A Crime Scene Approach to Distinguishing Sexual Murderers

by

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Abstract

Previous studies have identified two main types of sexual murderers: ‘angry’ and ‘sadistic’. Similar to the ‘organized murderer’ of the FBI, the sadistic sexual murderer has been described as likely to inflict mutilation, use restraints, humiliate, and force anal sex on the victim. All four behaviours are found on several sadism scales developed to measure sadism in sex offenders. This study compares crime-scene characteristics for sexual murderers who have used these four behaviours associated to sexual sadism.

Using a sample of 85 Canadian sexual murderers, logistic regression models were created to identify potential differences between sexual murderers who adopted such “sadistic” behaviours and those who did not. Findings, for example, show sexual murderers who have inflicted mutilation on the victim are more likely to pre-select and pre-meditate the crimes. Findings will be discussed in light of the literature on sexual sadism and the implications for the investigation of these crimes.

**Keywords**: sexual murderer; homicide; sadists; sexual offenders; angry and sadistic; organized FBI murderer; quantitative research
To Tracy

Your resilience and positivity gave me hope when I felt like there was nothing worth fighting for, you always knew how to make me laugh when all I wanted to do was cry, but most of all you showed me that I was worthy of life when I was betrayed and hurt beyond all recognition.

You are my hero, and my inspiration – I will always love you. R.I.P
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<tr>
<td>DSM</td>
<td>Diagnostic and Statistical Manual for Mental Disorders</td>
</tr>
<tr>
<td>ICO-10</td>
<td>International Classification of Diseases</td>
</tr>
<tr>
<td>NHSO</td>
<td>Non-Homicide Sexual Offender</td>
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<tr>
<td>PD</td>
<td>Personality Disorder</td>
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<tr>
<td>SHO</td>
<td>Sexual Homicide Offender</td>
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Chapter 1.

Introduction

Sexual Homicide is an atypical and severe violent crime. The rate of which has been steadily declining for several years (James & Proulx, 2004). Roberts and Grossman (1993) found sexual homicides in Canada accounted for 4% of all homicides, falling to 3% by 1995 (Statistics Canada, 2000), reaching its lowest point (2%) between 1995 and 2001 (Kong, Johnson, Beattie, & Cardillo, 2003). The United States of America followed a similar low base rate, with sexual homicide accounting for 0.8% of all homicides (Chan & Heide, 2008), falling to a low of 0.2% (U.S. Department of Justice, 2012). In the United Kingdom, government statistics indicate approximately 6% of homicides are sexual murders (HM Prison Service, 2003), with research suggesting homicides with ‘sexual circumstances’ actually lies closer to 2.5% (Francis, Soothill, & Fligelstone, 2004), having dropped from 3.7% between 1985 and 1994 (Francis & Soothill, 2000). Similar statistics can be found within other countries, such as Finland (2.8%, Häkkänen-Nyholm, Repo-Tiihonen, Lindberg, Salenius, & Weizmann-Henelius, 2009) and Australia (0.9%, Mouzos, 2003). It would appear that European countries have a slightly higher occurrence of sexual homicide, however the proportion of sexual homicides could seem higher due to a lower homicide rate. Overall the pattern remains relatively stable across the world. Given the rarity of such crimes, as well as its decline over the past 20 years, it begs the question as to why research surrounding sexual homicide has continued to increase since the mid-1980s, with more than 50 articles appearing in scientific journals (Chan & Heide, 2008).
Public concern regarding sexual homicide elicits the second highest seriousness rating when compared with over 200 other crimes (Wolfang, Figlio, Tracy & Singer, 1985). The fear of such crimes within the community is somewhat related to the severity and seemingly random victim selection. However, when these crimes do occur, they also receive extensive media and news coverage, inducing moral panic among members of the community and therefore adding to the elevated fear associated with sexual homicides (Roberts & Grossman, 1993). Consequently, the need for research and answers is heightened, but the low base rate associated with sexual homicides makes it difficult for researchers to obtain consistent and useful information. Clinical studies dominated initial research on sexual homicides, relying primarily on convenience samples. With current research relying on small samples of cooperative convicted offenders, making research infrequent (in order to get a large enough sample to provide some insight into the offenders) and hard to generalize (larger standard errors may occur when trying to be representative of a larger population, as well as of certain type of offenders), in turn effecting the significance of the results (Chan & Heide, 2008). Furthermore, when trying to utilise results of research in real-time investigations, given the rarity of such crimes, it is hard to find personnel within police and government departments, including those in specialised divisions, who have enough hands-on experience in sexual homicide cases. The rarity of sexual homicides contributes to not only the lack of empirical research on this area, but the difficulty of apprehending and convicting sexual murderers.

Current research on Sexual Homicide Offenders (SHOs) provides behaviourally rich cases and clearly differentiates them from other forms of violent crime (Vaughn, Delisi, Beaver, & Howard, 2009). Results indicate there are two types of sexual
murderers: the angry and the sadistic (Beauregard & Proulx, 2000). Sexual murderers are more often than not men killing women (Brittain, 1970; Revitch & Schlesinger, 1989), but contrary to media sensationalisation they do not tend to kill multiple victims (Campus & Cusson, 2007). However, difficulties in defining sexual homicide and sadism creates research issues particularly when comparing studies and from a clinical viewpoint, when determining what diagnostic criteria should be utilised.

The aim of this current study is to distinguish SHOs, exploring the differences between the angry and sadistic SHOs - with an emphasis on sadistic offenders. In particular this study investigates the four most cited behavioural traits of the sadistic offender (humiliation, mutilation, use of physical restraints and anal penetration) and determines whether there are crime-scene differences between sexual murderers who adopt these “sadistic” behaviours from those who do not. Findings will be discussed in light of the literature on sexual sadism and the implications for the investigation of these crimes.
Chapter 2.

Defining Sexual Homicide

Sexual homicide has been increasingly investigated in recent decades. Unfortunately, documentation of such crimes is lacking given the challenges found in defining this violent act. Burgess et al. (1986) originally defined sexual homicide in a very clear-cut manner “…results from one person killing another in the context of power, control, sexuality, and aggressive brutality” (p. 252), but later developed it into a broader definition: “…with evidence or observations that indicate that the murder was sexual in nature” (Ressler, Burgess & Douglas, 1988, xiii), altering it once more a few years later focusing on a “sexual element (activity) as the basis for the sequence of acts leading to death” (Douglas, Burgess, Burgess & Ressler, 1992), the sequence and performance of such sexual activity varying between offenders (p. 123). More recently, researchers have highlighted the need for a sexual motive to be present in the definition of sexual homicide. Proulx, Beauregard, Cusson, and Nicole (2007) state sexual murder to be the “culmination of an attack prepared with express purpose of seeking pleasure, even orgasm, in the subjugation, rape and suffering of a carefully selected woman” (p. 1), supported by Schlesinger (2004) who considers sexual murder to be “…a homicide motivated primarily by a breakthrough of underlying sexual conflicts or where the killing itself is sexual gratifying” (p. 1). With Folino (2000), incorporating a broader but sexually focused definition: “sexual homicide is a homicide with evidence of a sexual act” (p. 740).
The lack of a universal definition for sexual homicide (Roberts & Grossman, 1993) has allowed researchers to derive their own, somewhat simplistic interpretations of what sexual homicide may or may not involve. Such disparity in defining sexual homicide creates problems for research (e.g., comparative analysis between findings), data collection (e.g., determining what is a sexual homicide) and official statistics. Furthermore, current definitions do not allow for the inclusion of cases where a sexual element may not be apparent, while sexual activity is not necessary for the murder to be sexual motivated (e.g., the act of killing on its own may be gratifying for the offender). From a researcher’s point of view, most of the definitions also have pragmatic issues with regards to interpreting whether sexual motivation was present or not. Construing this from a crime scene alone is difficult and would rely on information known only to the offender. At present, the most practical definition of sexual homicide (Beauregard & Martineau, 2017), derives from the FBI (Ressler et al., 1988), which states that in order for a homicide to be considered sexual in nature, at least one of the following has to be present: (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; or (f) evidence of substitute sexual activity, interest, or sadistic fantasy. This definition does not come without its limitations, for example, false-positives (killing the victim after the sexual act has taken place, with the intention of destroying evidence) (Folino, 2000), or omitting the intentions of the offender altogether (Kerr, Beech, & Murphy, 2013). However, when a crime is being investigated, the culprit is not available, therefore relying on the crime scene for evidence to try to understand the offender and the crime is the most practical
(Beauregard & Martineau, 2017). Consequently, for the purpose of this study, as well as for real-life police investigations, the FBI definition of sexual homicide is the most reliable at this time. Furthermore, it’s worth noting that even if you were able to interview an offender regarding their true motivations for committing the crime, they themselves may lack the insight required to provide a reliable source of information.
Chapter 3.

