Developmental Risk Factors Among Sadistic Rapists:

A Comprehensive Review of Existing Literature

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Abstract

Recognising that sexual violence persists, this paper investigated developmental risk factors among sadistic rapists. These offenders were focused on because they commit brutal, sometimes fatal, acts of sexual violence and are difficult to apprehend without specialised knowledge, making them a salient target for early prevention and intervention strategies. This paper is underpinned by developmental criminology using Farrington's Integrated Cognitive Antisocial Potential (ICAP) theory and Ward & Beech's Integrated Theory of Sexual Offending (ITSO) to provide a multifaceted perspective on the aetiology of sadistic sexual offending and sadistic rapists. A comprehensive, integrative literature review was conducted to illustrate the prevalence of developmental risk factors among sadistic rapists, evaluate the current state of research on the topic, and inform developmental crime prevention measures. Research on this topic is limited; only 14 studies met the criteria for inclusion. These works were organised by methodology and thematically analysed, and their results were coded according to which of the five risk factor domains they related to (individual, family, school, peer, and community). Risk factors were most prevalent in the individual and family domains, with the development of sadistic rapists characterised by sadistic fantasies, deviant sexual behaviours, aggressive/antisocial conduct, unstable family structures, abuse, and neglect. The studies reviewed identified no risk factors in the community domain, and findings in the peer and school domains were limited. Recommendations for developmental crime prevention measures targeting these prevalent risk factors in the individual and family domains are offered, along with suggestions for an increase in longitudinal and comparative studies for future research.

Keywords: sadistic rapist, developmental risk factors, developmental crime prevention, thematic analysis, integrative literature review

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Developmental Risk Factors Among Sadistic Rapists:

A Comprehensive Review of Existing Literature

Acts of sexual violence (SV) instill significant fear in society, particularly among women, who are overrepresented as victims (Burt & Estep, 1981; Pryor et al., 2023; Ugwu & Britto, 2015). In Canada, it was reported that women were five times more likely to be a victim of sexual assault than men (Cotter, 2021). The overarching term of SV encompasses various criminal offences such as sexual assault, or any non-consensual sexual activities that violate an individual's sexual integrity (Criminal Code, RSC 1985, c C-46; Government of Alberta, 2020; National Sexual Violence Resource Center, 2010). While the public views rape and sexual assault as synonymous, the two concepts can be differentiated (Tavcer & Dobkins, 2023). The Government of Alberta (2020) conceptualised sexual assault as any form of forced or involuntary action that is sexual in nature, including non-consensual kissing, groping, oral sex, or penetration of any kind. Rape is a form of sexual assault that involves forced or coerced oral, anal, or vaginal penetration of any unconsenting or incapacitated party (Donde et al., 2018; National Institute of Justice, 2010; Young & Maguire, 2003). Despite its colloquial use, rape is an outdated term within Canadian law, that was subsumed under the term sexual assault in 1983 when the criminal law was changed to broaden the scope of offences (Hoddenbagh et al., 2021; Roberts et al., 1996; Tavcer & Dobkins, 2023). More specifically, Hoddenbagh et al. (2021) explained that under the Criminal Code of Canada (Criminal Code, RSC 1985, c C-46), three sections encompass sexual assault offences. Level one (s 271) involves any violation of a person's sexual integrity, where little to no physical injuries are inflicted upon the victim and can include everything from unwanted touching of someone's genitals to penetration; level two (s 272) entails sexual assault involving a weapon or imitation of one, threats to an individual other

than the victim, or infliction of bodily harm; and level three (s 273) refers to aggravated sexual assault where the victim is wounded, maimed, disfigured, or their life is endangered (Brennan & Taylor-Butts, 2008, as cited in Hoddenbagh et al., 2021; Tavcer & Dobkins, 2023). Sexual crimes against minors are enumerated under different sections of the *Criminal Code* (Hoddenbagh et al., 2021).

SV has remained an ongoing concern in Canada, where, for over 30 years, its prevalence has not changed (Tavcer & Dobkins, 2023). Roughly 4.7 million females (30% of women) in Canada aged 15 years or older reported having been sexually assaulted at least once since age 15, and 1.2 million (8%) males in the same age demographic reported having been the victim of a sexual assault since age 15 (Cotter & Savage, 2019). Furthermore, it is estimated that more than 940,000 sexual assaults are reported to police per year in Canada (Cotter, 2021, as cited in Tavcer & Dobkins, 2023). However, these numbers may actually be higher, as Cotter (2021) noted that these sexual assault rates only account for incidents that were reported to police. It is estimated that approximately only one in 10 sexual assaults are reported to police (Cotter & Savage, 2019; Tavcer & Dobkins, 2023). Confusion regarding what constitutes sexual assault, worry that the perpetrator would not face consequences, fears of dismissal, stigma, racism, sexism, experiencing shame or embarrassment, and wanting to avoid interaction with law enforcement or legal processes are some of the many barriers that have prevented victims of sexual assault from reporting to police thereby skewing the actual number of offences (Cotter, 2021).

The prevalence of SV begs the question, how do we go about preventing it? In offering a response to such an inquiry, this paper aimed to focus on the perpetrator, particularly the sadistic rapist. These offenders were targeted because the sadistic rapist is one of the most dangerous

typologies of sexual offenders, known for their brutal, sometimes fatal, acts of SV and their highly organised offending behaviours, which makes them difficult to apprehend (Burkey et al., 2015; Hazelwood et al., 2016). Accordingly, their dangerous nature and ability to evade law enforcement makes them a salient target for early prevention and intervention strategies.

Robertiello & Terry (2007) submitted that sexual offending, or any criminality, is most effectively reduced when insight regarding the social and environmental causes to such criminality are understood. In essence, the idea posited by Robertiello & Terry (2007) highlights that the best way to prevent criminal behaviour is to understand the circumstances that are conducive to it. This perspective aligns with a school of thought known as developmental criminology.

Developmental criminology is guided by the belief that criminality is a product of life experiences and behaviours learned from early childhood through adolescence that impact or influence a person's decision to commit crime (Cullen et al., 2012; Tremblay & Craig, 1997, as cited in Lab, 2014). Moreover, it gives way to developmental crime prevention, a significant form of primary crime prevention that sets out to pinpoint and effectively mitigate early risk factors before an individual is severely impacted by those early experiences and behaviours, and before they engage in criminal behaviour (Farrington et al., 2012; Kazemian et al., 2018; Lab, 2014). Kazemian et al. (2018) explain that the developmental approach to understanding and preventing crime borrows from the discipline of psychology to study the impact of protective factors and developmental risk factors on an individual's potential to commit crime.

Protective factors are factors that protect against criminal offending and contribute to low rates of offending among individuals in an identified risk category, such as sexual offenders (Kazemian et al., 2018). However, this paper focused on developmental risk factors because, as

highlighted by Tanner-Smith et al. (2012), these factors can be diagnostic markers that assist in identifying children and adolescents who are increasingly predisposed to engage in severe criminality. Additionally, Lab (2014) highlights that society's failure to address developmental risk factors is part of what makes individuals, especially youths, more susceptible to certain types of criminality. From herein, developmental risk factors will be used interchangeably with 'risk factors' for brevity.

Developmental risk factors are characteristics or experiences over the early lifespan that are linked to the probability or increased likelihood of criminal behaviour (Kazdin et al., 1997; Kraemer et al., 1997; 2001). They impact, modify, or trigger critical processes within an individual's life or the systems they interact with, thereby contributing to undesirable outcomes like criminality (Kazdin et al., 1997). Put simply, developmental risk factors are attributes or life events that alter or influence an individual's behaviour at various levels (e.g. biological, social, psychological), putting them at a higher risk of the outcome the risk factor is related to (Kazdin et al., 1997; Kraemer et al., 1997; Tanner-Smith et al., 2012). In this paper, the outcome being investigated is sadistic sexual offending.

Tanner-Smith et al. (2012) recognised that the influence or prominence of some developmental risk factors fluctuates during various developmental stages, while others are present across the life span. Longitudinal studies have recognised various developmental risk factors and categorised them into one of five domains based on the area of socialisation they are related to: individual, family, peer, school, and community domains (Herrenkohl et al., 2000; Kazdin et al., 1997; Tanner-Smith et al., 2012). This classification system for risk factors is integral to the structure of this paper, and its application will be discussed further in the methodology section.

Thus, converging developmental criminology and crime prevention with the notion put forth by Robertiello & Terry (2007), this paper reviewed existing literature to parse out what developmental risk factors are prevalent among sadistic rapists and determine the influence of those risk factors when informing crime prevention measures. As such, this paper is guided by the following research questions: What developmental risk factors are prevalent among sadistic rapists? How does developmental criminology theory posit a link between these individuals' development and their criminal careers? Lastly, if there are predictors for this type of violent sexual offending, how can we adopt them for crime prevention?

