of substitute sexual activity, interest, or sadistic fantasy

4.3.2. Variables

Scale variables

The selection of variables used to develop the persistent deviant sexual interests scale and the persistent low self-esteem scale were guided by existing models of sexual homicide (e.g., The Trauma Control Model, The Motivational Model, The Integrated Model of Paraphilias and Lust Murder) (Arrigo & Purcell, 2001; Burgess et al., 1986; Hickey, 1997; Purcell & Arrigo, 2006). Analysis began by identifying conceptual commonalities between models. It is important to note that the scientific models of sexual homicide are complex and include a variety of factors such as deviant sexual interests (Hickey, 1997; Purcell & Arrigo, 2006), predispositional factors (e.g., brain abnormalities) (Hickey, 1997; Purcell & Arrigo, 2006), criminogenic environments/traumatic/formative events (Arrigo & Purcell, 2001; Burgess et al., 1986; Hickey, 1997; Purcell & Arrigo, 2006), and some combination of situational factors or facilitators (e.g., the use of pornography, the use of alcohol or drugs) (Arrigo & Purcell, 2001; Hickey, 1997; Purcell & Arrigo, 2006). Despite the hypothesized importance of many of these factors, they were unable to be included in the analyses for several reasons. First, many of the sexual homicide models lack of specific hypotheses predicting the effect of a variety of important variables (e.g., predispositional factors and/or criminogenic environments). For instance, sexual homicide models, such The Trauma Control Model and the Integrated Model of Paraphilic Interests, broadly state that predispositional factors are important factors in the development of sexual homicide. Yet there are no specific hypotheses of the effects of predispositional factors on sexual homicide other than there are a broad number of predispositional factors associated with

sexual homicide. Second, given that many of the core factors of these models (e.g., predispositional factors and criminogenic environment) are also important factors in many other nonsexual homicide models of crime, it is difficult to speculate about their specific effect on sexual homicide¹¹.

The study found that low self-esteem and deviant sexual interests were common amongst each model of sexual homicide. In fact, it could be argued that both low self-esteem and deviant sexual interests are vital links in all the models - The Motivational Model (Burgess et al., 1986), The Trauma Control Model (Hickey, 1997), and The Integrated Model of Paraphilias and Lust Murder (Arrigo & Purcell, 2001). Although individually these factors are not unique to sexual homicide, each sexual homicide model has specific hypotheses concerning low self-esteem and deviant sexual interests that could be empirically tested. Based on these commonalities, variables were selected that were thought to measure these concepts (see Table. 11). All variables in both scales were dichotomously coded (0 = no, 1 = yes). The persistent deviant sexual interests scale included whether the offender began to masturbate before adolescence (40.0% - yes, n = 92), whether there was the presence of one diagnosed juvenile paraphilia (5.7% - yes, n = 17), whether the offender's nondeviant sexual fantasies began before adolescence (21% - yes, n = 48), whether the offender's deviant sexual fantasies began before adolescence (2.2% - yes, n = 5), whether the offender had deviant sexual fantasies excluding the victim 48 hours before the offence (21.4% - yes, n = 49), whether the offender had deviant sexual fantasies excluding the victim one year before the offence (15.7% - yes, n = 36), whether the offender compulsively masturbated during adolescence (17% - yes, n = 39), and whether the offender compulsively masturbated during adulthood (13.1% - yes, n = 30). Cronbach's alpha for the persistent deviant sexual interests scale was 0.70 suggesting good internal consistency. Each offender was given a score of 0 to 8, depending on how many items were endorsed. The

¹¹ Although there were no specific hypotheses regarding the effects of predispositional factors and criminogenic environments in the deviant sexual preference models of sexual homicide several analyses were run that included predispositional factors such as antisocial traits, psychopathy and measures of criminogenic environments. Models that included these factors were statistically nonsignificant.

mean score of the persistent deviant sexual interests scale was 1.55 (SD = 1.79)¹². The persistent low self-esteem scale included whether the offender had a poor self-image as a child (30.6% - yes, n = 70), whether the offender had a poor self-image as an adolescent (44.1% - yes, n = 101), and whether the offender had a poor self-image as an adult (42.8% - yes, n = 98). Cronbach's alpha for the persistent low self-esteem scale was 0.81 suggesting a very good internal consistency. Offenders' scores ranged from 0 to 3, and the mean score of the persistent low self-esteem scale was 1.17 (SD = 1.24).

¹² Indicators of nondeviant sexual behaviour such (e.g., masturbation began before adolescence, nondeviant sexual fantasies began before adolescence, and compulsive masturbation) were included in the scale to reflect the persistent and varied nature of the offender's sexual interests.