Typologies of Sexual Murderers

The need for a universal definition of what constitutes sexual homicide is evident, but in order to form an all-encompassing definition, classifying sexual murderers within a model may need to be the precursor. Sex offenders are comprised of a heterogeneous population of individuals, who have been classified into typologies based upon certain characteristics and motivations. Classifications, or typologies have been created by researchers in order to better understand the differences and distinctions between and within different types of offenders. The most common types of classifications are those that differentiated between juvenile sex offenders, female sex offenders, rapists, child molesters and cybersex offenders (Robertiello & Terry, 2007). Within these classifications however, researchers have discovered that offenders are not alike, requiring further classifications.

An influential model of sexual homicide offenders was created in the 1980s by a group of criminal profilers working with the FBI (Ressler et al., 1986; Ressler et al., 1988). Using a sample of thirty-six serial sex offenders, Ressler et al. (1986) separated sexual murderers into an ‘organised’ and ‘disorganised’ dichotomy. The notion being that the offender’s personality is evident at the crime scene, helping create profiles of offenders. An organised murderer is someone who plans the murder and displays control at the crime scene (i.e., leaving no clues). A disorganised murderer is someone who is less prone to or does not plan the murder and crime scenes are irregular and appear
random in nature (i.e., leaving clues at the crime scene). With these categories in mind, Ressler et al. (1986) looked at the crime-scene behaviours of their sample, finding there were in fact “consistencies and patterns in crime scenes that are objectively quantifiable and that distinguish organized from disorganized sexual murderers” (p. 293). However, in 1998, Godwin revealed that only different levels of aggression were explained by the labels “organised” and “disorganised”, with Beauregard and Proulx (2002) observing that the pre-crime and post-crime factors were omitted from the FBI study, which focuses primarily on the actual commission of the crime (the crime phase).

Following the FBI organised/disorganised dichotomy, other researchers have suggested alternative typologies, typically ranging between two and four types (Revitch & Schlesinger, 1981; Keppel & Walter, 1999; Clarke & Carter, 2000; Kocsis, 1999; Meloy, 2000; Beech, Robertson, & Clarke, 2001; Beauregard & Proulx, 2002; Canter, Alison, Alison, & Wentink, 2004; Malmquist, 2007; Sewall, Krupp, & Lalumiere, 2013).

Two types of sexual homicide offenders are consistently reported across various studies: the angry and the sadistic (Beauregard, Proulx, & St-Yves, 2007). Ressler et al. (1988) described the ‘angry’ murder using the term ‘disorganised’ – with Revitch and Schlesinger (1981) and Meloy (2000) using ‘cathatymic’ (which encompasses a displacement of intense matricentric rage towards another woman). Other studies described the ‘angry’ sexual murderer as someone who was ‘retaliatory’ (Keppel & Walter, 1999), ‘grievance motivated’ (Beech et al., 2001), and as someone who ‘rapes’ their victims (Malmquist, 2007). While the ‘organised’ (Ressler et al., 1988) and ‘compulsive’ (Revitch & Schlesinger, 1981; Meloy, 2000) sexual murderer were used as alternatives to the ‘sadistic’ sexual murderer. With a focus on ‘lust’ (Malmquist, 2007),
and a ‘prior intent to kill’ (Beech et al., 2001). Regardless of the label, the angry ‘disorganised’ and the sadistic ‘organised’ sexual murderers present a number of consistent characteristics both in terms of the context of the crime, and more specifically the *modus operandi* used by the offender during the crime.

### 3.1. The ‘Angry’ vs. the ‘Sadistic’ Sexual Murderer

Focusing on the ‘angry’ sexual murderer, these comparative studies (Revitch & Schlesinger, 1981; Keppel & Walter, 1999; Clarke & Carter, 2000; Kocsis, 1999; Meloy, 2000; Beech, Robertson, & Clarke, 2001; Beauregard & Proulx, 2002; Canter, Alison, Alison, & Wentink, 2004; Malmquist, 2007; Sewall, Krupp, & Lalumiere, 2013) highlighted common characteristics. The *modus operandi* utilised by these offenders is typically unplanned, with no premeditation. There is a lot of familiarity involved in the crime for the offender: (a) choosing a victim who is known to them; (b) choosing a known location for the crime; (c) usually an outdoors setting within walking distance of their home. The corpse is generally left at the crime scene, with the cause of death usually caused by strangulation. However, sometimes the victim’s actions or words can provoke the offender leading to violent and explosive attack from the offender (e.g., overkill). Whereas, the ‘sadistic’ sexual murderer is typically using a con tactic, such as, manipulation in order to approach the victim – who is unknown to the offender. The location of the crime tends to be chosen in advance, isolated and away from the victim and offenders home addresses. The weapons used at the crime scene reflect that of someone who has sadistic fantasies, such as, using torture instruments and restraints. Including more unusual behaviour, which includes leaving foreign objects inside the
offender’s body cavities, and retaining souvenirs. The sexual acts involved in sexual homicides include vaginal penetration and/or anal penetration. Sadists like to humiliate their victims, which in turn can lead to extreme violence and homicide. The most common method used to kill victims of sexual homicide is strangulation. Following the commission of the crime, Beauregard & Proulx (2002) found ‘sadistic’ offenders conceal the body in a different place to where the crime occurred – reflecting the ‘organised’ mentality of sexual homicide offenders.

When comparing some studies with that of the FBI (Ressler et al., 1988) there were some key findings that contradicted each other. Beauregard & Proulx (2002) and Beauregard, Proulx, & St-Yves (2007) found mutilation to be characteristic of sadism, but the FBI associated mutilation with that of the ‘disorganised’ offender. Furthermore, due to the time spent at the crime scene Beauregard & Proulx (2002) and Beauregard, Proulx, & St-Yves (2007) suggest the ‘sadistic’ offenders are more at risk of being caught by the police, however, the FBI researchers (Ressler et al., 1988) suggest the ‘angry’ or ‘disorganised’ offenders are more likely to be caught due to more evidence left at the crime scene, a result of the lack of planning associated with the ‘angry’ sexual offender.

Beauregard, Proulx & St-Yves (2007), introduced pre-crime and post-crime phases to their analysis, comparing it to that of the FBI (who focused primarily on the crime phase). The FBI’s study used an emotional scale evaluation on their sample which used a scale from 1 to 5, results suggest that the ‘organised’ offenders are “more depressed, more calm, less nervous, less frightened and less confused than were the disorganised murderers” (p. 134) – the opposite of Beauregard & Proulx (2002). It is believed that this difference could be due to the manner in which the emotional state of
the offenders was studied and/or the motivational differences of serial murderers and nonserial murderers (Beauregard, Proulx & St-Yves, 2007). Additionally, personality disorders appear to affect the relational and occupational problems of the ‘angry’ and the ‘sadistic’ offenders: Beauregard & Proulx (2002) found the ‘angry’ offenders suffered from borderline personality disorder, explaining their issues with loneliness (something the ‘sadistic’ offenders did not report) and their need to use psychoactive substances in the 48 hours preceding the crime. Adding to the unstable and ‘disorganised’ lifestyles suggested by the FBI (Ressler et al., 1988). The ‘sadistic’ offenders on the other hand were found to exhibit schizoid and avoidant personality disorders (Beauregard & Proulx, 2002). This explains research which suggests they have a simultaneous need to be both in contact with people (Beauregard, Proulx, & St-Yves, 2007), and have an inability to receive, and maintain intimacy (Beck & Freeman, 1990). Furthermore, prior to the crime, research has found ‘sadistic’ offenders, spend the 48 hours prior to the crime indulging in their deviant fantasies, reading pornographic material and planning their crimes – in line with the ‘organised’ profile by the FBI (Ressler et al., 1988). Pre-crime alcohol consumption differed in the FBI study (Ressler et al., 1988), suggesting sadistic offenders ‘organised’ required higher levels (56%) than the angry ‘disorganised’ offenders (19%). Beauregard, Proulx, & St-Yves (2007) contradicted these findings with no real difference between the two typologies, although they were significantly higher than the FBI study (85% vs. 79%). It is believed that this could be explained by the difference in sample composition (serial vs. nonserial) however without further research it is hard to know.