Project Rationale

Policymakers and practitioners acknowledge sexual offending as a significant public health concern (Allardyce, 2018). Sexual offences not only affect the economy, as law enforcement investigations, court processes, incarceration and parole of offenders, medical care and mental health services for victims incur substantial expenses, but, more importantly, victims of SV experience long-lasting trauma that impacts them physically, psychologically, emotionally, which can interfere with work and school (Allardyce, 2018). Investigating underlying factors contributing to the crimes of sadistic rapists is central to the potential early intervention and prevention efforts. While sadistic rapists are not the most common perpetrators of SV, Hazelwood et al. (2016) emphasised that these offenders engage in sophisticated and organised criminal activities, inflicting significant harm and posing challenges for apprehension without specialised insight or knowledge of the population. Hence, understanding aspects of an individual's development that contribute to this level of potential criminality can allow for proactive measures to be implemented with the hope that this particular type of sexual offending can be deterred or prevented entirely. However, studies targeting developmental risk factors among sadistic rapists are few and far between. Existing literature is often limited in the scope of the population in that it focuses solely on child sexual offenders or fails to distinguish between sex offender typologies, viewing them as a homogenous group of offenders (Woodworth et al., 2013). Thus, my paper aimed to address this incongruence by compiling and analysing the available literature that makes such distinctions. While the literature review approach does not directly elicit new data or findings on a topic, evaluating the current state of knowledge through comparison and synthesis of existing literature will help identify gaps in the research, allow for expansion upon previous findings, and position my work within the academic discourse. The hope is that, ultimately, this paper will assist in producing a roadmap for future research and prevention considerations.

An overview of this paper's methodology is provided, highlighting the means of data collection and analysis, as well as the inclusion and exclusion criteria and limitations. Subsequently, the theoretical framework underpinning this paper is outlined. The literature review begins with descriptions of the 14 studies included, which are grouped according to the methodology or approach taken, and the findings presented are in accordance with the five risk factor domains noted in the literature. The paper concludes with implications of the observed patterns and trends and recommendations for developmental crime prevention efforts.

Conceptualising the Sadistic Rapist

The theoretical framework of this paper provides a deeper understanding of developmental criminology, crime prevention, and risk factors. For now, the term 'sadistic rapist' is used interchangeably with 'sadistic sexual offender,' 'sadistic offender,' or 'sadists,' as that is how it appears in many of the studies included in this review. Sadistic rapists are classified as offenders who gain sexual gratification by inflicting physical and psychological harm on their victim during the course of sexual assault (Douglas et al., 2006, as cited in Pardue & Arrigo, 2008; Robertiello & Terry, 2007). The crimes these individuals commit are usually premeditated, and the target is usually someone unknown to them; they exhibit minimal contrition for the harm they inflict, and their modus operandi can include physical assaults, abuse, binding, biting, torture, the insertion of foreign objects into their victims, the use of weapons, and aggravating and maiming tactics that require medical intervention (Burkey et al., 2015). Furthermore, sadistic rapists live out their violent sexual fantasies on victims who are subjected to a range of physical and mental torture, often directed towards the sexual organs and erogenous zones (Douglas & Olshaker, 1998, as cited in McCabe & Wauchope, 2005).

Given the sadistic element associated with this typology of offender, the paraphilic disorder of sexual sadism, inherently overlaps with the behaviours exhibited by these rapists. According to the most recent version of the *Diagnostic and statistical manual of mental disorders* (DSM-5-TR), sexual sadism is diagnosed according to two criteria: the first is experiencing perennial and acute sexual arousal through fantasies, desires, or conduct resulting from the physical or psychological pain of others, that persists for at least six months (American Psychiatric Association, 2022). The second criteria is when an individual has acted on these impulses with a nonconsenting individual or when the desires or fantasies cause impairments that are clinically noteworthy in vital areas of functioning (e.g., work or social interactions) (American Psychiatric Association, 2022). It is important to note that not all sexual sadists are offenders; some are law-abiding citizens who act out their sadistic fantasies with consenting partners through consensual activities (Hazelwood et al., 2016). Additionally, not all rapists who

inflict pain upon their victims during the course of the assault are considered sadistic; what distinguishes the sexual sadist is that they must be sexually aroused by the torturing and pain of the victim (American Psychiatric Association, 2022).

Even though these criteria have been established, their application is inconsistent, as many studies of sexual sadism differ in their definitions and behavioural standards; this lack of standardisation has made it difficult to determine the prevalence of sadistic sexual offenders (Longpré et al., 2018b). When reviewing empirical evidence, Longpré et al. (2018b) reported mixed findings across various studies that estimated between 5% and 50% of sexual offenders are sadists. Within a legal context, the crimes of sadistic rapists would likely fall under s 273 of the *Criminal Code* due to the severity of the harm inflicted upon the victim (*Criminal Code*, RSC 1985, c C-46). Accordingly, it is essential to note that level three sexual assaults are the least common police-reported form of sexual assault in official police or court statistics. In 2022, only 123 of the 35,965 sexual assaults reported to the police were level three; this marked a slight decline from the 126 level three incidents reported in 2021 (Statistics Canada, 2024). Furthermore, five of the 123 level-three sexual assaults were unable to be substantiated by police (Statistics Canada, 2024). Moreover, not all of these incidents may have been perpetrated by a sadistic rapist.

Despite uncertainties about the occurrence of these offences and the prevalence of these offenders, sadistic rapists are still viewed as one of the most dangerous perpetrators of sexual violence because their crimes are brutal and typically include the torturing or even killing of their victim (Burkey et al., 2015). Therefore, it seems prudent that identifying developmental risk factors that contribute to sadistic offending would be beneficial to informing prevention and early intervention programs and strategies.

Methodology

For this paper, the chosen methodology was an integrative literature review. According to Torraco (2016), integrative literature reviews allow for the analysis and assessment of existing literature to address discrepancies or contradictions and present innovative outlooks on the subject. These characteristics matched the paper objectives in two key ways: first, highlighting discrepancies is the subject of the second research question, as this paper aimed to expose inconsistencies and provide a guide for future research. Secondly, the presentation of new perspectives is linked to the endeavour to inform developmental crime prevention efforts, as such efforts are limited in their practical application to sexual offending (Allardyce, 2018).

Furthermore, integrative reviews allow for the inclusion and synthesis of many different sources, including both empirical and theoretical research in journal articles and book chapters (Oermann & Knafl, 2021; Synder, 2019). As stated by Oermann & Knafl (2021), the diverse information sources that can be reviewed in this methodology give way to a fuller comprehension of advanced ideas, theories, and the current state of knowledge regarding a subject. This aspect of an integrated approach provided a level of flexibility in choosing data sources that allowed for the exploration of developmental risk factors from a multitude of academic perspectives such as criminological, psychological, and sociological.

Data Collection

All information was acquired through the analysis of secondary sources, which is a mode of unobtrusive data collection (van den Hoonaard & van den Scott, 2022). This method was sufficient for the goals of this research as the paper is an undergraduate honours thesis, and the chance of obtaining ethical approval and access to a population of sadistic rapists was improbable. In searching for data sources, Google Scholar and the Mount Royal University (MRU) Library were employed for access to the PubMed, Sage Publications, Taylor & Francis Group, ScienceDirect, Research Gate, and Wiley Online databases. The terms searched included 'sadism,' 'sadistic rapist,' 'sadistic sexual offender,' and 'sadistic sexual aggressor,' with any combination of the following terms: 'development,' 'developmental factors,' 'developmental antecedents,' 'developmental criminology,' 'predictors of offending,' 'childhood adversity,' 'childhood,' 'adverse childhood experiences (ACEs),' and 'adolescence.'

Criteria for Inclusion

The parameters for inclusion consisted of peer-reviewed, scholarly sources published in English. Moreover, given that research in this area is limited, works that address the early development of sadistic rapists, sadistic sexual aggressors or sexual sadists were included. Sources were not excluded based on the date of publication or methodology of the study. The only exclusion criteria was based on the population; studies that homogeneously grouped sexual offenders were not included as any such approach would fail to consider the unique 'sadistic' tendencies of the target population. Additionally, even though sadistic rapists may escalate to the murder of their victims (Burkey et al., 2015), there is an important distinction between this population and sexual murderers. As noted by Marshall & Kennedy (2003), not all sexual killers are sadistic; thus, studies that specifically targeted sexual murderers were also excluded. Nevertheless, some of the populations of sadistic sexual offenders in the studies reviewed do include sexual murderers, but only those who meet the sadistic criteria.

Data Analysis

The literature was organised into an annotated-bibliography style chart, allowing for easy comparison of sources. This tool was beneficial for conducting thematic analysis, a flexible

approach to data analysis used to examine inductive and deductive research, and encapsulate both manifest and latent meanings (Clark & Braun, 2017). Moreover, when employed within a 'critical' framework, thematic analysis serves as a tool to scrutinise patterns within personal or social meaning related to a topic; it allows for posing questions about the implications arising from these patterns (Clark & Braun, 2017). These characteristics made thematic analysis a robust method for uncovering and interpreting the nuanced developmental risk factors among sadistic rapists. During the analysis, the information was systematically reviewed and coded according to which risk domain the finding corresponded to (individual, family, school, peer, or community). This approach allowed recurrent themes and patterns regarding developmental risk factors among sadistic rapists to emerge in an organised way.

Limitations

As with any literature review, this paper was reliant on the quality and quantity of existing works. Given that this topic is under researched, and many works fail to distinguish sex offender typologies, only 14 studies were found that adhered to the inclusion and exclusion criteria. Moreover, with the exception of a few sources, most of the works analysed in this review were not conducted to identify developmental risk factors, or that was not their sole objective. However, within many of these studies, information on the development of sadistic sexual offenders and sexual sadism, which provided insight into potential risk factors, was presented. Thus, information relating to these individuals' childhood, development, or developmental experiences was extracted for this literature review.