Table 11. Persistent Deviant Sexual Interests and Low-Self Esteem Scales

Persistent Deviant Sexual Interests Scale	Prevalence (n)
Masturbation began before adolescence	40.0% (92)
Presence of at least one juvenile paraphilia	5.7% (17)
Nondeviant sexual fantasies began before adolescence	21.0% (48)
Deviant sexual Fantasies began before adolescence	2.2% (5)
Occurrence of deviant sexual fantasies excluding the victim 48 hrs. before the crime	21.4% (49)
Occurrence of deviant sexual fantasies excluding the victim one year before the crime	15.7% (36)
Compulsive masturbation during adolescence	17.0% (39)
Compulsive masturbation during adulthood	13.1% (30)
Scale (number of items = 8)	Mean, SD, Range 1.55, 1.79, 0-8 Alpha 0.70
Persistent Low-Self Esteem Scale	Prevalence (n)
Poor self image as a child	30.6% (70)
Poor self image as an adolescent	44.1% (101)
Poor self image as an adult	42.8% (98)
Scale (number of items = 3)	Mean, SD, Range 1.17, 1.24, 0-3 Alpha 0.81
Pearson's Correlation between Persistent Deviant Sexual Interests Scale and Persistent Low-Self Esteem Scale	.342, p<.01

Crime scene variables

Building on Healey et al.'s (2013; in press) research on typologies of sexual murderers, crime scene variables associated with offenders who resemble sexually sadistic offenders and offenders who were very likely to kill their victims were included in the analysis (see Table. 12). Crime scene variables from these two types of offenders were included for two reasons. First, both types of offenders resemble the sexual murderer historically described in the scientific literature¹³. Second, crime scene variables were used because they are more objective, less open to interpretation, do not rely on information from the offender, and have been empirically related to sexual homicide. Included were, whether the offender humiliated his victim (52.0% - yes, n = 119), whether the offender premeditated his crime (60.7% - yes, n = 139), whether the offender selected his victim (24.5% - yes, n = 56), whether the offender targeted stranger victim (20.1% - yes, n = 46), and whether the offender used a weapon during the offence (52.4% - yes, n = 120).

¹³ Please note that humiliation was used as an indicator of sexual sadism because humiliation is commonly cited as one of the core features of sexual sadism in both the clinical literature (American Psychological Association, 2013; World Health Organization, 1992) and empirical literature on sexual homicide (see Marshall & Kenney, 2005).

Table 12. Prevalence of crime scene behaviours, situational factors, and offender variables

Variable	Prevalence (n) or Mean (SD)
<u>Crime Scene Behaviours</u>	
Humiliation	48.8% (n = 98)
Premeditation	60.7% (n = 139)
Selection of victim	24.5 % (n = 56)
Stranger victim	20.1% (n = 46)
Use of weapon	52.4% (n = 120)
<u>Situational Factors</u>	
Angry at time of offence	31.4% (n = 72)
Use of alcohol	65.1% (n = 149)
Victim resistance	
<u>Offender Characteristics</u>	
Personality - introverted	52.0% (n = 119)
Personality – extroverted	48.0% (n = 110)
Criminal career – generalists	36.7% (n = 84)
Criminal career – specialists	63.3% (n = 145)
<u>Type of Offender</u>	
Sexual aggressor	63.8% (n = 146)
Sexual murderer	36.2% (n = 83)

Situational variables

Situational variables were guided by empirical evidence suggesting that sexual homicide may be the result of an escalation in violence during a sexual assault (Beauregard & Mieczkowski, 2012; Healey et al., 2013; Mieczkowski & Beauregard, 2010). Specifically Included were whether the offender was angry at the time of the offence (31.4% - yes, n =72), whether the offender was under the influence of alcohol during the offence (65.1% - yes, n = 149), and how much the victim resisted the offender’s attack (coded on Likert scale from 0-4) (\bar{X} = 2.09, SD = 1.52, Range = 0-4). The inclusion of the use of alcohol and drugs was analyzed because in addition to being a situational factor it is also an important factor in all sexual homicide models (e.g., The

Motivational Model, The Trauma Control Model, The Integrated Model of Paraphilia and Lust Murder).

Offender variables

Due to the nature of the sample, it was necessary to control for the effects of antisociality (sexual aggressors of women) and specialization (i.e., deviant sexual interests of child molesters). Both antisociality (Lalumière, Harris, & Quinsey, 2005) and specialization (Hanson & Bussière, 1998) have been shown to be associated with deviant sexual interests (i.e., child molesters) and violent sexual offending. Antisociality was measured with the inclusion of the personality variables measuring whether the offender was introverted (52.0% - yes, n = 119) or extroverted (48% - yes, n = 110), and these were included to rule out any possible effects that antisociality may have on the prediction of sexual homicide. Introverted refers to offenders characterized by avoidant, dependent, and passively aggressive personality traits (Beauregard, Deslauriers-Varin, & St-Yves, 2010). Extroverted refers to offenders characterized by antisocial, borderline, narcissistic, and impulsive personality characteristics (Beauregard et al., 2010). Specialization was measured with the inclusion of the criminal career variable measuring whether the offender was a generalist (36.7% - yes, n = 84) or specialist (63.3% - yes, n = 145), and this was included to rule out any possible influence that being a specialist may have on the main effect on both persistent deviant sexual interests and persistent low self-esteem. The term generalist refers to offenders who had varied criminal careers including sexual and nonsexual crimes (Beauregard, et al., 2010), and the term specialist refers to an offender whose criminal career is characterized by almost exclusively sexual offences (Beauregard, et al., 2010).