Beauregard, Proulx, & St-Yves (2007) post-crime factors demonstrated further differences between the two typologies. The ‘angry’ sexual murderer’s borderline
personality disorder (Beauregard & Proulx, 2002) results in impulsivity and over-the-top reactions, reflected in their cooperation during interrogations, admitting to their responsibility for the sexual murder, as well as handing themselves in after the crime. Whereas, the ‘sadistic’ sexual murderers ‘organised’ personality requires the investigation to be tightly controlled with pressure applied to the suspect in order for them to cooperate or confess (St-Yves, 2002), the lack of evidence found at the crime scene during sadistic sexual murderers making matters worse.

Despite these limitations, there are clear differences between the ‘angry’ and the ‘sadistic’ sexual offenders. The most important limitation impacting the majority of these studies is the wide spectrum of offenders included (e.g., nonserial, serial) - this is important to consider when analysing and comparing sexual homicide studies, as even if you understand what is involved when looking at a sexual homicide offenders, whether it was committed by men or adult women could alter results - demonstrating the heterogeneity within this type of crime.
Chapter 4. Sadists and Non-Sadists

Personality Disorders

Personality Disorders (PDs) and paraphilia’s are often documented in research related to sexual offending (e.g., Ahlmeyer, Kleinsasser, Stoner & Retzlaff, 2003; Smallbone & Wotley, 2004; Beauregard, Proulx, & St-Yves, 2007). Studies show that borderline personality disorder (the ‘angry’ sexual homicide offender), schizotypal (the ‘sadistic’ sexual homicide offender) and narcissistic PDs are the most common amongst sexual offenders (Leue, Borchard, & Hoyer, 2004). Although it has been debated whether there are in fact PDs that are more dominant among sexual offenders (Bogerts, Vanheule, & Palmans, 2005), research has shown that offenders involved in the most violent of criminal offences (i.e., sexual homicides), have a high prevalence rate of a PD diagnosis (Chan & Heide, 2008; Folino, 2000; Langevin, 2003) – with antisocial PD being the most common, varying between 27% to 81% (e.g., Chan & Heide, 2008 Folino, 2000; Stone, 2001; Langevin, 2003; Berner & Bricken, 2006).

Paraphilias’ are psychiatric behaviours of abnormal or unconventional sexual behaviour. The Diagnostic and Statistical Manual for Mental Disorders (DSM) -IV-TR describes paraphilia as a "recurrent, intense sexually arousing fantasies, sexual urges or behaviors generally involving nonhuman objects, the suffering or humiliation of oneself or one's partner, or children or other nonconsenting persons that occur over a period of six months (criterion A), which cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (criterion B)” (American Psychiatric Association, 2003, p. 570-2). Eight paraphilias were listed, which included
sexual sadism. However, following issues determining what constitutes treatment and trying to differentiate between what causes harm to individuals and what does not the DSM-V made a distinction between paraphilias and paraphilic disorders. Consequently, sexual sadism was renamed a disorder, and refers to a continuum of behaviours that may range from emotional coercion to more physical aggression. It specifically refers to the “recurrent and intense sexual arousal from the physical or psychological suffering of another person, as manifested by fantasies, urges or behaviours” (p. 696). It is worth noting that sexual sadism must be differentiated from normal sexual arousal and the level of aggression and pain inflicted on the victim is different from that of sadomasochistic behaviour. The International Classification of Diseases (ICD-10), however, uses the same diagnostic criteria for sadism and masochism (World Health Organisation, 1992). The disorder of sadomasochistic is described as a “sexual preference for activities involving the infliction of humiliation, pain and bondage” (p. 172). In this context, sadism is viewed as the active role, and masochism as the passive role. Furthermore, the ICO-10 differentiates between anger or pure cruelty and sadism in a sexual context.

Since Krafft-Ebing’s work on the Psychopathia Sexualis, researchers have tried to validate the notion of sadism, however, the variability across sources means an agreed upon definition is yet to emerge. This disparity has led to various estimates on the actual prevalence of sadism, which ranges anywhere from 5% to 50% (Chan & Heide, 2008; Healey, Lussier, & Beauregard, 2013; Langevin, 2003; Stone, 2001; Chan & Beauregard, 2015). Consequently, the inconsistencies in definitions make identifying sadism in individuals unreliable and effects the ability to compare sadistic offending across studies. As a result, researchers have started to move away from using diagnostic criteria to
identify sadism within offending populations (e.g., DSM-V, ICD-10), instead turning to more reliable and consistent indicators, such as behaviour crime-scene indicators which are exhibited during the crime phase (e.g., Healey, Lussier, Beauregard, 2012; Marshal & Hucker, 2006, Nitschke, Mokros, Osterheider, & Marshall, 2012). These indicators provide a more objective understanding of the offender motivations (Healey, Lussier, Beauregard, 2012), and can be used in conjunction with clinical assessments to provide an accurate and all-encompassing diagnosis.

4.1. Differentiating sadists from non-sadists

With the change from diagnostic to behavioural crime-scene indicators, researchers have been conducting studies to determine whether there is a difference between sadistic offenders and non-sadistic sexual offenders.

Healey, Lussier & Beauregard (2012) examined the predictive validity of the crime-scene indicators of sadism in the context of sexual homicide and rape. Results indicated 40% of the crime-scene indicators overlapped with the official diagnosis of sadism and that these behaviours were able to determine which offenders were sexual murderers and rapists. In particular, premeditation, mutilation, humiliation and the use of physical restraints were significantly related to an official diagnosis of sadism. However, both non-sadists and sadists were found to use excessive amounts of force during the commission of the crime, suggesting ‘force’ is not a good indicator of sadism.

Proulx et al. (2006) incorporated crime-scene behaviour indicators with that of phallometric data. Phallometric assessments measures the sexual arousal to violence by exposing the participants to various auto-taped descriptions of violence (sexual and
nonssexual) and measuring the level of sexual arousal through changes in the volume/circumference of the penis (Quinsey, Chaplin, & Varney, 1981; Barbaree, Seto, Serin, Amos, & Preston, 1994; Proulx et al., 1994; Seto & Kuban, 1996). Results found that although sadists and nonsadists did not differ in their arousal to non-sexual violence, sadists showed increased arousal to rape with physical violence and rape with humiliation compared to nonsadists. Nitschke, Osterheider, & Mokros (2009) research found that exercising power and control, humiliation of victims, and being sexually aroused by these acts were the most important factors that differentiated sadists from nonsadists.

The act of humiliation reflects whether the offender humiliated the victim during the offense, which includes physical, verbal and/or both physical and verbal humiliation (Langevin et al., 1988; Dietz, Hazlewood & Warren, 1990; Beauregard & Mieczkowski, 2012; Healey, Lussier & Beauregard, 2013). Healey, Beauregard, Beech & Vettor (2016) wanted to determine whether the sexual murderer was a unique type of offender. In doing so, results indicated the ‘sadistic' profile was characterised by high levels of humiliation (.98), furthering previous research which indicated humiliation to be an integral part to sadists lead-up to sexual homicide (Ressler et al., 1986; Dietz et al., 1990; Langevin, 2003; Beauregard & Proulx, 2002; Richards & Jackson, 2011; Marshall & Hucker, 2006). Additionally, torture and mutilation have been identified as two of the strongest behavioural predictors of sadism (Marshall & Hucker, 2006).

Weapons left or used at the crime scene can reflect that of someone who has sadistic fantasies, such as using torture instruments and/or physical restraints. The FBI study (Ressler, Burgess, & Douglas, 1988) found 40% of the offenders had used physical restraints. However, some studies separate physical restraints from other weapons, such
as ligatures. In doing so the definition of physical restraints becomes blurred given ligatures are used to bind or tie up victims too. For example, Beauregard & Martineau (2012) found 20.3% of their population used ligatures and 10.9% used physical restraints. As a result, it’s possible the use of physical restraints maybe underestimated in studies and open to interpretation based on who is both answering the question and looking at the crime scene.