Additionally, while this paper aims to determine what risk factors characterise the development of sadistic rapists, establishing prevalence is not the same as positing a causal link. As such, these findings mark a starting point in identifying experiences and behaviours that may

contribute to the eventual crimes of these offenders; further investigation involving primary data will be necessary to fully assess the relationship between these factors and the offending of sadistic rapists.

Theoretical Framework

This paper employed developmental criminology to help investigate and understand the complex intersection between early risk factors and the criminal careers of sadistic rapists. Detailed is Farrington's (2005) Integrated Cognitive Antisocial Potential (ICAP) theory, a prominent model in developmental criminology that addresses and explains the most common risk factors linked to criminality (Cullen et al., 2012). While the ICAP offers a solid theoretical foundation, it serves as a preliminary step in the exploration of violent, sadistic sexual behaviour due to its explanation for offending in general rather than sexual offending specifically. As such, this paper extends its focus by incorporating a theory tailored to sexual offenders: Ward & Beech's (2016) Integrated Theory of Sexual Offending (ITSO). Including these two theories thereby enriches the multifactorial perspective, linking diverse conceptual frameworks that collectively provide a more comprehensive understanding of the complex phenomenon under investigation.

Developmental Criminology

In the 20th century, theoretical perspectives of crime generally concentrated on development during the teenage years (Cullen et al., 2012). However, Cullen et al. (2012) explained that in the 1990s, a small cadre of academics (Farrington, 1997; Loeber & Le Blanc, 1990; 1998; Moffitt, 1993; Tonry et al., 1991) posited that the aetiology of offending may be rooted in childhood. From there, the risk-factor prevention paradigm, a concept central to developmental criminology, garnered influence among criminologists after it was adopted from medicine and public health by pioneers like David Hawkins and Richard Catalano (Farrington, 2000; Hawkins & Catalano, 1992). The risk-factor prevention paradigm links explanation and prevention, recognising primary factors contributing to criminal behaviour and helping implement preventive strategies to mitigate their impact (Farrington et al., 2012). This perspective and paradigm gave prominence to a new era of research and theoretical developments to study criminality, informing many studies, including this one.

Integral to developmental theories is the capacity to conceptualise criminal behaviour as a dynamic or evolutive phenomenon influenced by diverse underlying causes or constructs that vary among individuals and offender types (Mazerolle & McPhedran, 2018). Accordingly, risk factors exemplify this multidimensional nature, as they are characteristics or experiences rooted in biology, psychology, sociology, or an individual's environment that increase the likelihood of criminality (Kazdin et al., 1997; Tanner-Smith et al., 2012). As previously outlined, these risk factors are organised into five domains (individual, family, peer, school, and community) according to the area of socialisation they relate to (Herrenkohl et al., 2000; Tanner-Smith et al., 2012). Researchers employing a developmental approach have extensively investigated risk factors associated with ongoing criminality, and among the five domains, there are variables commonly linked to offending (Kazemian et al., 2018; Tanner-Smith et al., 2012).

The individual domain examines a wide range of personality traits, behaviours, and psychological characteristics exhibited in childhood and adolescence linked to an increased risk of offending. Such traits include low self-control, low self-esteem, early substance use and misuse, and other antisocial tendencies such as physical aggression, overt defiance or opposition to rules, deceit, or theft-vandalism (Herrenkohl et al., 2000; Tanner-Smith et al., 2012; Tremblay, 2012). Additionally, Conduct Disorder (CD) in childhood is a salient risk factor in this domain (Loeber & Dishion, 1983, as cited in Tanner-Smith et al., 2012). The Centers for Disease Control and Prevention (2023) explained CD as a condition whereby children persistently exhibit aggression and violate rules and social norms at home, in school, or during peer interactions.

Behaviours associated with CD are similar to the aforementioned antisocial tendencies (Tremblay, 2012) and entail aggression, animal cruelty, rule-breaking behaviour like truancy or delinquency, difficulties in peer relationships, and theft-vandalism (Centers for Disease Control and Prevention, 2023).

In the family domain, parenting styles, family structure and dynamics, authoritarian disciplinary measures, and familial norms and values are all aspects of socialisation that can impact development positively or negatively (Herrenkohl et al., 2000; Tanner-Smith et al., 2012). Herrnkohl et al. (2000) pointed out that children are malleable, and exposure to violent or antisocial conduct, especially at home, can normalise those behaviours and negatively impact the child's development.

The peer domain looks at socialisation with friends. Risk factors in this domain include delinquent peers or peers with positive attitudes toward delinquency (Tanner-Smith et al., 2012). Tanner-Smith et al. (2012) highlighted the importance of this domain in development, as peer socialisation can be central to establishing a sense of identity.

Risk factors within the school domain are measured by academic performance, achievement, and conduct at school (Herrenkohl et al., 2000; Tanner-Smith et al., 2012). Low levels of success in school and behavioural issues are key risk factors for violence and criminality (Hawkins et al., 2000, as cited in Tanner-Smith et al., 2012).

Lastly, neighbourhood characteristics and aspects of one's physical environment are considered in the community domain (Herrenkohl et al., 2000; Tanner-Smith et al., 2012). Risk factors in this domain include urbanisation, high levels of transience, and frequent exposure to criminal behaviour (Herrenkohl et al., 2000; Tanner-Smith et al., 2012).

Considering all of these domains holistically, there is empirical evidence to substantiate that the possibility of violence and offending is higher for those exposed to more risks during their development (Herrenkohl, 2000; Tanner-Smith et al., 2012). Accordingly, this paper aims to apply knowledge of the risk factors within these five domains to sadistic rapists with the hope of identifying patterns of risk factors that are recurrent across the literature.

Moreover, the goal is to use the findings from this paper to inform prevention efforts, which is analogous to the outcomes of a developmental criminological approach. Kazemian et al. (2018) explained that developmental studies identifying early risk factors also allocate considerable focus on intervention or prevention measures designed to avert criminal and antisocial behaviours. This approach, known as developmental crime prevention (DCP), aspires to construct and implement measures that will intervene before a child engages in criminal behaviour (Koegl et al., 2023; Welsh & Tremblay, 2021). Koegl et al. (2023) emphasised that DCP policies and programs foster healthy development for children by targeting areas within the five risk domains; these measures include ameliorating parenting skills, enhancing education, and promoting healthy social skills for both children and their parents. By identifying developmental risk factors for sadistic rapists early on, DCP ultimately works towards attenuating the influence of one or numerous risk factors as they emerge (Koegl et al., 2023). Overall, the endeavour to use the insight gained from this paper to inform potential prevention strategies aligns with the emphasis placed on mitigating early risk factors in developmental criminology.

Farrington's Integrated Cognitive Antisocial Potential (ICAP) Theory

The foundation of the ICAP theory rests upon Farrington's (2005) aim to answer why people become offenders and why they commit offences. This model (see Appendix A) takes an

integrative approach, borrowing from a plethora of theoretical frameworks such as strain, control, learning, labelling, and rational choice (Farrington, 2005). In reviewing the development of his theory, Farrington (2020) explained that the first iteration of what would become the ICAP was proposed in 1986 after he analysed the Cambridge Study in Delinquent Development (CSDD), a longitudinal study exploring the development of criminal and antisocial behaviour among 411 young males in London, England. Participants were first contacted in 1961-1962 and were interviewed or followed up on through records nine times throughout their lives, from age eight and nine to age 61 (Farrington et al., 2009; 2014; 2021). The CSDD aimed to understand the evolution and desistance of criminal behaviour among the population (Farrington et al., 2014). This research found that the interplay between various childhood adversities, like antisocial parents, poor child-rearing, delinquent peers, or living in a bad neighbourhood, induce antisocial and impulsive behaviour in adolescents, who likely fail school as a result (Farrington et al., 2021). Farrington et al. (2021) explained that as these children grow up, they often experience a range of challenges in adulthood, such as involvement in criminal activities, problems maintaining employment or finding housing, substance use issues, and difficulties in personal relationships. Accordingly, these individuals are more likely to have children who follow the same path, which perpetuates the cycle of antisocial behaviour (Farrington et al., 2021).

Constructing the theory to explain the results of the CSDD, Farrington (2020) identified that the fourth and most current model of the ICAP was proposed in 2003. The central concept of the ICAP is antisocial potential (AP), or the potential to engage in antisocial or criminal behaviour (Farrington, 2005). Antisocial behaviours are typically defined as conduct that transgresses the fundamental rights of others (Calkins & Keane, 2009). An individual's likelihood of progressing from AP to offending is rooted in two types of risk factors that have been empirically established: long-term risk factors and short-term risk factors (Cullen et al., 2012; Farrington, 2020).

Long-term risk factors are individual differences, which include biological influences, individual characteristics, family dynamics, peer influences, school experiences, and community influences (Farrington, 2005; 2020). Farrington (2020) described the root of these factors, which arise from elements such as adverse life experiences and negative socialisation processes. Short-term risk factors described within-individual differences, which are immediate situational, motivational, or environmental factors that influence an individual to commit a crime (Farrington, 2005; 2020). These factors refer to circumstances that may prompt offending, like opportunity, intoxication, or the perception that the benefit will outweigh the cost (Farrington, 2020). Accordingly, the ICAP posits that the commission of a crime is the byproduct of an individual's AP level and the social environment (Farrington, 2005).