4.3.3. Data Analysis

This study sought to investigate the impact that persistent low self-esteem and persistent deviant sexual interests had on the prediction of sexual homicide using

hierarchical logistic regression¹⁴. Hierarchical logistic regression was used because it is a non-parametric technique that does not assume that model parameters are normally distributed. The model of sexual homicide controlled for elements of sexual sadism and situational factors that have been shown to increase the likelihood of homicide during a sexual assault. Controlling for situational factors permitted us to ascertain the direct effects of persistent low self-esteem and persistent deviant sexual interests. Controlling for sexually sadistic behaviours was justified because there is empirical evidence that suggests that sexually sadistic offenders are less likely to kill their victims despite their often-cited relationship in the scientific literature (Healey et al., in press). By controlling for the known relationship between sexually sadistic behaviours and sexual homicide, it was more likely to isolate the main effect of deviant sexual interest and low self-esteem.

4.4. Results

4.4.1. Multivariate analysis.

Due to the strong theorized relationship between persistent deviant sexual interests and persistent low self-esteem in sexual homicide models, a Pearson's correlation was initially conducted to see if there were significant amounts of multicollinearity between the two scales. Results indicated that multicollinearity was not a concern ($r = 0.34$, $p < .01$).

A series of hierarchical logistic regression models were performed using offender characteristics, crime scene behaviours, and situational factors to predict sexual homicide (see Table. 13). The first model included personality variables (antisociality), criminal career variables (specialization), the persistent deviant sexual interests scale, and the persistent low self-esteem scale. While controlling for antisocial personality (nonsignificant) and criminal career (nonsignificant), both persistent deviant sexual

¹⁴ Please note that the usage of the term prediction refers to the statistical prediction of sexual homicide and not a prediction of the offender's future behaviour. Given the nature of the data (i.e., retrospective) it is impossible to predict the offender's future behaviour.

interests scale (odds ratio [OR] = 1.27, $p < .01$, 95% confidence interval [CI] = [1.07 – 1.49]) and persistent low self-esteem scale (OR = 1.27, $p < .05$, 95% CI = [1.00 – 1.60]) significantly predicted sexual homicide.

Table 13. Logistic regression model predicting sexual homicide

Variables	Model 1	Model 2	Model 3
<u>Offender Characteristics</u>	OR (95% CI)	OR (95% CI)	OR (95% CI)
Personality (Introverted ref)	1.12 (.62 - 2.03)	1.58 (.78 - 3.24)	1.62 (.78 - 3.34)
Criminal Career (generalist ref)	0.78 (.42 - 1.45)	1.44 (.54 - 2.41)	1.03 (.47 - 2.24)
Persistent Deviant Sexual Interests	1.27** (1.07 - 1.49)	1.26* (1.02 - 1.56)	1.31** (1.05 - 1.64)
Persistent Low Self Esteem	1.27* (1.00 - 1.60)	1.37* (1.03 - 1.84)	1.38* (1.02 - 1.87)
<u>Crime Scene Behaviours</u>			
Humiliation	-	0.26 *** (.25 .15)	0.25*** (.14 - .44)
Premeditation	-	0.62 (.28 - 1.37)	0.66 (.29 - 1.50)
Selection of victim (no ref)	-	4.08** (1.71 - 9.73)	3.75** (1.52 - 9.24)
Stranger Victim (no ref)	-	3.15** (1.35 - 7.37)	2.82** (1.18 - 8.15)
Use of Weapon (no ref)	-	3.52 *** (1.75 - 7.06)	3.92*** (1.88 - 8.15)
<u>Situational Factors</u>			
Angry at Time of Offence		-	1.15 (.52 - 2.54)
Use of Alcohol (no ref)		-	1.23 (.55 - 2.78)
Victim Resistance		-	1.01 (.77 - 1.32)
Cox & Snells R ²	0.07	0.33	0.33
Hosmer - Lemmenshow	6.86, $p = .552$	12.36, $p = .136$	11.03, $p = .46$
Omnibus Test of Model Coefficients	17.84, $p < .001$	69.822, $p < .001$	0.464. $p = .927$

+ $p < .10$ * $p < .05$, ** $p < .01$,

Next crime scene variables associated with both sexual sadists and the sexual murderer described in sexual homicide models were entered. The personality variables and criminal career variables remained nonsignificant. Interestingly, both the persistent deviant sexual interests scale (OR = 1.26, $p < .05$, CI = [1.02 – 1.56]) and the persistent low self-esteem scale (OR = 1.37, $p < .05$, CI = [1.03 – 1.84]) remained significant predictors of sexual homicide. Similar to previous research, humiliation was inversely associated with sexual homicide (OR = 0.26, $p < .001$, CI = [.025 – 0.15]). Sexual murderers were much more likely to select their victim (OR = 4.08, $p < .01$, CI = [1.71 – 9.73]), target a stranger victim (OR = 3.15, $p < .01$, CI = [1.35 – 7.37]), and use a weapon during the course of the offence than offenders who did not kill their victim.