Beauregard & Field (2008) found that offenders displaying “organized” psychological characteristics are more likely to move the body – consistent with previous literature which has found offenders who are disorganized, impulsive, unstable and overly violent are more likely to leave the body at the crime scene (Ressler, Burgess, Douglas, et al., 1986; Ressler, Burgess, Hartman, et al., 1986; Ressler, et al., 1988; Beauregard & Proulx, 2002). Furthermore, Ressler and colleagues (1988) organized model states that those who are in control at the crime scene make sure that they do not leave any evidence at the crime scene (i.e., moving the body) – the purpose of which is to not only delay the discovery of the body, but to hide and/or obscure any connections the offender may have with the victim and the crime scene. This was also demonstrated by Dietz et al. (1990) who found sadistic offenders demonstrated investigative awareness by wearing gloves at the crime scene and pre-selected deserted locations.

However, it is worth noting that semen does get found at sexual homicide crime scenes, typically around 20-25% of offenders in each study – given the careful manner in which the crimes are carried out and evidence removed by the offender, it has been hypothesized that when semen has been found at the crime scene it is a result of the offender having sexual dysfunction at the crime scene (Ressler, Burgess, Douglas,
Hartman, & D’Agostino, 1986). Therefore, the presence of semen at the crime scene is not necessarily indicative of an offender who is disorganized.

Previous research has also touched upon the use of anal sex as a method used by the offender to degrade the victim. For example, Gratzer & Bradford (1995) found sadists who humiliate their victims are more likely to force anal sex on the victim - suggesting the two behaviours (anal sex and humiliation) mutually coexist with one another. Beauregard & Field (2008) also suggest after vaginal penetration, anal penetration was the second most common sexual act committed during sexual homicide within their study. Although under-researched the link between sadism, sexual homicide and the use of anal sex as another method used by the offender to degrade and humiliate the victim further is apparent and needs to be research directly as a feature of sadism and sexual homicide.

Despite some disagreement as to the core features of sadism, these studies demonstrate that a behavioural indicator could be insightful as a potential feature to aid in sadistic offending investigations. It is particularly useful as it requires no self-reported offense behaviour, instead it can be determined from the crime scene alone. Furthermore, it could be useful to diagnosticians if self-reported information is unavailable or unreliable.
4.2. **Dimensional vs. Categorical**

After the recent focus on behavioural indicators, along with changing sexual sadism into a disorder within the DSM, researchers have begun to question whether sadism goes beyond the categorical approach, (which suggests an offender is distinctly sadistic or non-sadistic), but is in fact a continuum of behaviours (dimensional) that may range from emotional coercion to more physical aggression.

Nitschke et al. (2012) suggest that a categorical approach to sexual sadism is unlikely. With the behaviour of a sadistic offender during the crime phase appearing to be a more violent and exaggerated form of sexual violence – which could be found along the upper end of the continuum for sexual aggression. Mokros et al. (2014) examined crime-scene behaviour and clinical data of 1,020 adult male sex offenders to research whether there was presence of latent dimensional structure in sadism. Results suggest that sadism is more likely to be dimensional than categorical in nature. Based on the severity of sadistic behaviour, Reale, Beauregard, & Martineau (2017) examined whether the SHOs in their study could be classified into distinct groups. Results found three distinct groups, suggesting the severe sadism group would be at the upper end of the continuum and the non-sadists would be at the lower end.

Regardless of whether sadism is dimensional or categorical in nature, there is a commonality in that crime-scene behavioural indicators that can be found in several of the sadism scales developed to measure sadism in sex offenders. If a consensus can be found in a definition of what constitutes sadism and more importantly what behaviours are most salient to sadism, the dimensionality debate will be easier to determine. The
three most cited behaviours associated with sadism are: humiliation, mutilation and physical restraints, with the inclusion of anal penetration in more recent studies. All four of these behaviours in their own right inflict pain and suffering on the victim, whether physical or psychological with humiliation being one of the most cited features of sadistic sexual attacks. As a result, it has become one of the more salient behavioural criterion of the DSM diagnosis of sadism (Marshall, Kennedy & Yates, 2002; Marshall, Kennedy, Yates & Serran, 2002; Marshall & Kennedy, 2003). However, all victims of sexual assault will experience pain and suffering, so using this characteristic on its own is not indicative of sadism. Furthermore, the need to exercise power and control over the victim cannot be used to determine who is a sadist, since those who rape their victims or those who are child molesters also exercise power and control, but in a different way.

4.3. Aim of this Study

In an attempt to overcome the shortcomings and limitations of previous research, the current study aims to compare crime characteristics for sexual homicide offenders who have committed the four most commonly cited behaviours associated to sexual sadism (humiliation, mutilation, physical restraints and anal penetration). These four behaviours will become the dependent variables and the crime scene and modus operandi variables will be introduced as the independent variables in order to test the effects on these four ‘sadistic’ behaviours. The results will aim to answer the following research questions:

1. Is it possible to identify the differences between sexual murderers who adopted the four most cited ‘sadistic’ behaviours from those who do not?
2. Are these four ‘sadistic’ behaviours most reflective of a sadistic SHO based on previous research and results from this study?

Binary logistic regression is the most appropriate multivariate regression analysis given the binary nature of the variables and the aims of the study. Findings will be discussed in light of the literature on sexual sadism, sadism scales and the implications for the investigation of these crimes. It is worth noting that this study will be utilizing existing definitions and classifications and testing them with this data. This study will not attempt to find new variables associated with SHOs or sadism.
Chapter 5. Methodology

5.1. Participants

The present study used data collected from sexual murderers incarcerated in the province of Quebec (Canada) from 1998 until 2005. To be included within this study, offenders had to commit crimes that met at least one of the sexual homicide criterion as defined by Ressler et al., (1988): (1) victim’s state of dress; (2) sexual positioning of the victim’s body; (3) exposure of the sexual parts of the victim’s body; (4) insertion of a foreign object into the victim’s body cavities; (5) evidence of substitute activity, interest, or sadistic fantasy, such as mutilation of genitalia; and (6) evidence of sexual intercourse (oral, vaginal, anal). Of the 100 sexual murderers contacted, 85 agreed to participate in the research project and signed written consent. Majority of the participants were Caucasian (90.6%), and the average age at the time of the intake assessment was 33.7 years (SD = 10.4). Only 30.6% of these offenders were in a relationship or married at the time of the sexual murder. None of the offenders included within the study had major mental disorders, such as psychotic or mood disorders, and none were mentally disabled. Of the 85 offenders, 80% murdered female victims, of which 67.9% were adult victims (18 years or older) and 92.9% were Caucasian. Offenders had been convicted on average 1.4 (SD = 1.7) for previous adult violent crimes, 4.2 (SD = 5.4) for adult serious crimes, 1.6 (SD = 2.9) for adult other serious non-violent crimes, .4 (SD = .76) for adult sexual crime (hands-on) and .15 (SD = .43) for adult sexual crime (hands-off).
5.2. Procedures

Data was collected during a semi-structured interview with each participant using the Computerised Questionnaire for Sexual Aggressors (CQSA) (St-Yves, Proulx & McKibben, 1994). The CQSA includes information on different aspects of an offender’s life and criminal activity, such as correctional information, pre-crime, crime and post-crime factors, and psychiatric diagnostics. The main advantages of the semi-structured interview over other methods are that it allows subjects to speak freely and at length using their own concepts and terminology. It can also be conducted in a relatively informal, non-threatening manner, providing the researcher the opportunity to develop a relationship of trust and confidence (Bennett & Wright, 1984). Checking for and questioning inconsistencies monitored the reliability of responses in our study. However, the study includes areas of questioning where variables were not available in official reports. As a result, it is possible that some offenders may have been tempted to exaggerate (e.g., drug use prior to crime) or minimize (e.g., use of pornography prior to crime) certain behaviours related to the event. Nonetheless, one study comparing the responses of offenders to official records revealed agreement between the two (West & Farrington, 1977). In order to minimize response distortion, offenders were promised complete confidentiality, and a guarantee that information they provided could not be used in any way against them by the Correctional Service of Canada.

Police records, victim statements, and the institution case files were consulted to determine details about each offender’s criminal activities. In case disagreement between self-reported data gathered using the CQSA and the official data (police record, victim statement and institutional files), the official data was used. Inter-rate agreement was
measured on the basis of 16 interviews (and consultations of official documentation) conducted jointly by two raters. Ratings were done independently following those interviews, which were conducted by one interviewer in the presence of the other. The current study is a secondary data analysis of this data which was collected for the purpose of a prior study. The current study is distinct from the original work.