For the purposes of this paper, focus was placed on identifying long-term risk factors that build up an individual's AP rather than the short-term risk factors. Similar to the five domains of risk factors and their organisation surrounding different modes of socialisation (Herrenkohl et al., 2000; Tanner-Smith et al., 2012), long-term risk factors are also rooted in attachment and socialisation processes, emerging early on and manifesting throughout a person's development (Farrington, 2005). Conversely, short-term risk factors look at the circumstances in the time frame leading up to a crime that can explain the behaviour, such as boredom, intoxication or peer pressure (Farrington, 2020). Given that this paper was organised around the five risk domains, long-term risk factors are more in line with its objectives. The ICAP provides a theoretical foundation linking developmental risk factors in each risk domain to the potential for criminal behaviour; however, the model is not without limitations. For instance, Farrington (2005) explained that antisocial behaviours like aggression or lying are not included in the model as risk factors because they are predictors of offending behaviour rather than causes of it. Moreover, he argued that these measures are helpful in identifying at-risk groups, but are limited in identifying causal factors that can be addressed through interventions (Farrington, 2005). This paper deviates from such notions by highlighting the prevalence and severity of antisocial behaviours because as predictors, they may be associated with other underlying risk factors that are amenable to intervention measures.

Additionally, the ICAP also does not include factors that cannot be altered, such as gender or ethnicity, as Farrington (2005) assumed that their link to criminal behaviour is mediated by risk factors that can be changed. These factors are also not considered in this paper, as the goal is to identify risk factors that can be targeted by prevention or intervention measures, and these are variables that cannot be changed.

Lastly, Farrington (2005; 2020) identified a significant drawback in the ICAP's generalisation to all types of offending behaviour, as it does not consider the differences between risk factors among various offenders and crime types such as robbery versus fraud versus sexual assault. Thus, to accommodate for the generality of the ICAP, an integrative theory focusing explicitly on the etiology of sexual offending is employed in conjunction with the ICAP to strengthen the framework underpinning this paper.

Ward and Beech's Integrated Theory of Sexual Offending (ITSO)

Ward & Beech's Integrated Theory of Sexual Offending (ITSO) is a complex, etiological model that offers a comprehensive explanation of sexual offending. Over the years, the ITSO has

undergone several iterations to provide an evolving comprehension of the multifactorial nature of sexual violence. The theory proposed by Ward & Beech (2006) initially aimed to integrate numerous causal factors and processes linked to sexual offending without drawing from other pre-existing theories, instead providing the theoretical foundation for the amalgamation of other leading models to address sexual violence. In its development, the fundamental structure of the ITSO has remained the same, with alterations made to refine, clarify, or elaborate on the central spheres (Ward & Beech, 2006; 2008; 2016). The exception to this is the addition of personal agency in the most recent iteration, which ties all of the model's factors together: biology, ecology, three neuropsychological systems, and now, personal mediation (Ward & Beech, 2016). The focus of this paper is on the current version of the ITSO (see Appendix B).

Ward & Beech (2016) identify the origins of sexual offending in the convergence of causal factors in four spheres of human functioning: biological (genes and brain development); ecological (social, cultural, physical environment); central neuropsychological systems; and personal agency (goal-setting, planning, intentional action). Furthermore, the continuous, dynamic interplay between proximal and distal factors in these domains shapes an individual's psychology, influencing behaviours that contribute to the occurrence of sexual offending (Ward & Beech, 2016). In this model, distal factors are equivalent to Farrington's (2005) conceptualisation of long-term risk factors; these are factors impacted by biology and adverse social and cultural experiences that shape a person's psychology, creating vulnerabilities that increase the probability of sexual offending (Ward & Beech, 2016). Conversely, proximal factors are like short-term risk factors (Farrington, 2005) as they refer to environmental triggers that prompt a person to commit an act of SV (Ward & Beech, 2016). What follows is a layout of the model (see Appendix B).

According to Ward & Beech (2016), interactions between an individual's biological and ecological spheres, three central neuropsychological systems with particular functions are shaped:

- The Motivation/Emotional System, which is associated with genetic, cultural, and experiential factors, influences rapid goal-driven perception and action; deficits in this area can diminish interpersonal functioning.
- The Action Selection and Control System, which underpins the planning, implementation, and evaluation of actions, with malfunctions leading to self-regulation issues.
- The Perception and Memory System, which processes sensory information; impairments in this system can result in maladaptive beliefs and attitudes.

These three systems comprise the neuropsychological sphere (Ward & Beech, 2016) and deficiencies in these systems contribute to clinical phenomena, or state factors, associated with sexual offending such as deviant sexual interests, challenges in social interactions, and fantasies related to illegal sexual behaviour (Mann et al., 2010, as cited by Ward & Beech, 2016). These clinical phenomena are then mediated through the personal agency sphere (Ward & Beech, 2016), meaning that an individual's decision-making and intentional actions contribute to the expression of behaviours associated with sexual offending. The ITSO also proposes a feedback loop (see Appendix B) which is an outcome of sexual offending that may be cyclical, further influencing an individual's ecological niche and reinforcing vulnerabilities in the perception and memory system that impact a person's conduct in subsequent, analogous contexts (Ward & Beech, 2016). Put simply, when a person commits a violent sexual act, the feelings they get from engaging in that behaviour serve as feedback data through their ecological niche and into their

memory and perception system; then, the next time they are in a similar situation, their neuropsychological system remembers the action they took previously (the violent sexual act), the positive feelings and feedback when they did that violent sexual act, and then proceeds to act in a similar manner, reinforcing that behaviour and strengthening the feedback loop (Ward & Beech, 2016). Perhaps this is why many sadistic rapists often fixate on fantasies or replay the violent acts in their minds (MacCulloch et al., 1983), using them as feedback and preparing for subsequent violent acts.

A notable strength of the ITSO is its consideration of such broad historical, developmental, biological, psychological, and social variables (Thakker & Ward, 2015; Ward & Beech, 2016). Moreover, it links various factors to common symptoms exhibited by those who sexually offend. The model's broad scope and complex explanation create a deeper understanding of not only the types of factors contributing to sexual offending but also how they facilitate this behaviour (Thakker & Ward, 2015).

This paper examined the literature about distal factors in the biological and ecological spheres over the neuropsychological systems and personal agency spheres. This prioritisation stems from the understanding that distal factors in the biological and ecological spheres are essentially long-term risk factors. These genetic predispositions, social and cultural experiences, and environmental conditions converge to shape the three neuropsychological systems (Ward & Beech, 2016). If there are deficiencies in those systems that make an individual vulnerable to sexual offending, then personal agency determines whether or not a person acts on them (Ward & Beech, 2016). Therefore, the biological and ecological spheres connect to the risk factors that initiate and sustain this feedback loop.

Literature Review

Case Studies

Five of the case studies were of sadistic sexual offenders, or specifically a sadistic rapist. Of the five works, three were conducted in the United States (US) (Groth & Birnbaum, 1979; Pardue & Arrigo, 2008; Rada, 1978a), while the other two (Langton & Torpy, 1988; MacCulloch et al., 1983) were done in the United Kingdom (UK).

Pardue & Arrigo (2008) aimed to delineate the different characteristics and personality traits of sadistic, power, and anger rapists through examination of prominent cases, with offenders who fit each of the rapist types, academic publications, and heuristic analysis. For the sadistic rapist, the authors examined the life of sexually sadistic offender Jeffrey Dahmer, including elements of his development, which were extracted for use in the current paper (Pardue & Arrigo, 2008). The authors found that the three rapist types had distinct and divergent personality traits, which informed recommendations for future research recognising the heterogeneity of rapists and implications for clinical diagnosis, treatment, and prevention measures (Pardue & Arrigo, 2008).

MacCulloch et al. (1983) investigated the aetiology of sadistic behaviour and its relationship to crime using the case histories of 16 male patients at Park Lane Special Hospital. 20 individuals originally fit the sample criteria, however, four refused to participate (MacCulloch et al., 1983). The participants were individuals who were convicted for a fatal or non-fatal sadistic assault(s) that was either blatantly sexual or had sexual connotations; moreover, each had a diagnosis of psychopathic disorder but was not deemed to be suffering from affective psychosis or neurocognitive impairments (MacCulloch et al., 1983). Langton & Torpy (1988) presented a report of a young male who had not yet been convicted for any sexual offences but who was experiencing sadistic sexual fantasies and had begun to act on them. The purpose of presenting this case was to highlight ethical and treatment challenges for physicians encountering individuals who have histories, thoughts, and fantasies similar to those linked to dangerous sexual offenders (Langton & Torpy, 1988). The individual, referred to as 'X' in the paper, was a single, unemployed, 23-year-old male living in a provincial city (the exact location was not disclosed); this individual voluntarily asked for psychological help to manage his condition before it escalated further (Langton & Torpy, 1988). While drug treatment was not effective, the authors increased local support and social activities for 'X', which helped him gain confidence, form relationships, and minimise his fantasies (Langton & Torpy, 1988). Moreover, because 'X' was adamant about remaining anonymous and maintaining confidentiality, Langton & Torpy (1988) raised questions and outlined challenges regarding when or if individuals who voluntarily seek help but present as dangerous should be detained; in this case, 'X' was not reported or detained, as the authors believed it would impede his cooperation with treatment.