Finally, situational variables were entered to determine their effects on the model. The personality variables and criminal career variables remained nonsignificant. Sexual murderers were likely to have persistent deviant sexual interests (OR = 1.31, $p < .01$, CI = [1.05 – 1.64]) and have low self-esteem (OR = 1.38, $p < .05$, CI = [1.02 – 1.87]). Offenders who humiliated their victims were significantly less likely to kill their victims (OR = 0.25, $p < .001$, CI = [0.14 – .044]) while sexual murderers remained much more likely to select a specific victim (OR = 3.75, $p < .01$, CI = 1.52 – 9.24)), seek out a stranger victim (OR = 2.82, $p < .01$, CI = [1.18 – 8.15]), and use a weapon during the offence (OR = 3.92, $p < .001$, CI = [1.88 – 8.15]). Remarkably, after controlling for offender characteristics, and crime scene variables, none of the situational variables were significant in predicting sexual homicide¹⁵.

¹⁵ The same model was performed analyzing the interaction effect of persistent deviant sexual interests and persistent low self-esteem. The interaction effect was nonsignificant and the model fit incidences suggested a poor fit to the data.

4.5. Discussion

4.5.1. Low-self Esteem and Persistent Deviant Sexual Interests

Recent studies suggest that sexual homicide is a heterogeneous phenomenon (Beauregard & Mieczkowski, 2012, Healey et al., in press; Mieczkowski & Beauregard, 2010). However, despite the empirical evidence pointing to multiple pathways, many models of sexual homicide assert that deviant sexual preferences are important factors in explaining sexual homicide. This study sought to explore the core elements of sexual homicide models (i.e., low self-esteem and deviant sexual interests). Results from the study suggest that persistent low self-esteem and deviant sexual interests are important factors in predicting sexual homicide. The use of the term interests, and not preferences, is an important distinction. Whereas many models of sexual homicide models claim a preference for sexual violence (e.g., sexual sadism) is an important feature of sexual homicide, others suggest that deviant sexual interests (e.g., paraphilias) is part of the etiology of this phenomenon. In this study, persistent sexual interests involve a variety of sexual interests that are persistent across the offender's life-course.

Factors empirically related to the crime scene behaviour(s) of sexually sadistic offenders, namely humiliation, were inversely related to sexual homicide. Although this finding is somewhat expected given the recent empirical evidence on sexual sadism and sexual homicide (Healey et al., 2013; Healey et al., in press), it is contrary to many of the theoretical models of sexual homicide (Burgess et al., 1986). This result may be explained by the fact that the model of sexual homicide is thought to measure persistent deviant sexual interests in general (i.e.,parpahilias) and not solely sexually sadistic acts (i.e., a sexual preference for violence). Although some of the sexual acts may have been violent or excessively deviant, there was little evidence that they were exclusively sexually sadistic. Despite the theoretical models claiming that sexual sadism is the main construct driving an offender to kill in a sexual manner (Brittain, 1970; Burgess et al., 1986; Grubin 1994; Hickey, 1997; Ressler et al., 1988; Warren et al., 1996), there is a segment of the empirical literature that suggests sexual murderers have multiple and persistent paraphilias (Arrigo & Purcell, 2001; Hickey, 1997; Langevin, 2003). There is

empirical evidence to suggest that persistent paraphilias often coexist amongst numerous other deviant sexual interests and that one sexual interest is more prevalent than another at any given time (Abel et al., 1987). In this sense, the sexual murderers in the sample may have killed their victim during a period whereby a sexual interest in violence is more prevalent than any other sexual interest (i.e., the paraphilic offender). This hypothesis is supported by the empirical evidence, suggesting that offenders who appear to be exclusively aroused by sexually sadistic acts are unlikely to kill their victim (Healey et al., 2013; Healey et al., in press).

An alternative explanation for the link between deviant sexual interests and sexual homicide lies with the theoretical link between low self-esteem, empathy, and sexual substitution. Marshall et al. (1993b) hypothesized that low self-esteem may result in an offender's ability to identify with his victims needs at the time of the offence. Although the results do not specifically support what Marshall et al. (1993b) claim, they demonstrate that persistent low self-esteem is significantly related to sexual homicide. Given the excessively violent nature of sexual homicide, it could be argued that sexual murderers lack empathy for their victims. Whether the empathy deficits are global (i.e., apparent in every aspect of the offender's life) or situational are difficult to discern from these results. What is more likely, given the sexually deviant nature of the sample, is the concept of sexual substitution as described by Marshall and colleagues (1993b). Because of the offender's deviant sexual interests and their inability to relate to others in a prosocial way, offenders may have sought victims with the intention to kill after they expressed their deviant sexual needs. Another possible explanation relates to the feelings of powerlessness experienced by the offender as the result of low self-esteem. Several models of sexual aggression suggest that offenders kill in an attempt to regain control because their deviant sexual fantasies are no longer effective in achieving this goal (Arrigo & Purcell, 2001; Burgess et al., 1986; Hickey, 1997; Marshall & Barbaree, 1990).