5.3. Variables

Dependent Variables. A total of four dependent variables were included in this study: humiliation – which could be physical (i.e., urinating and/or defecating on victim, positioning victim in a certain position) and/or psychological (i.e., calling victim certain names, cutting hair, forcing victim to say certain things during assault); physical restraints – which includes the use of bondage; and mutilation – which includes removal of body parts; and anal penetration with penis. Each variable was dichotomized (0 = no, 1 = yes). Among the 85 sexual murderers in this study, 20% (n = 17) humiliated their victims; 12.9% (n = 11) used physical restraints; 18.8% (n = 16) mutilated their victims; and 14.1% (n = 12) had anal sex with penis with their victims.

Table 1. Descriptive Statistics of Dependent Variables

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humiliation (1 = yes)</td>
<td>17</td>
<td>20.0</td>
</tr>
<tr>
<td>Physical Restraints (1 = yes)</td>
<td>11</td>
<td>12.9</td>
</tr>
<tr>
<td>Mutilation (1 = yes)</td>
<td>16</td>
<td>18.8</td>
</tr>
<tr>
<td>Anal penetration with penis</td>
<td>12</td>
<td>14.1</td>
</tr>
</tbody>
</table>
Independent Variables. *Crime-Scene variables*. A total of four crime-scene variables were included. Location of the body was dichotomized (0 = not left at the crime scene, 1 = left at the crime scene). State of dress of the victim was dichotomized (0 = dressed/partially dressed, 1 = naked/genitals and breasts exposed). Cause of the victim’s death was dichotomized (0 = no strangulation/asphyxiation, 1 = yes strangulation/asphyxiation). Semen found in the body cavities of the victim was dichotomized (0 = no, 1 = yes).

*Table 2. Descriptive Statistics of Crime Scene Independent Variables*

<table>
<thead>
<tr>
<th>Crime Scene</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of body (1 = Left at the crime scene)</td>
<td>19</td>
<td>22.4</td>
</tr>
<tr>
<td>State of dress of the victim (1 = naked/genitals and breasts exposed)</td>
<td>47</td>
<td>55.3</td>
</tr>
<tr>
<td>Cause of death (1 = strangulation/asphyxiation)</td>
<td>40</td>
<td>47.1</td>
</tr>
<tr>
<td>Semen found in the body cavities of the victim (1 = yes)</td>
<td>13</td>
<td>15.3</td>
</tr>
</tbody>
</table>

1 Crime Scene variables in this study were defined as characteristics of the victims body/location and death that could be determined through physical evidence and observation.
Modus Operandi variables\textsuperscript{2}. A total of fifteen modus operandi dichotomous variables were included. Premeditation of the offense – which involves deliberate, thought out planning prior to the crime occurring with calculated intent - was dichotomized (0 = no, 1 = yes). Time of the crime was dichotomized (0 = day, 1 = evening/day and evening). Selection of the victim, pre-meditated prior to the crime occurring was dichotomized (0 = no, 1 = yes). Level of intimacy between the offender and victim prior to the offense was dichotomized (0 = stranger/no intimacy, 1 = friendship/affectionate relationship). Strategies used to get in touch with the victim was dichotomized (0 = no coercion, 1 = coercion), with coercion reflecting the use of physical force and/or threats. Strategies used to bring the victim to the crime site was dichotomized (0 = no coercion 1 = coercion), with coercion reflecting the use of physical force and/or threats. Use of a weapon on the victim (at any point during their interaction) was dichotomized (0 = no, 1 = yes). Reaction from the offender to the victims resistance was dichotomized (0 = no resistance/physical force, 1 = physical force). Nature of the sexual acts on the victim during the offence was dichotomized (0 = no sexual acts/non-intrusive, 1 = intrusive/both intrusive and non-intrusive). Probability of apprehension from police and/or passersby during the crime was dichotomized (0 = low, 1 = high). Distinctive characteristics searched for by the offender when selecting their victim, such as specific hair colour, facial features or body shape was dichotomized (0 = no, 1 = yes). Type of resistance exhibited by the victim during the crime was dichotomized (0 = none/passive, 1 = verbal and physical). Pre-mortem torture of the victim was dichotomized (0 = no, 1 = yes multiple evidence of torture). Length of the crime was

\textsuperscript{2} Modus Operandi variables in this study were defined as an unvarying/habitual method/ procedure which could be inferred from the crime scene itself and any evidence present.
dichotomized (0 = less than 15 minutes, 1 = more than 15 minutes). Residential situation of the victim at the time of the crime was dichotomized (0 = living alone, 1 = not alone).

Table 3. Descriptive Statistics of Modus Operandi Independent Variables

<table>
<thead>
<tr>
<th>Modus Operandi</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premeditation (1 = Yes)</td>
<td>56</td>
<td>65.9</td>
</tr>
<tr>
<td>Time of the crime (1 = evening/day and evening)</td>
<td>64</td>
<td>75.3</td>
</tr>
<tr>
<td>Selection of victim (1 = yes)</td>
<td>33</td>
<td>38.8</td>
</tr>
<tr>
<td>Level of intimacy (1 = friendship/affectionate)</td>
<td>18</td>
<td>21.2</td>
</tr>
<tr>
<td>Strategies to get in touch (1 = coercion)</td>
<td>50</td>
<td>58.8</td>
</tr>
<tr>
<td>Strategies to bring victim to crime scene (1 = coercion)</td>
<td>42</td>
<td>49.4</td>
</tr>
<tr>
<td>Used a weapon on the victim (1 = yes)</td>
<td>57</td>
<td>67.1</td>
</tr>
<tr>
<td>Reaction from offender to victims resistance (1 = physical force)</td>
<td>66</td>
<td>77.6</td>
</tr>
<tr>
<td>Nature of the sexual acts on the victim (1 = intrusive)</td>
<td>44</td>
<td>51.8</td>
</tr>
<tr>
<td>Probability of apprehension (1 = high)</td>
<td>39</td>
<td>45.9</td>
</tr>
<tr>
<td>Distinctive characteristics searched for by offender (1 = yes)</td>
<td>16</td>
<td>18.8</td>
</tr>
<tr>
<td>Type of resistance from victim (1 = verbal/physical)</td>
<td>67</td>
<td>78.8</td>
</tr>
<tr>
<td>Pre-mortem torture (1 = yes multiple evidence)</td>
<td>68</td>
<td>80.0</td>
</tr>
<tr>
<td>Length of crime (1 = more than 15 mins)</td>
<td>66</td>
<td>77.6</td>
</tr>
<tr>
<td>Residential situation of victim (1 = not alone)</td>
<td>51</td>
<td>60.0</td>
</tr>
</tbody>
</table>
5.4. Statistical Analyses

Analytical Strategy

Table 1 – 3 presents descriptive information for each independent and dependent variable and how they were coded individually. All variables were dichotomized based on the presence or absence of certain behaviours or evidence left on the victim/at the crime scene. In order to determine whether the modus operandi and crime-scene variables were significant in relation to the presence of the four main dependent variables, bivariate analyses (chi-square) were conducted (Tables 4 & 5). Behaviours that were significant at the bivariate level were placed into a logistic regression model at the multivariate level. Logistic Regression was chosen due to the dichotomous nature of the variables and was used to determine which crime scene (Table 6) and modus operandi (Table 7) variables are more or less likely to occur with each of the dependent variables (humiliation, physical restraints, mutilation and anal penetration). Single block logistic regression was chosen instead of sequential block analysis as initial comparison yielded no difference in results between the two methodologies. .
## Chapter 6. Results