In a chapter exploring the psychodynamics of rape, Groth & Birnbaum (1979) identified anger, power, and sadistic rape as the three fundamental patterns of rape, providing explanations and examples of each type of offender. Two sadistic rapists were presented in their case study; however, only one is included in this literature review, as the case provided a detailed account of the individual's early life experiences and development, while the other case focused on offence details, personality traits, habits in adulthood, and situational factors leading up to the crimes. The subject, named Oliver, is a sadistic rapist who began offending early, at the age of 12 (Groth & Birnbaum, 1979). While it is not explicitly stated where Groth & Birnbaum (1979) encountered this specific case, the authors explained in the book's preface that all the data was derived from their clinical observations, evaluations, and treatment of offenders across various institutional and community programs. This work provided the authors with access to six different populations of known sexual aggressors (see Appendix C), and it can be inferred that Oliver was among one of these populations (Groth & Birnbaum, 1979).

Lastly, Rada (1978a) created a classification system that describes psychiatric categories of five different characterological rapist types and could be applied in clinical and legal circumstances. The five types outlined include psychotic, situational stress, masculine identity conflict, sadistic, and sociopathic rapists. Two case studies demonstrate the markedly differing development of sadistic behaviour that translates into rape: the first is a 22-year-old, single Caucasian male who committed an act of rape that was driven by sadistic fantasy but involved no sadistic acts; the second is a 24-year-old single Caucasian male, who committed multiple rapes with sadistic acts (Rada, 1978a). Again, where the author encountered these cases is not specified, though the preface explained that most of the data in the book was gathered from rapists who were apprehended or convicted for a rape offence in the US (Rada, 1978a; 1978b).

Development of a Theoretical Model using Structural Equation Modelling (SEM) Analysis

Two studies in this literature review created a model to explain the development or aetiology of sexual sadism. Both used structural equation modelling, a form of statistical analysis that allows the representation and testing of various relationships between observed and latent variables (Kline, 1998, as cited in Longpré et al., 2018a).

The model constructed by Longpré et al. (2018a) outlined factors that precede the development of acute sexually sadistic behaviours, utilising the Massachusetts Treatment Center for Sexually Dangerous Persons (MTC) database. The MTC features a comprehensive collection of information on sexual offenders assessed at the centre, derived from diagnostic assessments and psychological evaluations, as well as institutionalisation, criminal, academic, employment,

and probationary records (Longpré et al., 2018a). Additionally, Longpré et al. (2018a) noted that reports on the offenders post-commitment were available for the majority of the sample, which included 518 adult male sexual offenders evaluated at the MTC between 1959 and 1991; specifically, participants consisted of 233 rapists (victims 16 years or older), 190 child molesters (victims under 16), and 95 offenders labelled 'mixed' (victims both over and under 16 years old). A preliminary version of the MTC Sadism Scale (MTCSS) (see Appendix C) was used, with indicators coded as absent (0) or present (1) (Longpré et al., 2018a). Longpré et al. (2018a) assessed the model's goodness-of-fit (GFI) using absolute and incremental indices, and the weight least squares means and variance adjusted estimator (WLSMV) was employed to model the ordered data.

Similarly, Robertson et al. (2018) developed an etiological model, evaluating the impact of various forms of abuse in childhood to understand the social-developmental pathways that contribute to manifestations of sexual sadism. Furthermore, the model investigated the role of juvenile externalising behaviours and hypersexuality as predictors for sadistic behaviours in adulthood (Robertson et al., 2018). Robertson et al. (2018) used exploratory principal-axis factor analysis with OBLIMIN rotation to produce three latent traits for abuse: psychological, physical, and sexual abuse. The GFI of psychological and sexual abuse was assessed using confirmatory factor analysis; however, due to limitations with the Analysis of Moment Structures (AMOS), the software employed to help calculate the SEM, the GFI of physical abuse could not be tested (Robertson et al., 2018). The sample included 397 adult male sexual offenders incarcerated in prisons or special commitment facilities in Massachusetts and Minnesota between the ages of 20 and 68 years old; however, prior to SEM analysis, participants with random missing relevant data were removed through listwise deletion, leaving 219 participants (Robertson et al., 2018). Robertson et al. (2018) had each participant complete the Multidimensional Inventory of Development, Sex, and Aggression (MIDSA), a digital, self-report developmental inventory designed to evaluate various domains linked to sexual aggression.

Comparative Studies

Six of the studies took a comparative approach, juxtaposing a population of sadistic sexual offenders against different populations, including other rapist typologies and non-sadistic sexual offenders. One non-comparative study (Dietz et al., 1990) was included in this category, as its findings were built upon in a later work (Gratzer & Bradford, 1995). Dietz et al. (1990) detailed the characteristics of 30 male, sexually sadistic offenders, as well as their offence and victim characteristics. Their data was collected using case files from the National Center for the Analysis of Violent Crime (NCAVC), a referral agency in the United States implemented to investigate cold cases and extreme forms of crime and provide services to law enforcement (Dietz et al., 1990). The cases analysed were those that had been categorised as 'possible sexually sadistic criminals' and were submitted to the NCAVC for evaluation or research and teaching purposes between 1984 and 1989 (Dietz et al., 1990). Dietz et al. (1990) screened the files and admitted them if there was a consensus that the individual had two or more experiences across a span of at least six months of documented sexual arousal in response to depictions of anguish or degradation. Furthermore, none of the participants had been treated for their sexual sadism prior to offending, although some had been evaluated for other reasons like military discharge or previous incarcerations (Dietz et al., 1990). Files for each offender included information from sources like police investigations, victim statements, court transcripts, offender-produced materials (i.e. diaries), psychiatric assessments, or prison records (Dietz et al., 1990). Dietz et al.

(1990) disclosed that five of the 30 participants were interviewed by at least one of the authors, and for six of the 30 cases, published biographies were employed to enhance the file information.

Gratzer & Bradford (1995), built upon the findings of Dietz et al. (1990), comparing the characteristics of their sample population with those of 29 non-sadistic sexual offenders and 28 sadistic sexual offenders whose manifestations were milder. The authors reviewed the charts of 59 patients who attempted or committed murder, underwent a sexual behaviour evaluation before trial or while in prison, and were admitted to the Forensic Unit of the Royal Ottawa Hospital (ROH) in Canada between 1982 and 1992 (Gratzer & Bradford, 1995). Additionally, Gratzer & Bradford (1995) analysed the patient charts, using information from sources like police reports, psychiatric assessments, and forensic accounts of the offence to discern which offenders met the criteria for sexual sadism under the *Diagnostic and statistical manual of mental disorders*, third edition (DSM III-R). Using the Yates' Corrected Chi-square test, the sadists from ROH were compared to the participants in the Dietz et al. study (1990) (sadists from the NCAVC) and nonsadists from ROH (Gratzer & Bradford, 1995). Gratzer & Bradford (1995) identified some offender and offence characteristics that were unique to sexual sadism, while other factors were associated with aggressive sexual offenders in general. Moreover, differences were noted between the population studied by Dietz et al. (1990) and the sadists from the ROH (Gratzer & Bradford, 1995).

Similarly, Proulx et al. (2007) compared the development, psychology, sexology, and criminological characteristics of sadistic and non-sadistic sexual aggressors against women. Participants were 141 extrafamilial sexual aggressors evaluated between 1995 and 2000 at Correctional Service Canada's Regional Reception Centre, and 71% of sexual murderers whose victims were women and who were incarcerated in Quebec in 1999 (Proulx et al., 2007). When grouping the sample, Proulx et al. (2007) employed two sadism scales of the MTC-R-3 to determine if an individual was a sadist or not; 43 participants were categorised as sadists (18 sexual murderers and 25 sexual aggressors of women), and 98 were labelled nonsadists (22 sexual murderers and 76 sexual aggressors of women). Additionally, a French version of the Millon Clinical Multiaxial Inventory (MCMI-I) questionnaire was done with 30 sadists and 70 nonsadists; the remainder of the sample in both groups could not complete it due to reading impairments or chose not to do so (Proulx et al., 2007). Phallometric evaluations utilised French translations of stimuli from Abel et al. (1978) (as cited in Proulx et al., 2007), and three deviance indexes were calculated for each participant with valid phallometric results: (1) physical violence rape index; (2) humiliation rape index; and (3) nonsexual physical violence index (Proulx et al., 2007). Nitschke et al. (2009) also took a similar approach, but from a clinical and diagnostic perspective; the authors investigated the prevalence and traits of sexual sadists who were undiagnosed when sentenced to mandatory psychiatric treatment. In comparing this population against diagnosed sadists and non-sadistic sexual offenders, the study highlights the issue of underdiagnosis for sexual sadists (Nitschke et al., 2009). The sample consisted of 535 patients, all sexual offenders or individuals who committed murder, manslaughter, or assault as an index offence and were treated between July 1990 and December 2006 at Straubing District Hospital, a high-security, forensic-psychiatric facility in Germany (Nitschke et al., 2009). Expert forensic psychiatrists reviewed the charts of participants to ascertain if they met sexual sadism criteria outlined by the International Classification of Diseases, 10th edition (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) (Nitschke et al., 2009). From there, Nitschke et al. (2009) labelled 240 individuals as sex offenders, dividing them into three subcategories: accurately diagnosed sexual sadists, undiagnosed sexual sadists, and

non-sadistic sex offenders. Variables included socio-demographic information, developmental data (e.g., upbringing and socialisation), criminal record, and clinical factors (e.g., medications, frequency of admission), and an internet search was conducted to compare media coverage (Nitschke et al., 2009). Finally, comparing count data involved Pearson's chi-squared tests and nonparametric tests for continuous data, both of which had a Bonferroni adjustment to account for multiple comparisons (Nitschke et al., 2009).