4.5.2. Premeditation as a Script

Although the findings showed that premeditation was not significantly related to the act of killing, three other variables suggest some form of planning element to the

crime. Even after controlling for some characteristics of these offenders (i.e., personality, criminal career) and adding the deviant sexual interests and persistent low self-esteem, as well as the situational factors, three crime scene behaviours were significant: selection of a victim, targeting a stranger victim, and the use of a weapon. These three specific behaviours suggest some form of planning. Sex offenders who select specific victims (e.g., strangers) and who possess a weapon during the crime exhibit decision-making, at a minimum. (Beauregard & Leclerc, 2007). They leave their home and look for a specific type of victim making sure to bring with them a weapon. The fact that these three behaviours are significant, in addition to the persistent low self-esteem and deviant sexual interests, may suggest the presence of a script of sexual homicide (Beauregard, Proulx, Rossmo, Leclerc, & Allaire, 2007). Thus, it is possible that some sex offenders suffering from persistent low self-esteem, presenting deviant sexual interests, and who choose to target a specific victim – a stranger to him, with a weapon have a clear intention to kill the victim during or after the sexual assault.

4.5.3. Sexual Homicide Models

The results are largely consistent with the prominent models of sexual homicide (Arrigo & Purcell, 2001; Ressler et al., 1987; Hickey, 1997) and provide evidence for the importance of persistent deviant sexual interests and low self-esteem in the prediction of sexual homicide. All three models of sexual homicide predicted that both low self-esteem and persistent deviant sexual interests would have an independent effect on sexual homicide. The study was unable to provide evidence for many of the other factors in each of the sexual homicide models (e.g., predispositional factors, criminogenic environments, traumatic events). Perhaps the biggest pitfall for all of these models is the lack of concise operationalization of key theoretical factors. For example, The Motivational Model (Ressler et al., 1987), The Trauma Control Model (Hickey, 1997), and The Integrated Model of Paraphilic Interests (Arrigo & Purcell, 2001) all suggest that the foundation of sexual homicide are predispositional factors. Sexual murderers are thought to have a trait(s) that somehow differentiates them from noncriminals, nonsexual criminals, and nonsexual murderers. The FBI's Motivational Model assumes that the offender has some form of personality disorder or biological deficit that when exposed to a criminogenic environment, produces deviant sexual interests and deviant sexual

fantasies. The Trauma Control Model posits that personality disorders (e.g., psychopathy or Antisocial Personality Disorder), biological factors (e.g., extra chromosome), or sociological factors (e.g., socialization) may influence the development of sexual homicide. An attempt was made to incorporate individual level (i.e., personality disorders), and traumatic events (i.e., negative life events) into the sexual homicide model to evaluate their utility statistically¹⁶. Specifically, variables directly measuring Antisocial Personality Disorder and Psychopathy were entered. Various individual behaviours considered to be the hallmark of these disorders (e.g., callousness, lack of empathy, impulsivity) were also investigated. None of the combinations of the hypothesized predispositional factors were significantly related to sexual homicide.

Criminogenic environments are hypothesized to exacerbate already existing predispositional traits making it more likely to develop violent deviant sexual preferences/fantasies (Arrigo & Purcell, 2001; Hickey, 1997; Ressler et al., 1987). Characteristics of these environments include physical abuse, psychological abuse, sexual abuse, alcohol and drug abuse in the home, exposure to deviant sexual models (i.e., pornography in the home, lax sexual boundaries), and a lack of bonding between caregiver and child. Again consideration was paid to many of these variables in the initial development of the model. Similar to the effects of the predispositional factors, the study was unable to find significant effects between most of these variables and sexual homicide. There was a significant effect between low self-esteem and sexual homicide. Low self-esteem is thought to be the product of a lack of bonding between caregiver and child (Arrigo & Purcell, 2001; Burgess et al. 1987; Hickey, 1997; Marshall et al., 1993a, 1993b). This is a very interesting finding given that low self-esteem is a common factor in most homicide models. As discussed previously, there may be a number ways in which low self-esteem may affect sexual homicide. What can be determined is that based on the results and the theoretical relevance in sexual homicide models, low self-esteem may be considered one of the foundations of sexual homicide. Additional research is needed to determine the exact causal mechanism.

¹⁶ The study was unable to include sociological variables because they were unavailable in the dataset.