### Table 2. Bivariate Analyses Between Each Dependent Variable and Modus Operandi

<table>
<thead>
<tr>
<th>Modus Operandi</th>
<th>Humiliation</th>
<th>Physical Restraints</th>
<th>Mutilation</th>
<th>Anal Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$</td>
<td>$\chi^2$</td>
<td>$\chi^2$</td>
<td>$\chi^2$</td>
</tr>
<tr>
<td>Premeditation (1 = Yes)</td>
<td>4.724*</td>
<td>3.521+</td>
<td>6.81**</td>
<td>.517</td>
</tr>
<tr>
<td>Time of the crime (1 = evening/day and evening)</td>
<td>.016</td>
<td>.923</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>Selection of victim (1 = yes)</td>
<td>9.028**</td>
<td>3.275+</td>
<td>7.432**</td>
<td>1.124</td>
</tr>
<tr>
<td>Level of intimacy (1 = friendship/affectionate)</td>
<td>.070</td>
<td>.068</td>
<td>2.631+</td>
<td>1.237</td>
</tr>
<tr>
<td>Strategies to get in touch (1 = coercion)</td>
<td>.304</td>
<td>2.758+</td>
<td>2.129</td>
<td>.449</td>
</tr>
<tr>
<td>Strategies to bring victim to crime scene (1 = coercion)</td>
<td>.047</td>
<td>.861</td>
<td>2.946+</td>
<td>3.331+</td>
</tr>
<tr>
<td>Use of weapon on victim (1 = yes)</td>
<td>.852</td>
<td>.184</td>
<td>1.042</td>
<td>.482</td>
</tr>
<tr>
<td>Reaction from offender to victims resistance (1 = physical force)</td>
<td>.017</td>
<td>1.280</td>
<td>5.674**</td>
<td>3.003+</td>
</tr>
<tr>
<td>Nature of the sexual acts on the victim (1 = intrusive)</td>
<td>.424</td>
<td>.039</td>
<td>4.262*</td>
<td>13.02***</td>
</tr>
<tr>
<td>Probability of apprehension (1 = high)</td>
<td>.426</td>
<td>.382</td>
<td>.036</td>
<td>.886</td>
</tr>
<tr>
<td>Distinctive characteristics searched for by offender (1 = yes)</td>
<td>3.773*</td>
<td>.590</td>
<td>1.992</td>
<td>1.985</td>
</tr>
<tr>
<td>Type of resistance from victim (1 = verbal/physical)</td>
<td>.159</td>
<td>.281</td>
<td>.889</td>
<td>3.154+</td>
</tr>
<tr>
<td>Pre-mortem torture (1 = multiple evidence)</td>
<td>1.176</td>
<td>.940</td>
<td>22.251***</td>
<td>.097</td>
</tr>
<tr>
<td>Length of crime (1 = more than 15 mins)</td>
<td>.271</td>
<td>1.280</td>
<td>5.674**</td>
<td>3.726*</td>
</tr>
<tr>
<td>Residential situation of victim (1 = not alone)</td>
<td>1.483</td>
<td>.070</td>
<td>.051</td>
<td>.259</td>
</tr>
</tbody>
</table>

Note. $+p<0.10$, $*p<0.05$, $**p<0.01$, $***p<0.001$ (two-tailed)
Results of chi square bivariate analyses for modus operandi variables indicate different significance levels for each dependent variable. With regards to humiliation, our findings show that sexual murderers were significantly more likely to premeditate their crimes ($\chi^2 = 4.724; p < 0.05$); select their victims ($\chi^2 = 9.028; p < 0.01$); and search for distinctive characteristics when selecting their victims ($\chi^2 = 3.773; p < 0.05$). With regards to physical restraints, our findings show that sexual murderers were more likely to premeditate their crimes ($\chi^2 = 3.521; p < 0.10$); select their victims ($\chi^2 = 3.275; p < 0.10$); and used coercion to as the strategy to get in touch with the victim ($\chi^2 = 2.758; p < 0.10$). It is worth noting that although findings with $p < 0.10$ are not significant, they are approaching significance and will be included within the analysis of these results. With regards to mutilation, our findings show that sexual murderers are marginally more likely to use pre-mortem torture ($\chi^2 = 22.251; p < 0.001$); premeditate their crimes ($\chi^2 = 6.81; p < 0.01$); select their victim ($\chi^2 = 7.432; p < 0.01$); use physical force when reacting to the victims resistance during the crime ($\chi^2 = 5.674; p < 0.01$); spend more than 15 minutes on the crime itself ($\chi^2 = 5.674; p < 0.01$); inflict intrusive sexual acts upon the victim ($\chi^2 = 4.262; p < 0.05$); and significantly more likely to have a friendship and/or affectionate relationship with the victim prior to the crime ($\chi^2 = 2.631; p < 0.10$); and use coercion as the strategy to bring the victim to the crime scene ($\chi^2 = 2.946; p < 0.10$). With regards to anal penetration with penis, our findings show sexual murderers are marginally more likely to use coercion to bring the victim to the crime scene ($\chi^2 = 3.331; p < 0.10$); use physical force when reacting to the victims resistance during the crime ($\chi^2 = 4.724; p < 0.10$); and significantly more likely to inflict intrusive sexual acts upon the victim ($\chi^2 = 13.02; p < 0.001$); and spend on the 15 minutes on the crime itself ($\chi^2 = 3.726; p < 0.05$).
Given the significance found at the bivariate level, single block binary logistic regression was chosen for the multivariate level statistical analysis. (Table 6 & 7).

**Table 3. Bivariate Analyses Between Each Dependent Variable and Crime Scene Independent Variables**

<table>
<thead>
<tr>
<th>Crime Scene</th>
<th>Humiliation</th>
<th>Physical Restraints</th>
<th>Mutilation</th>
<th>Anal Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of body (1 = Left at the crime scene)</td>
<td>.017</td>
<td>3.885+</td>
<td>.899</td>
<td>.260</td>
</tr>
<tr>
<td>State of dress of the victim (1 = naked/genitals and breasts exposed)</td>
<td>.761</td>
<td>.495</td>
<td>5.372*</td>
<td>2.195</td>
</tr>
<tr>
<td>Cause of death (1 = strangulation/asphyxiation)</td>
<td>.000</td>
<td>3.003+</td>
<td>1.886</td>
<td>.049</td>
</tr>
<tr>
<td>Semen found in the body cavities of the victim (1 = yes)</td>
<td>1.453</td>
<td>1.399</td>
<td>.182</td>
<td>7.501**</td>
</tr>
</tbody>
</table>

*Note. +p<0.10, *p<0.05, **p<0.01, ***p<0.001 (two-tailed)*

Results of chi square analyses for crime variables indicate different significance levels for each dependent variable. With regards to humiliation, our results indicate no significance with any of the crime scene variables. With regards to physical restraints, our results indicate sexual murderers are significantly more likely to leave the body of the victim at the crime scene ($\chi^2 = 3.885; p < 0.10$) and kills the victim using strangulation/asphyxiation ($\chi^2 = 3.003; p < 0.10$). With regards to mutilation, our results indicate that sexual murderers are significantly more likely to inflict post-mortem torture on the victim ($\chi^2 = 20.931; p < 0.001$); leave the body of the victim at the crime scene ($\chi^2 = 8.833; p < 0.01$); and leave the body of the victim with the genitals and/or breasts exposed ($\chi^2 = 5.372; p < 0.05$). With regards to anal penetration with penis, our results...
indicate that sexual murderers are significantly more likely to leave semen within the victim’s body cavities ($\chi^2 = 7.501; p < 0.01$). Given the significance found at the bivariate level, single block binary logistic regression was chosen for the multivariate level statistical analysis (Table 6 & 7).

Our findings indicate that at the multivariate level of the modus operandi independent variables, those sexual murderers who humiliate their victims are significantly more likely to select their victims ($b = 2.062; SE = .939; p < 0.05$); but significantly less likely to choose victims who lived with others (i.e., not alone) ($b = -1.976; SE = .825; p < 0.01$). Sexual murderers who used physical restraints on their victims were approaching significance and more likely to select their victims ($b = 2.299; SE = 1.281; p < 0.10$), and leave multiple evidence of pre-mortem torture on the victim ($b = 3.056; SE = 1.715; p < 0.10$). Sexual murderers who use physical restraints were significantly more likely to use coercion as a strategy to get in touch with their victims ($b = 4.343; SE = 1.889; p < 0.05$); and use physical force as a reaction to the victims resistance ($b = 4.162; SE = 2.153; p < 0.05$); but significantly less likely to use coercion to bring their victim to the crime site ($b = -3.747; SE = 1.383; p < 0.01$). Sexual murderers who mutilated their victims were significantly more likely to premeditate their crimes ($b = 3.260; SE = 1.749; p < 0.05$) and use intrusive sexual acts on the victim ($b = 2.085; SE = 1.070; p < 0.05$), but significantly less likely to already be affectionate or have a friendship with the victims prior to the crime ($b = -5.882; SE = 2.686; p < 0.05$) and leave multiple evidence of torture on the victim’s body ($b = -7.173; SE = 2.044; p < 0.01$).
Table 4. Single Block Binary Logistic Regression Analyses for each Dependent Variable against Modus Operandi Independent Variables (n = 85)