Knight & Prentky (1987) addressed the issues of taxonomic validity of four rapist types that frequently appear in clinical literature: compensatory, exploitative, displaced anger, and sadistic rapists. They compared the developmental antecedents and adult adaptations of 108 rapists committed to the MTC, theorising that if there were substantial differences among the offender types, then there would be preliminary validation for the typological distinctions (Knight & Prentky, 1987). Knight & Prentky's (1987) sample included rapists whose victims were adult women (16 or older), individuals convicted of rape in Massachusetts, and those who were repeat or violent offenders. The primary data for all offenders was obtained by analysing documents such as clinical files, institutionalisation records, parole summaries, notes from social services, and school records (Knight & Prentky, 1987). Knight & Prentky (1987) coded variables that emerged from the research files using a data schedule with three components: (1) demographic information and history; (2) a scale to evaluate various elements like social intelligence, aggressive or antisocial behaviour, and method of offences; and (3) a checklist to code the manifestation, acuteness, and persistence of different clinical symptoms or behavioural indicators. A year later, Rosenberg et al. (1988) published a kindred study, taking a path analytic approach to validating the taxonomic system for rapists constructed at the MTC by investigating factors in development and adulthood that contribute to the various forms of aggression and

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sexuality in rapists, as well as impulsive lifestyle. Moreover, because of discrepancies in differentiating displaced anger and sadistic rapists from one another, predictors of a sadistic sexual outcome were specifically investigated (Rosenberg et al., 1988). The sample consisted of 201 male rapists committed to the MTC, 107 of which were still residing at the centre and 94 of whom had been released after treatment; like many of the previous studies, the victims of these offenders were women over the age of 16 (Rosenberg et al., 1988). Analogous to Knight & Prentky (1987), Rosenberg et al. (1988) obtained their primary data from the clinical reports and various records of the participants; additionally, the authors used the same type of data schedule, comprised of three components, double coding the files. Data was analysed using principal component analysis (PCA) to reduce predictor variables into cohesive constructs (Rosenberg et al., 1988). Subsequently, Rosenberg et al. (1988) used stepwise multiple and logistic regression to conduct probabilistic outcome analyses, which helped determine childhood and adulthood predictors of rapist subtypes. Both Knight & Prentky (1987) and Rosenberg et al. (1988) found distinct developmental pathways amongst the typologies that supported the efficacy of their typological discriminators; nevertheless, it was acknowledged that these discriminators still required further operationalisation to revise and improve the current classification system.

Finally, Langevin et al. (1985) compared five predictors of sexual aggression (sexual arousal to rape stimuli, alcohol and drug use/abuse, sex hormone levels, brain pathology, and history of aggression) among 20 sexual aggressors, divided into sadistic (N = 9) and nonsadistic (N = 11) groups, and 20 nonviolent nonsex offenders. The aim of the study was to identify predictors of future violence and recidivism among this population (Langevin et al., 1985). The sexual aggressors were individuals charged and convicted for rape, attempted rape, or indecent assault, at the Forensic Service, Clarke Institute of Psychiatry and Ontario Correctional

Institution (Langevin et al., 1985). Two of the sadists in the sexual aggressor's sample were distinguished from nonsadists based on offence characteristics, and the remainder were differentiated based on their admitted sexual preference for or arousal to controlling and degrading a victim and a victim's panic, horror, or unconsciousness (Langevin et al., 1985). Each of the five predictors was evaluated using different scales and research methods; for this review, the focus will be on the variables and findings grouped under 'history of aggression,' as it provides the most detail about the development of these individuals (Langevin et al., 1985). Langevin et al. (1985) employed the Buss-Durkee Hostility Inventory, Minnesota Multiphasic Personality Inventory (MMPI), and their questionnaire (Clarke History of Aggression Test, Clarke Parent Child Relationship Questionnaire), comparing the groups through one-way multivariate and discriminant analysis. In general, Langevin et al. (1985) suggested that sadism is a distinct sexual anomaly and reported differences in variables related to alcohol and drug use/abuse, sexual arousal to rape stimuli, sex hormones, and brain pathology. Additionally, the need for further investigation, particularly into the influence of sex hormones and aggression, was highlighted (Langevin et al., 1985).

Individual

In the individual domain, developmental risk factors that emerged can be characterised by four overarching themes: fantasies, deviant sexual behaviours, aggressive/antisocial conduct, and self-esteem.

Fantasies

Six studies provided insight into early experiences of deviant fantasies among sadistic rapists. In their analysis of published works, Pardue & Arrigo (2008) found that Dahmer struggled with his sexuality during adolescence; he experienced homosexual fantasies, in which

he desired a partner that was submissive and unconscious, and he fantasised about his lover being murdered and mutilated. As he grew up, the violent nature of these fantasies became more intense (Pardue & Arrigo, 2008). Similarly, in MacCulloch et al.'s (1983) sadistic fantasy group, it was reported that four individuals experienced deviant sexual fantasies, including transvestism and fetishism, shortly after puberty. Additionally, one individual reported non-aggressive homosexual fantasies following puberty, and another began experiencing sadistic fantasies as early as age 11 (MacCulloch et al., 1983). The fantasies of all the individuals in this group eventually evolved, progressing in sadistic ways approximately one to seven years after the beginning of masturbatory activities, with the average period being five years after and the average age being 16 years old (MacCulloch et al., 1983). MacCulloch et al. (1983) reported that this sadistic escalation was followed by an increase in arousal and masturbation as a result of the change in fantasy.

In accordance with these findings, Oliver, the case presented by Groth & Birnbaum (1979), explained that his fantasies began at the age of 14 when he first imagined committing a rape, and they continued to evolve from there. Proulx et al. (2007) further substantiated this pattern, reporting that 48.8% of sadists experienced deviant sexual fantasies before the age of 18, compared to 18.6% of non-sadistic sexual offenders. Furthermore, Robertson et al. (2018) found a correlation between sadistic fantasies and sexual sadism, indicating that sadistic fantasies play a role in the early stages of sexual sadism development, with sadistic behaviours potentially emerging later on.

Rada (1978a) provided somewhat divergent findings; Case 1 had similar experiences to those reported by the subjects in Pardue & Arrigo (2008) and MacCulloch et al. (1983), as he experienced sexually aggressive fantasies that escalated throughout his development. The

individual became aroused by reading media descriptions of rape and violent sexual behaviour, becoming perplexed by the idea of necrophilia (Rada, 1978a). However, Case 2 reported engaging in masturbation during adolescence but had no experience with sadistic fantasies (Rada, 1978a). Langton & Torpy (1988) reported a similar contradiction, as 'X' did not develop sadistic fantasies until early adulthood.

Deviant Sexual Behaviours

The development of sadistic rapists is defined by behavioural issues, including sexual deviance. Some instances of sexual deviations were found to have stemmed from sexual fantasies. MacCulloch et al. (1983) described one of the cases in which the individual, at age 16, began to carry out behaviours he had fantasised about; this included stealing a woman's purse to gain control over her helplessness, following girls on the street and getting off on their fear and anxiety, and hiding a large stick or bat to pretend he was going to kidnap a victim he regularly stalked. This rehearsal of fantasised behaviours was a frequent occurrence among the population of sadists in MacCulloch et al.'s (1983) study. Conversely, Case 1, outlined by Rada (1978a), disclosed that as a child, his mother would make him take off his pants and then she would beat him; beginning at age 7, the individual became aroused when his mother would deliver the beatings, and his fantasies developed from there.

Other sexually deviant behaviours included 'peeping Tom' activities. Rada (1978a) noted that Case 2 engaged in voyeuristic activities numerous times. Similarly, Oliver began to spy on his sister after catching her exercising naked, even creating a peephole in the closet to do so (Groth & Birnbaum, 1979). This incident sparked a sexual curiosity in him, which led to the raiding of his mother's closet for women's apparel, which he would dress up in (Groth & Birnbaum, 1979).

Sexually deviant behaviours also characterised early sexual encounters, as 'X' only experienced sexual relations by way of exhibitionism (Langton & Torpy, 1988). Furthermore, one of the participants studied by Dietz et al. (1990) engaged in autoerotic asphyxiation, becoming sexually attracted to ropes; his mother took him to see a clinician who said he would grow out of it, but the attraction continued, and he later employed that as his modus operandi.

While not deviant to the level of previously mentioned behaviours, Proulx et al. (2007) found that compared to non-sadists, the sadists had a higher rate of engaging in behaviours such as viewing pornographic videos (14.7% vs. 35.7%), reading pornographic magazines (18.1% vs. 35.7%), visiting strip clubs (31.0% vs. 10.5%), and compulsively masturbating (25.0% vs. 11.7%) before the age of 18. Overall, this increased interest in sexual content and behaviours substantiates Robertson et al.'s (2018) finding that hypersexuality, which was measured through variables like sexual compulsivity, preoccupation, and drive, was a predictor of sexual sadism. *Aggressive/Antisocial Conduct*

Regarding aggressive/antisocial conduct, four studies reported on the prevalence of behaviours like cruelty to animals or firesetting. Langton & Torpy (1988) recounted that 'X' had admittedly tortured stray cats and dogs during his teens, acts which he admitted he found exciting, though he denied sexual arousal. Comparably, Pardue & Arrigo (2008) found that Dahmer was fascinated by dead animals and often used a chemistry set to remove the internal organs and dismember them. On a similar note, Destructiveness/Victimisation, which measured childhood arson, animal cruelty, and childhood sexual victimisation in conjunction with Psychiatric Disturbance in adulthood, was found to be a highly predictive pathway to a sadistic outcome by Rosenberg et al. (1988). However, Langevin et al. (1983) found that there was no statistical significance in the difference between sadistic sexual offenders, non-sadistic sexual offenders, and non-violent, non-sexual offenders regarding early behaviours like arson and cruelty to or torturing of animals.