In some form or another, each of the sexual homicide models predicts that a negative life event or significant stressor (e.g., interpersonal conflict with someone, being fired from a job) causes the offender to act out violently and commit homicide. Negative life events are related to the use of alcohol and drugs in that the offender uses them around the same time he experiences his life stressor(s), compounding the effects of stressors and disinhibiting the offender. Again the study was unable to find a significant effect between negative life events (i.e., early traumatizations) and sexual homicide when persistent low self-esteem and persistent deviant sexual preference(s) were included in the model. This finding is in direct opposition to the models of sexual homicide. The results point to an offender who has deviant sexual interest(s) and sets out to kill his victim. Neither alcohol nor drugs disinhibit him resulting in a lack of sexual control. Rather, he chooses a stranger victim with specific characteristics. Stranger victims may have been chosen for a number of reasons, one of which being to prevent the offender from being caught. Research has shown that crimes involving stranger victims are more difficult to solve than crimes involving nonstrangers because no direct relationship between the victim and the offender (Rossmo, 2000). Second, because the offender plans on killing his victim, he can engage in behaviours without fear of damaging his fragile self-esteem. If the offender knows that he is going to kill his victim he may not fear being rejected. A stranger victim whom he knows he is going to kill allows him to act out his most deviant sexual interest(s) without fear of rejection or judgment. The victim then becomes a sexual substitute for a prosocial sexual outlet. Finally, the act of killing may also serve to help the offender regain his self-esteem from the act of killing itself. By killing the victim he has exercised tremendous amounts of control over his victim (Marshall et al., 1993a, 1993b)

4.6. Conclusion

Overall the study found support for some of the factors common to all sexual homicide models. Specifically, the study was able to demonstrate that the core features of sexual homicide models (i.e., low self-esteem and deviant sexual preferences) were significant in predicting sexual homicide. Moreover, these factors remained significant even after controlling for crime scene behaviours associated with sexual sadism and

situational factors associated with an escalation in violence during a sexual assault. The model suggests that there is a specific sexual murderer who is driven by persistent and deviant sexual interests (i.e., paraphilias) and not necessarily sexually sadism.

Each of the models outlined in this study proposed a series of broad predispositional factors hypothesized to account for this discrepancy. However, the study was unable to find evidence to support these claims. There are several possible explanations. First, predispositional factors may simply be unimportant in the development of sexual homicide. In fact, many of the factors proposed by these models such as criminogenic environments, poor socialization, physical abuse, and sexual abuse are not exclusively associated with sexual homicide. Second, there may be unique predispositional factors common amongst sexual murderers that are not adequately measured or specified in existing sexual homicide models. Given the results suggest that deviant sexual preferences play a significant role in sexual homicide, predispositional factors associated with persistent deviant sexual interests may be an interesting line of exploration.

This study is not without its limitations. This model of sexual homicide does not explain the causal mechanism by which low self-esteem and deviant sexual interests interact to produce sexual homicide. At this stage in the research it is difficult to determine whether the simple co-occurrence of these two factors are unique predictors of sexual homicide or whether offenders' differential pathways (i.e., differential predispositional factors) combined with low self-esteem and persistent deviant sexual interests are more likely to kill their victims. Future research should provide specific and testable hypotheses regarding differential pathways and their effect on low self-esteem, persistent deviant sexual interests, and sexual homicide. This study also used a composite scale to measure deviant sexual interests and suggests that persistent deviant sexual interests are very important in predicting sexual homicide. Many of the sexual homicide models posit that specifically violent sexual preferences are important to sexual homicide. Future research should specifically investigate the differences between individuals with deviant sexual interests who do and do not kill their victims in order to better understand their effects on sexual homicide.

Chapter 5.

General Conclusions

Compared to other behavioural phenomenon, the theoretical literature on sexual homicide is sparse and somewhat underdeveloped. Existing theoretical models of sexual homicide suggest that a combination of predispositional factors, environmental influences (e.g., criminogenic household), poor parental relationships, social isolation, low self-esteem, and deviant sexual desires can produce extremely sexually violent men who are likely to kill their victims (Arrigo & Purcell, 2001; Burgess et al. 1987; Hickey, 1997). Across most models of sexual homicide, inadequate or criminogenic environments are thought to be one of the most important factors in the development of sexual homicide. Characterized by physical, sexual, and psychological abuse, these environments foster and aggravate existing predispositions for extreme sexual violence. Several models of sexual homicide (e.g., The Motivational Model of Sexual Homicide, The Trauma Control Model and the Integrated Paraphilic Model) hypothesize that predispositional factors (e.g., biological deficits, experiencing extreme sexual abuse, or personality disorders) are important, and necessary, in the development of sexual homicide. Specifically, these models state that without the presence of these specific predispositions, the hypothesized developmental mechanisms of sexual homicide would fail to work.