<table>
<thead>
<tr>
<th>Modus Operandi</th>
<th>Humiliation</th>
<th>Physical Restraints</th>
<th>Mutilation</th>
<th>Anal Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.183(1.750)</td>
<td>-10.324(3.801)***</td>
<td>-2.357(1.804)+</td>
<td>-2.064(2.009)</td>
</tr>
<tr>
<td>Premeditation (1 = Yes)</td>
<td>1.022(1.083)</td>
<td>1.654(1.628)</td>
<td>3.260(1.749)*</td>
<td>.032(2.023)</td>
</tr>
<tr>
<td>Time of the crime (1 = evening/day and evening)</td>
<td>-.084(.819)</td>
<td>-.320(.962)</td>
<td>2.100(1.667)</td>
<td>3.861(2.877)</td>
</tr>
<tr>
<td>Selection of victim (1 = yes)</td>
<td>2.062(.939)*</td>
<td>2.299(1.281)+</td>
<td>1.379(1.144)</td>
<td>1.470(1.833)</td>
</tr>
<tr>
<td>Level of intimacy (1 = friendship/affectionate)</td>
<td>.083(.941)</td>
<td>1.164(1.319)</td>
<td>-5.882(2.686)*</td>
<td>5.272(3.101)+</td>
</tr>
<tr>
<td>Strategies to get in touch (1 = coercion)</td>
<td>-.1.524(1.087)</td>
<td>4.343(1.889)*</td>
<td>-.482(1.561)</td>
<td>4.560(2.384)*</td>
</tr>
<tr>
<td>Strategies to bring victim to crime scene (1 = coercion)</td>
<td>-.020(1.041)</td>
<td>-3.747(1.383)**</td>
<td>1.254(1.526)</td>
<td>-9.233(4.137)*</td>
</tr>
<tr>
<td>Use of weapon on victim (1 = yes)</td>
<td>1.023(.835)</td>
<td>.804(1.151)</td>
<td>-1.157(1.103)</td>
<td>-2.410(1.622)</td>
</tr>
<tr>
<td>Reaction from offender to victims resistance (1 = physical force)</td>
<td>-1.042(1.084)</td>
<td>4.162(2.153)*</td>
<td>-</td>
<td>-6.503(3.488)+</td>
</tr>
<tr>
<td>Nature of the sexual acts on the victim (1 = intrusive)</td>
<td>.689(.744)</td>
<td>1.322(1.059)</td>
<td>2.085(1.070)*</td>
<td>-</td>
</tr>
<tr>
<td>Probability of apprehension (1 = high)</td>
<td>1.285(.792)</td>
<td>-.428(1.001)</td>
<td>2.082(1.328)</td>
<td>-3.158(1.800)+</td>
</tr>
<tr>
<td>Distinctive characteristics searched for by offender (1 = yes)</td>
<td>1.241(.873)</td>
<td>.792(1.231)</td>
<td>-.003(1.183)</td>
<td>2.852(1.738)</td>
</tr>
<tr>
<td>Type of resistance from victim (1 = verbal/physical)</td>
<td>.524(1.109)</td>
<td>-2.614(1.734)</td>
<td>-.551(1.290)</td>
<td>-1.224(2.141)</td>
</tr>
<tr>
<td>Pre-mortem torture (1 = multiple evidence)</td>
<td>-.956(.838)</td>
<td>3.056(1.715)+</td>
<td>-6.173(2.044)**</td>
<td>.698(1.743)</td>
</tr>
<tr>
<td>Length of crime (1 = more than 15 mins)</td>
<td>.038(1.081)</td>
<td>-1.524(1.773)</td>
<td>-</td>
<td>-2.284(2.335)</td>
</tr>
<tr>
<td>Residential situation of victim (1 = not alone)</td>
<td>-1.976(0.825)**</td>
<td>.667(.996)</td>
<td>-1.632(1.232)</td>
<td>.699(1.261)</td>
</tr>
</tbody>
</table>

Note. +p<0.10, *p<0.05, **p<0.01, ***p<0.001
Sexual murderers who use anal penetration with penis are marginally more likely to have an affectionate relationship or friendship with the victim prior to the crime ($b = 5.272; \ SE = 3.101; p < 0.10$), and significantly more likely to use coercion to get in touch with the victim ($b = 4.560; \ SE = 2.384; p < 0.05$). However, those who use anal penetration with the penis are approaching significance and less likely to assume the probability of apprehension during the crime is high ($b = -3.158; \ SE = 1.800; p < 0.10$) and significantly less likely to bring the victim to the crime site using coercion ($b = -9.233; \ SE = 4.137; p < 0.05$).

### Table 5. Single Block Binary Logistic Regression Analyses for each Dependent Variable against Crime Scene Independent Variables ($n = 85$)

<table>
<thead>
<tr>
<th>Crime Scene</th>
<th>Humiliation</th>
<th>Physical Restraints</th>
<th>Mutilation</th>
<th>Anal Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$ (SE)</td>
<td>$b$ (SE)</td>
<td>$b$ (SE)</td>
<td>$b$ (SE)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.509(.542)**</td>
<td>-1.759(.606)**</td>
<td>-3.117(.769)**</td>
<td>-3.057(.807)</td>
</tr>
<tr>
<td>Location of body (1 = Left at the crime scene)</td>
<td>.273(.665)</td>
<td>1.295(.727)+</td>
<td>.733(.670)</td>
<td>-.780(.924)</td>
</tr>
<tr>
<td>State of dress of the victim (1 = naked/genitals and breasts exposed)</td>
<td>.455(.595)</td>
<td>-.205(.716)</td>
<td>1.545(.725)*</td>
<td>1.201(.815)</td>
</tr>
<tr>
<td>Cause of death (1 = strangulation/asphyxiation)</td>
<td>-.189(.603)</td>
<td>-1.725(.975)+</td>
<td>.699(.659)</td>
<td>.141(.770)</td>
</tr>
<tr>
<td>Semen found in the body cavities of the victim (1 = yes)</td>
<td>-1.278(1.097)</td>
<td>.338(.840)</td>
<td>.482(.804)</td>
<td>2.185(.802)**</td>
</tr>
<tr>
<td>Post-mortem sex (1 = yes)</td>
<td>.130(.827)</td>
<td>.510(1.332)</td>
<td>-.047(.786)</td>
<td>.224(.966)</td>
</tr>
</tbody>
</table>

*Note* +p<.10; *p<.05; **p<.01; ***p<.001
Our findings indicate that at a multivariate level focusing on the crime scene independent variables, sexual murderers who use physical restraints on their victims were marginally significantly more likely to leave the body of the victim at the crime scene ($b = 1.295; SE = .727; p < 0.10$); and less likely to kill the victim using strangulation or asphyxiation ($b = -1.725; SE = .840; p < 0.10$). Sexual murderers who mutilated their victims were significantly more likely to leave the body of the victim naked and/or with the breasts and genitals exposed ($b = 1.545; SE = .725; p < 0.05$). Sexual murderers who used anal penetration with penis during the crime were significantly more likely to leave semen within the cavities of the victim ($b = 2.185; SE = .802; p < 0.01$).
Chapter 7. Discussion

The central aim of this study was to determine whether there are crime scene differences between sexual murderers who adopt the four most cited “sadistic” behaviours (humiliation, mutilation, physical restraints and anal penetration) from those who do not. This study was unique because these ‘sadistic behaviours’ were used as dependent variables, thereby focusing on the crime scene behaviours as evidence, unlike previous studies. Through the use of bivariate analysis, we were able to determine which crime scene and modus operandi variables were significantly associated with these four ‘sadistic’ behaviours, and in turn allowed us to use multivariate analysis to understand which independent variables evident at the crime scene were more or less likely to occur with the presence of any of the four dependent variables.

Contrary to the majority of previous research, of the four behaviours, the use of physical restraints was the least frequent among sexual murderers (12.9%) with humiliation coming out on top (20%). Having said that, humiliation was the behaviour with the least number of significant crime scene characteristics associated with it (n = 2) – which could suggest that those who humiliate their victims do so in a simplistic and controlled manner, focusing entirely on the type of victim (selection and location).

It is clear that there are certain crime scene characteristics that differentiate those sexual murderers who adopt “sadistic” behaviours from those who do not. Interestingly, there is minimal overlap between the four dependent variables, this is significant because it suggests each behaviour is mutually exclusive and the presence of one does not necessarily mean that the others will also occur. Additionally, the independent variables
used within this study were distinct in nature so the minimal overlap could suggest that there are particular behaviours that go hand in hand with each of the four dependent variables. Furthermore, it could infer that the SHOs favour a particular behaviour over others which is significant from a theoretical standpoint as this could provide more insight into the offenders’ personality thus providing more information for the police during their investigations.