Incidents of juvenile delinquency, such as acts of violence or assaults, also emerged as prevalent behaviours among sadistic rapists, though the findings are mixed. At only five years old, 'X' wounded his younger sister, aged three, with a pitchfork (Langton & Torpy, 1988). Oliver (Groth & Birnbaum, 1979) also began engaging in delinquent activities early on. At the age of seven, he developed an obsession with guns, and he would practise shooting at his reflection in the mirror with wax bullets; by the age of 12, he also began shoplifting, and before his first murder, he stole a revolver (Groth & Birnbaum, 1979). Groth & Birnbaum (1979) described Oliver as sexually naive but curious, given that he did not receive any sexual education and growing up, talking about sex was incredibly taboo. Acting on this curiosity, he jumped two young children, a boy and a girl, and attempted to drag them into the woods, though they broke free and he was never apprehended (Groth & Birnbaum, 1979). Six months later, right before turning 16, Oliver pulled the revolver he had stolen on a woman and, upon panicking, shot and killed her; he was apprehended for this incident and received psychiatric treatment, though he divulged that upon his release, he still had rape fantasies that he refused to disclose (Groth & Birnbaum, 1979). In accordance with these anecdotes, Robertson et al. (2018) reported that juvenile assaultive behaviour was the strongest loading measure of juvenile externalising problems, which was found to be a predictor for the development of sexual sadism. Additionally, though not illegal or assaultive behaviour, Proulx et al. (2007) reported that sadists exhibited more frequent temper tantrums or outbursts in childhood (47.5%) than non-sadists (25.5%).

Nevertheless, many studies reported contrasting evidence. For example, although the rate of juvenile charges is somewhat high (58.4%), Longpré et al. (2018a) reported lower rates of

behaviours like fighting (26.1%), vandalism (20.3%), encounters with youth service boards (23.6%), and juvenile penal history (32.8%). Similarly, Langevin et al. (1985) observed no statistically significant differences regarding behaviours like stealing as a child, police interactions, or encounters with the juvenile courts between the three groups in their sample. Further confirming these conclusions is Knight & Prentky (1987), who found that contact with the youth service board was the lowest for the sadistic rapists (33.3%) when compared to the other rapist subtypes. Moreover, although the sadistic offenders had the second highest rate of juvenile penal history (53.3%), the differences among the groups in the sample were not statistically significant (Knight & Prentky, 1987). Lastly, Rosenberg et al. (1988) also reported a negative association between a sadistic outcome and Juvenile Impulsive/Antisocial Behaviour. This factor measured assaults on peers or teachers, vandalism, behavioural problems in school, contact with the youth service board, and encounters with the juvenile justice system (Rosenberg et al., 1988).

Self-Esteem

Five of the 14 studies established a pattern of low self-esteem among sadistic sexual offenders. For instance, Longpré et al. (2018a) found that feelings of inferiority were common among 59.6% of their participants. Moreover, 56.1% of the sadists studied by Proulx et al. (2007) had low self-esteem, although 42.1% of non-sadists also reported low self-esteem.

Anecdotal evidence also provides support for these findings, as Groth & Birnbaum (1979) found that Oliver's hospital records detailed his feelings of self-depreciation and unworthiness. Withal, Oliver felt hopeless and insignificant as he constantly tried to prove himself to his father, who was too busy to pay him any mind (Groth & Birnbaum, 1979). One of the subjects studied by MacCulloch et al. (1983) had a prolonged history of low self-assurance,

which manifested in difficulties interacting with girls. Failures approaching those of the desired sex were posited as a contributor to the feelings of unworthiness and timidity experienced by all the sadists in the study. On a similar note, Langton & Torpy (1988) found that 'X' felt sexual inferiority to other males.

Family

Emergent risk factors in the family domain fall into one of four categories: family structure, neglect, abuse (observed or experienced), and sexual deviance.

Family Structure

Many of the studies detailing family structure provided support for households characterised by parental infidelity and divorce; Dietz et al. (1990) found that 47% of participants came from these types of homes. Similarly, Longpré et al. (2018a) reported that 48.6% of their sample came from divorced households and 27.2% experienced family instability growing up. In Knight & Prentky's (1987) sample, 60% of the sadistic offenders came from single-parent homes (parental marriages not intact), although this was the second lowest rate compared to the other subtypes. Parental infidelity and divorce were also common among the two groups of sadists observed by Gratzer & Bradford (1995). Nevertheless, it was also prevalent among the non-sadistic offenders, which led the authors to associate such variables with sexually aggressive behaviour rather than sexual sadism explicitly (Gratzer & Bradford, 1995). Additionally, although Oliver came from a two-parent household until his father's passing when he was 18, the description of his parent's marriage depicts a strained relationship marked by a sense of disconnection (Groth & Birnbaum, 1979). Conversely, while Rosenberg et al. (1988) did investigate Family Pathology, which measured variables like familial and marital instability, no direct link in the structural analysis diagram was found between this construct and a sadistic outcome.

Neglect

Experiences of neglect were relatively common among sexual sadists. 'X,' the oldest of three children, recounted growing up in a strict, affectionless household, where at the age of 12, he was locked up for two days with no food (Langton & Torpy, 1988). Likewise, the distance and dysfunction seen in his parent's marriage extended into Oliver's own relationship with them, as he constantly sought approval from his father, who frequently grew impatient with him (Groth & Birnbaum, 1979). Furthermore, despite being closer to his mother, Oliver admitted that she remained cold to keep order amongst her nine children and focus on running the family business (Groth & Birnbaum, 1979). He explained that he was raised by his older sisters, who ran the house while his parents ran the business, and all of his siblings had to compete for the little affection his parents offered (Groth & Birnbaum, 1979).

Moving beyond these anecdotes, Knight & Prentky (1987) observed that 57.1% of the sadistic offenders were neglected in childhood, meaning that their fundamental physical and emotional needs were not met; this was the second highest rate amongst the other rapist subtypes. Similarly, while the rates were not as high, Longpré et al. (2018a) still found that 32.6% of their sample was neglected. In comparing the undiagnosed sadists to the accurately diagnosed sadists, Nitschke et al. (2009) noticed that poor socialisation and neglect were common among both groups, albeit the undiagnosed sadists reported a higher rate of both (80.6% vs. 43.8% and 41.7% vs. 12.5%). Data for the non-sadistic group was not available for this variable (Nitschke et al., 2009).

Conversely, Rosenberg et al. (1988) did measure childhood neglect through Family Pathology, though as previously stated, no direct link was found to a sadistic outcome.

Relative to neglect, four studies provided evidence of abandonment among sadistic sexual offenders. For example, Proulx et al. (2007) acknowledged that a notable percentage of sadists were abandoned by their parents compared to non-sadists (51.2% vs. 39.2%). One of the cases observed by MacCulloch et al. (1983) reported a similar experience, as he was sent to an orphanage at birth and spent much of his life angry at having been abandoned by his mother. Longpré et al. (2018a) found that 36.3% of the sadists in their sample had no or sporadic contact with their father, while 31.3% reported having fully lost contact. By the same token, 18.3% of participants had no or sporadic contact with their mother, while 16.6% had fully lost contact (Longpré et al., 2018a). Although it was the second lowest rate amongst rapist subtypes, Knight & Prentky (1987) also observed that 13% of the sadistic offenders were foster children. However, despite group differences not being statistically significant, somewhat oppositional to the prevalence of abandonment is their finding that 42.9% of sadists ran away from home (Knight & Prentky, 1987).

Abuse (Observed or Experienced)

The development of sadistic rapists was marked by three types of abuse: physical, psychological, and sexual. Findings regarding the prevalence of physical or psychological abuse were included in the majority of studies in this review. Longpré et al. (2018a) found that 29.3% of the sadists in their sample experienced physical abuse. Similarly, Dietz et al. (1990) reported that during their childhood, 20% of their sample had been physically abused. Reporting higher rates was Knight & Prentky (1987): among the sadistic offenders observed, 63.6% were

physically abused growing up, representing the second highest rate after the exploitative offenders (73.9%).

Two of the case studies provide anecdotal evidence detailing experiences of physical abuse. Case 1 from Rada (1978a) was administered severe beatings regularly by his mother and occasionally by his father. At first, his mother would make him take off his pants and lie down before beating him; around the age of 12, he was struck on any part of his face or body (Rada, 1978a). Similarly, 'X' recalled that his father physically abused him until the age of 16 (Langton & Torpy, 1988).