Despite several differences in each model of sexual homicide, there is a significant amount of conceptual and theoretical overlap; most notably low self-esteem and a deviant sexual preference for violence. Most models of sexual homicide posit that sexual murderers grow up reclusive and socially isolated from peers and family. Although this early social isolation is important in the sexual and social development of the budding sexual murderer, the common hypothesized effect is the development of low self-esteem and subsequently the development of a deviant sexual preference for

violence. Most sexual homicide models suggest that deviant sexual fantasies reflect the offender's need to control and dominate their victim(s) (i.e., a deviant sexual preference for sexual violence). Interestingly no mention is made as to why sexual murderers develop deviant sexual fantasies as a means of regaining self-esteem, as opposed to nonsexual violent fantasies. Due to the common factors of low self-esteem and deviant sexual preferences, one of the main goals of this study was explore the utility of these two concepts in explaining the development of sexual homicide¹⁷. This study provided evidence of the theoretical link between low self-esteem, persistent deviant sexual interests, and sexual homicide. Moreover, this relationship remained significant even after controlling for factors associated with an escalation in violence during a sexual assault (e.g., situational factors and crime scene behaviours associated) and sexual sadism. These results strengthen the theoretical literature on sexual homicide by providing evidence of the robust relationship between low self-esteem, deviant sexual preferences, and sexual homicide. Conversely, this study suggests that the relationship between sexual sadism and sexual homicide is complex, particularly because persistent deviant sexual preferences in general (i.e., paraphilias), and not solely sexual sadism, were significantly associated with sexual homicide. Although the premise that paraphilias in general are related to sexual homicide is not novel (see Arrigo & Purcell, 2001 and Hickey, 1997), this study represents one of the few attempts to empirically explore the relationship between general deviant sexual preferences and sexual homicide.

It is important to note that this study, like many before, did in fact establish a relationship between sexually sadistic behaviour and homicide. Where this study departs from others is that although related to sexual homicide, sexual sadism is not the most robust predictor of sexual homicide. In many respects, these results are at odds with much of the previous literature on sexual sadism and sexual homicide. Known as the *unique offender hypothesis*, much of the previous work on sexual homicide was dominated by the notion that the sexual murderer was exclusively sexually sadistic

¹⁷ It worth noting that one of the initial goals of this study was to explore all the common theoretical factors across sexual homicide models. Because predispositional factors were common across all models, an attempt to incorporate common measures were undertaken but ultimately proved unsuccessful. See study three for a more complete description of the common predispositional factors and attempts to measure them.

(Brittan, 1970; Burgess, Hartman, Ressler, Douglas, & McCormack, 1986; Dietz et al., 1990; Krafft-Ebing, 1886; Langevin et al., 1988; Ressler et al., 1986). However, competing explanations of sexual homicide emerged that postulate that sexual murderers are not a unique type of offender but may be influenced by a number of factors experienced during sexual assault resulting in an escalation of violence and ultimately death (Beauregard & Mieczkowski, 2012; Mieczkowski & Beauregard, 2010). Known as the *differential outcome of a sexual assault hypothesis*, factors such as the presence of a weapon and whether the offender was under the influence of alcohol or drugs are important in determining whether a sexual assault will escalate into a sexual homicide.

Given the findings suggesting that sexual murderers constitute a heterogeneous group of offenders who are not necessarily driven by sadistic needs, the current study also sought to explore the utility of each hypothesis in explaining sexual homicide. The findings provide evidence for the heterogeneous nature of sexual homicide. Similar to previous research, the findings of this study suggest that offenders who kill their victims during a sexual assault appear to be influenced by contextual factors, such as the presence of a weapon and the use of alcohol and or drugs. Interestingly, the same factors are also important for sexual murderers who demonstrated behavioural characteristics similar to those associated with the unique offender hypothesis (i.e., sexually sadistic). Although these offenders were also very likely to use weapons and be under the influence of alcohol and or drugs, these factors were secondary to other behaviours such as strong levels of premeditation and victim selection based on deviant sexual interests. The novelty of the current study is not the competing hypothesis but rather the concurrent empirical exploration of both hypotheses, which was made possible by using the multivariate statistical technique latent class analyses (LCA). LCA is particularly well suited for this type of analysis because it identifies mutually exclusive and distinct groups using behavioural indicators. Since this study identified four distinct groups of sexual murderers, it was able to bring together disparate, and often contradicting, segments of the sexual homicide literature.

As noted previously, there are a host of definitional problems associated with sexual sadism, which are often related to methodological issues (e.g.,

operationalization). Due to the theoretical and empirical relationship between sexual sadism and sexual homicide, these problems have also confounded the understanding of sexual homicide. In an attempt to overcome some of the established difficulties (i.e., a reliance on self-report data from the offender) this study used a series of crime scene behaviours that have been empirically related to both sexual sadism and sexual homicide. Despite these difficulties, the study was able to demonstrate that just under half of the crime variables used in the analysis were able to discriminate sadists from nonsadists. Many of the typical behaviours associated with sexual sadism were also associated with a clinical diagnosis of sexual sadism in the study; mainly, premeditation, the use of physical restraints, mutilation, and humiliation. Subsequently, additional analyses suggested that premeditation, mutilation, and humiliation were also robust predictors of whether an offender was a rapist or a sexual murderer.