Humiliation has the least amount of significant crime scene and *modus operandi* variables associated with it, but with a consistent focus across bivariate and multivariate analysis on the selection of the victim. Results suggest sexual homicide offenders who adopt the “sadistic” behaviour of humiliation purposefully select their victims based upon characteristics that appeal to them. In doing so, this indicates humiliation is an integral part to sadists’ preparation, preceding the sexual homicide, supporting previous research (Ressler et al., 1986; Dietz et al., 1990; Langevin, 2003; Beauregard & Proulx, 2002).
Previous research on sadism has contested the presence of physical restraints at the crime scene (Ressler, Burgess, Dougalss, Hartman & D’Agostino, 1986; Dietz et al., 1990, Marshall & Kennedy, 2003) - the idea being that the offender uses the physical restraints to make the victim more submissive in order to prolong the pain and suffering.

Table 6. Summary Table of All Significant IVs against each DV

<table>
<thead>
<tr>
<th>Humiliation</th>
<th>Physical Restraints</th>
<th>Mutilation</th>
<th>Anal Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premeditation (1 = yes)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection of victim (1 = yes)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Level of intimacy (1 = friendship/affectionate)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Strategies to get in touch (1 = coercion)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Strategies to bring victim to crime scene (1 = coercion)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Reaction from offender to victims resistance (1 = physical force)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nature of the sexual acts on the victim (1 = intrusive)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability of apprehension (1 = high)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-mortem torture (1 = multiple evidence)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Residential situation of victim (1 = not alone)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location of body (1 = left at the crime scene)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State of dress of the victim (1 = naked/genitals and breasts exposed)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cause of death (1 = strangulation/asphyxiation)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semen found in the body cavities of the victim (1 = yes)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Our results indicate that those sexual homicide offenders who use physical restraints are more likely to have victims who resist them and require coercion to get in contact with the victim prior to the crime. This, therefore, suggests physical restraints may not be a prerequisite of sadism, but should the victim be less than compliant, then physical restraints will be used in reaction to the resistance from the victim. However, it’s possible that those who do not use physical restraints or have a compliant victim, but have a lethal weapon in their possession find that this is enough to gain control and compliance from the victim (Healey, Beauregard, Beech & Vettor, 2016). As a result, further research is needed to determine whether physical restraints were used in the absence of a lethal weapon and, if so, what differences in crime scene behaviours can be seen. These findings are also important when looking at behaviours associated with sadism as well as what defines sadistic behaviour.

When offenders are clinically diagnosed as sadistic they have to adhere to a list or set of behaviours which will determine whether they fall into the category of being sadistic or not. Previously the presence of physical restraints has been critical in the diagnosis of sadism and has been a successful behavioural indicator. However, if the presence of physical restraints is not a prerequisite to the presence of sadism, as our research suggests, then this would be creating false positives and omitting offenders who could be sadistic, and in turn raising concerns for the investigation. Furthermore, it is possible that other behavioural indicators that have not previously been identified in research could be more reliable in the identification of sadism.

Mutilation is an act that comes prior to the victim’s death, as this provides the offender with the gratification that they require. Our study demonstrated that those sexual
homicide offenders who mutilate their victims are more likely to choose victims whom they have no affectionate relationship with, and less likely to premeditate the crime, suggesting they are more impulsive in nature. Interestingly, our results indicate that those who mutilate victims, like to prolong the humiliation of their victims after the crime has taken place by leaving their bodies (breasts/genitalia) exposed – thereby combining two of the four “sadistic” behaviours. These results are significant and may be explained by recent research which has suggested that sadism is not as rigid in its diagnosis as previously thought, but that sexual sadistic behaviours lie on a continuum. In essence those who gain a high level of sexual satisfaction from pain, suffering and severe fantasies and more likely to mutilate and kill their victims than those who have a lower level of sexual satisfaction (Marshall & Hucker, 2006; Mokros, Schilling, Eher, & Nitschke, 2012, Reale, Beauregard & Martineau, 2017).

Although rarely researched in itself, our study indicates anal penetration is an important factor when determining potential differences between those who display “sadistic” behaviour from those who do not. Used as a means to degrade their victims, our study indicates offenders are more likely to know the victim in an affectionate way, thereby not using coercion or any physical force with the victim. However, in doing so they are increasing the likelihood of being apprehended and therefore killing the victim is a way to eliminate witnesses from the equation. Reale, Beauregard and Martineau (2016) did find that sadistic SHOs could be distinguished from other SHOs based on their investigative awareness during the crime commission process. This included selecting deserted crime scene locations and using forensic awareness strategies (i.e., destroying finger print evidence). Thus, SHOs who use anal penetration with the use of forensic
Awareness strategies at the crime scene may be a more useful indicator for the presence of severe sadism than the presence of humiliation. This is particularly important during the investigation when the police will not know the offender or the victim and will be relying on the evidence at the crime scene.

Despite these results, this study does not come without its limitations. Examples include: (a) measurement – similar to the current study, the only previous study to find the majority of the sexual homicide offenders to not use physical restraints (.62), was that by Healey, Beauregard, Beech & Vettor (2016). It’s likely this could be explained by the fact that the presence of physical restraints is rarely reported, thus putting into question its use as both a behaviour associated with ‘sadists’, as well as that used to diagnose sexual sadism disorder. Additionally, the presence or absence of humiliation when dealing with sexual homicide loses validity when the victim is dead and, therefore, becomes solely reliant on the offender’s report of the event; (b) sample size – due to the nature of the population the sample size is small (n = 85), which can lead to a larger standard error and thereby making it difficult to generalise these results; (c) combinations – each “sadistic” behaviour was taken individually rather than looking at the presence of one of the four behaviours in combination with another. The use of physical restraints and/or anal penetration on their own may not be specific to sadism, as it is known that restraints and anal penetration can be used during more intense/physical sexual encounters. Consequently, it would be worth considering combinations of these characteristics to better identify sadistic behaviour. In addition, it is unclear as to whether these crime scene and modus operandi behaviours would be the same if the offender used one or more of these characteristics; (d) alternative methodologies – other multivariate
analyses could have been used to further understand sadism. For example, multinomial choice model could have determined the probability of the offenders within the sample making a choice between the four ‘sadistic’ behaviours. Alternatively, a model could have been created that adds up the four sadistic behaviours to infer which crime scene and modus operandi characteristics are used with one, two, three or all four behaviours.

Furthermore, the current study focused solely on the four most cited behaviours associated with sexual sadism, however different combinations of these four behaviours could provide different results and may highlight which offenders are more severely sadistic in nature.

In summary, this study provides a solid foundation on which future research on sadism can build. These four behaviours provide an insight as to which crime scene characteristics are more likely to be associated with those sexual murderers who adopt such “sadistic” behaviours from those who do not. In particular focusing on the reliability of certain behaviours in the diagnosis of sadism, as well as understanding that sadism is not black or white, but in fact lies upon a continuum. Thus, requiring future research to be clear as to which behaviours are more indicative of severe sadism and which are less clear cut. Furthermore, not all behaviours are reliable when the offender is unknown to the police at the time of the investigation. The police are therefore relying on physical evidence at the crime scene to determine who the offender could be, so tailoring research to take this into account would be more beneficial from an investigative point of view, which may in turn help with the clinical diagnostic process.
Practically the current findings infer that certain behaviours are more readily associated with sadism than others which could alter the manner in which sexual homicide cases are investigated as well as the process and criteria currently used to clinically diagnose sadism. From a theoretical standpoint, if sadism does lie upon a continuum of severity then not all sadistic offenders should receive the same treatment and/or punishment for their crimes. Furthermore, should humiliation for example, no longer be a reliable behavioural characteristic for the presence/absence of sadism it could affect police investigations that have already been solved and could create doubt over other definitions and prior research.
Notes:

1. Sexual sadism must be differentiated from normal sexual arousal and the level of aggression and pain inflicted on the victim is different from that of sadomasochistic behaviour.

2. Premeditation refers to the thought process of the offender which manifests itself from preparation and planning. A sexual crime becomes pre-meditated when prior to carrying out the crime, the offender plans it in detail. This involves, structured, staged and elaborate planning, with specifics such as the victim’s identity, victim’s characteristics and locations of the crime.

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

4. Post-mortem mutilation was not included in the analysis because sadists would not experience the gratification they desire (i.e., no pain inflicted on the victim) as the victim is already dead.
References


Conference of the Association for the Behavioral Treatment of Sexual Abusers, Montreal, Canada.