One of the more interesting conclusions that can be drawn from this study is the finding that crime scene indicators showed both convergent and predictive validity. These findings suggest that clinicians may be able to use a series of crime scene behaviours to determine whether an offender (known or unknown) may be sexually sadistic. Using crime scene behaviours that do not rely on self-report information from an offender has useful implications for sentencing and treatment. Due to fears of increased sanctions or treatment, many sexually sadistic offenders may be reluctant to admit to sexually sadistic fantasies. By demonstrating that a series of crime scene behaviours can validly identify sexually sadistic offenders, clinicians and criminal justice personnel may be better able to identify sexually sadistic offenders and better protect the public and future victims.

5.1. Limitations

This study was based on a relatively small sample of convicted sexually violent offenders from Canada and the United Kingdom. Therefore, these findings may not be generalizable to all sexually violent offenders. All of the participants in this study were apprehended by law enforcement, convicted for their crime, and were incarcerated at the time of their interview. As such, the findings of this study may be limited because it is

based on information from apprehended and convicted offenders, and not unidentified offenders. Although this limitation is not exclusive to this study, it is worth noting that unknown factors associated with unidentified sexual murderers may impact the validity and reliability of the findings.

In determining the convergent and predictive validity of a series of crime scene variables, the current study only used one crime committed by the offender. That is, although there was a small amount of offenders in the sample with a series of crimes (i.e., serial offenders), the current study used only one crime for each offender (the first crime). By only considering one crime amongst a series of crimes, it may have restricted the ability to identify sexually sadistic offenders if they did not exhibit sexually sadistic behaviours during the one crime used in the analyses. Clinicians, for example, have access to collateral information and may be able to identify other behaviours indicative of sexual sadism that would be missed by analyzing only crime scene behaviours.

Finally, some information was missing from the data, including whether the offender attempted to kill his victim during a sexual assault but was unsuccessful. Access to medical care (e.g., close proximity to a hospital) may have impacted the lethality of a sexual assault. Therefore, it is possible that individuals in the study were incorrectly categorized as nonhomicidal offenders when the offender's intent was to kill his victim

5.2. Future Directions

One of the most interesting findings of this study was the fact that offenders resembling sexual sadists were the least likely to kill their victims. With the advancements in the development of scales aimed at measuring sexual sadism, researchers have been able to more accurately and reliably identify sexually sadistic offenders (Marshall & Hucker, 2006; Mokros, Schiling, Eher, Nitschke, 2012; Nitschke, Osterheider, & Mokros, 2009). Based on these newer tools, several researchers have suggested that sexual sadism lies on a continuum (Marshall & Hucker, 2006). Although sexually sadistic offenders in this study were the least likely to kill their victims, it may be

the case that the sexually sadistic offenders who did not kill their victims may lie lower on the hypothesized continuum than sexually sadistic offenders who did kill their victim. Future research should address two interrelated questions. Using the sexual sadism scale proposed by Marshall and Hucker (2006), is there evidence that supports the notion that sexually sadistic offenders who killed their victims lie higher on a sexual sadism continuum than those who do not kill their victims? If so, what is a cut-off score for those sexually sadistic offenders who kill their victims versus those who do not?

Although the study was able to demonstrate the importance of key theoretical factors (i.e., low self-esteem and persistent deviant sexual interests) in the prediction of sexual homicide, it is difficult to speculate on the exact mechanism by which these factors interact to produce sexual homicide. At this stage in the research it is impossible to determine whether these two factors uniquely predict sexual homicide or whether differential factors combine with low self-esteem and persistent deviant sexual preferences to predict sexual homicide. When measuring persistent deviant sexual interests this study used a composite scale constructed to measure persistent deviant sexual interests (i.e., paraphilias) and not sexual sadism in particular. Despite the fact that there is a wealth of empirical and theoretical literature that suggests sexual sadism is the driving force of sexual homicide (Brittain, 1970; Burgess et al., 1986; Grubin 1994; Hickey, 1997; Ressler et al., 1988; Warren et al., 1996), there is also a segment of the literature that hypothesizes that deviant sexual interests in general, and not sexual sadism, are important factors in the development of sexual homicide (Arrigo & Purcell, 2001; Hickey, 1997; Langevin, 2003). Although these two approaches may initially seem at odds with one another, research on non-homicidal paraphilias may provide a partial explanation and direct future research. Abel and colleagues (1987) demonstrated that multiple paraphilias coexist despite only one being more prevalent at a given time. The results of this study do not entirely dismiss sexual sadism as an important factor in sexual homicide. In fact, there are several paraphilias that commonly occur with sexual sadism (e.g., fetishism, masochism). It is possible that sexual sadism is an important element, albeit part of constellation of deviant sexual preferences. Future research should explore the factor structure and temporal ordering of deviant sexual preferences related to sexual homicide. That is, given the theorized and empirical importance of sexual sadism and deviant sexual preferences in the development of sexual homicide, is

there a combination of deviant sexual preferences that are more important in the prediction of sexual homicide? Is sexual sadism an important element in this combination? If sexual sadism is part of this combination of deviant sexual preferences, and given the established cyclical nature of paraphilias, do sexual murderers kill when sexual sadism is more prevalent?

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