Proulx et al. (2007) reported that a large percentage of the sadists had observed physical (51.2%) and psychological (51.2%) violence, although nonsadists were also exposed to the same types of violence (42.3% and 47.4%). Furthermore, both types of offenders experienced physical abuse (sadistic: 55.8% vs. non-sadistic: 44.3%), which contradicts Gratzer & Bradford's (1995) observation that physical abuse in childhood was more common among the two groups of sadists (NCAVC and ROH) than the nonsadists (ROH). However, psychological victimisation, such as humiliation, was more common among the sadistic offenders than the non-sadistic offenders (62.8% vs 43.3%) (Proulx et al., 2007). Proulx et al. (2007) also noted that sadistic offenders were exposed to alcohol abuse during their development. While there were no significant differences in the parent-child relationships among the three groups studied by Langevin et al. (1985), the authors pointed out that troubled familial relationships were prevalent across all groups.

Notably, the model by Robertson et al. (2018) found that the path from psychological abuse in childhood to juvenile externalising behaviours, a predictor of sexual sadism, was significant, while physical abuse approached significance. Moreover, psychological abuse

trended on significance in predicting hypersexuality, which was also found to be a predictor of sexual sadism (Roberston et al., 2018).

Opposing this trend is Nitschke et al. (2009), who reported no significant differences between the diagnosed and undiagnosed sadists regarding traumatisation (12.5% and 25%). Again, data for the non-sadistic group was not available (Nitschke et al., 2009).

Regarding experiences of sexual abuse, 20% of the sample observed by Dietz et al. (1990) reported being sexually abused as a child, while Longpré et al. (2018a) found that 14.1% of their participants had been sexually assaulted in childhood. While the proportion of offenders sexually victimised in these samples is not very high, other studies provide evidence that further establishes the prevalence of sexual abuse among this population. Namely, MacCulloch et al. (1983) noted that some of the sadists had experienced being restrained or 'buggered.' Moreover, while the perpetrator was not a member of his family, 'X' was sexually abused by his father's best friend, who had anal intercourse with him numerous times throughout his adolescence, beginning at 14; these experiences were not reported to his parents (Langton & Torpy, 1988). Rosenberg et al. (1988) also reported that a path leading from Destructiveness/Victimisation, which measured childhood sexual abuse, through Psychiatric Disturbances in adulthood predicted a sadistic outcome. Additionally, it was noted that the sadistic offenders experienced a higher rate of sexual abuse than the other subtypes, leading to increased psychopathologies in adulthood (Rosenberg et al., 1988). It was also found that sexual abuse significantly contributed to juvenile externalising behaviours and approached significance in predicting hypersexuality, both of which were predictive of sexual sadism (Robertson et al., 2018). Despite lacking statistical significance, Knight & Prentky (1987) observed that, relative to one-quarter or less of the other subtypes, almost half of the sadists (46.2%) were sexually assaulted as a kid.

While the prevalence of sexual abuse is not refuted, two studies presented evidence of low rates or insignificant differences across group comparisons. For instance, while both groups of sadists experienced sexual abuse in childhood (NCAVC: 20.0% and ROH: 28.6%), Gratzer & Bradford (1995) also found no significant group differences, with the non-sadists (ROH) reporting experiences of sexual abuse as well (12.9%). As a result, childhood sexual abuse was linked to general sexual aggression rather than sexual sadism (Gratzer & Bradford, 1995). Furthermore, not only were there no significant differences in experiences of sexual abuse during childhood, but the rate of this victimisation was low for both the diagnosed sadists (6.3%) and the undiagnosed sadists (2.8%); data for the non-sadistic group was not available (Nitschke et al., 2009).

Sexual Deviance

Though not a common factor investigated, three studies did measure exposure to or involvement in sexual deviance within the family, but the results vary. Knight & Prentky (1987) found that sexual deviation not involving the individual occurred in 46% of the sadists' families, which was the highest in the sample and double that of the compensatory or displaced anger rapists. Moreover, 16.7% of sadists experienced sexual deviation within their family, although group differences on this variable were not statistically significant (Knight & Prentky, 1987). In contrast, Longpré et al. (2018a) reported low rates of familial sexual deviation, with 14.3% of participants having observed it and 9.5% being involved in it. Furthermore, Rosenberg et al. (1988) did measure sexual deviance in the family through Family Pathology, though no direct path to a sadistic outcome is shown.

School

Within the school domain, findings can be divided into two categories: level of education and academic behaviours.

Level of Education

The level of education completed was not reported for the samples or cases in five of the 14 works (MacCulloch et al., 1983; Langevin et al., 1985; Proulx et al., 2007; Rada, 1978a; Robertson et al., 2018). The remaining studies provided insight to varying degrees, but the predominant conclusion was that most sadistic sexual offenders had completed at least high school. Pardue & Arrigo (2008) found that Dahmer completed high school, though he failed out of university after his first semester. Comparably, Oliver, the case presented by Groth & Birnbaum (1979), also completed high school, despite a year-long interruption to his studies when he attempted to abduct and rape a woman. He was apprehended and charged with assault with a deadly weapon, but court proceedings were delayed so he could undergo psychiatric treatment (Groth & Birnbaum, 1979). After returning to school and graduating, Oliver pursued post-secondary studies twice but dropped out both times: the first time was because he was hit with a civil suit from the incident above; the second time was following a failed rape and murder, after which he contacted his psychiatrist for help and was arrested upon arrival at the hospital (Groth & Birnbaum, 1979).

Contextualising these findings within the broader landscape of research, Longpré et al. (2018a) found a low rate of high school dropouts (17.4%) in their sample, similar to the conclusions of most studies in this review. Dietz et al. (1990), also found that 43% of participants had graduated and received education beyond high school. Likewise, sadists from the NCAVC had a significantly higher rate of education beyond high school than sadists from the ROH

(43.3% vs. 3.6%) (Gratzer & Bradford, 1995). Furthermore, while it did not reach statistical significance, Gratzer & Bradford (1995) found that non-sadists from the ROH had a slightly higher frequency of education beyond high school than sadists from the ROH (6.5% versus 3.6%). Additionally, Nitschke et al. (2009) found that high school graduation rates between diagnosed and undiagnosed sadistic offenders were relatively high and close in range (68.8% vs. 66.9%); it is important to note that these rates are lower than those reported for the non-sadistic sexual offenders (81.4%).

In contrast to the prevailing trend, three sources present opposing evidence regarding the educational outcomes of sadistic sexual offenders. For instance, 'X,' the case presented by Langton & Torpy (1988), dropped out at 16 to get a job; after working on and off for years, he enrolled at college but withdrew due to financial difficulties. Knight & Prentky (1987) also reported a 50% dropout rate impacting the sadistic rapists; moreover, the average grade completed was grade 8. Rosenberg et al. (1988) had a similar finding, noting that the average grade grade completed was grade 9, although this was for the entire sample of rapists, not just the sadistic subtype.

Academic Behaviours

Three of the seven studies that investigated behaviour in school showed evidence of deviant or delinquent conduct. When investigating early conduct problems, Longpré et al. (2018a) found that 15.4% of individuals committed an assault on their teachers while in school. Moreover, 38.8% of participants experienced problems in junior high, and 45.6% experienced problems in high school (Longpré et al., 2018a). Knight & Prentky (1987) reported a similar finding, explaining that in elementary school, the sadistic offenders displayed the most

behavioural problems of any rapist subtype. Moreover, by junior high, the sadistic offenders were increasingly engaging in problematic behaviours at school (Knight & Prentky, 1987).

While still in the realm of deviant behaviour, Pardue & Arrigo (2008) found that Dahmer was described as a prankster by his classmates, who also noted that he would often engage in behaviours such as drinking alcohol during class and drawing outlines of bodies with chalk in the school hallways.

Four studies (Groth & Birnbaum, 1979; Langevin et al., 1985; Langton & Torpy, 1988; Rosenberg et al., 1988) presented divergent findings. 'X' did reasonably well in school, and no deviant incidents were reported (Langton & Torpy, 1988). On the same note, Oliver was described as a highly intelligent individual with proficiencies in an array of areas; he disclosed that discipline at his school was strict, but in reviewing his high school file, Groth & Birnbaum (1979) did not report any incidents of misconduct. Instead, Oliver's file indicated that he got good grades, and he even disclosed that he often feared not meeting the familial standards for success (Groth & Birnbaum, 1979). Langevin et al. (1985) also found that sadistic sexual offenders had the lowest rate of truancy (25%) compared to the non-sadistic sexual offenders (27%) and the non-violent non-sexual offenders (67%). Finally, Rosenberg et al. (1988) measured behaviours like assaulting teachers and problems at every level of school (elementary, junior, and high school) through the construct of Juvenile Impulsive/Antisocial Behaviour, finding that a more pronounced manifestation of such conduct decreased the likelihood of a sadistic outcome (Rosenberg et al., 1988).

Peers

Findings regarding the prevalence of developmental risk factors in the peer domain were relatively limited. Of the 14 studies in this review, seven did not feature information on peer relations and interactions (Dietz et al., 1990; Gratzer & Bradford, 1995; Groth & Birnbaum, 1979; Langevin et al., 1985; Langton & Torpy, 1988; Nitschke et al., 2009; Robertson et al., 2018). Among the remaining six studies, findings predominantly reported difficulties in establishing personal relationships among participants or subjects. For instance, Pardue & Arrigo (2008) found that Dahmer preferred to be alone and was described as a social outcast by teachers and acquaintances; he could not connect with others and had difficulties forming and maintaining social relationships. Similarly, MacCulloch et al. (1983) found that those in the sadistic group reported challenges in social relationships that began early in life. After puberty, these difficulties manifested as issues of sexually relating to or appropriately engaging with individuals of the gender they were attracted to (MacCulloch et al., 1983).

Additionally, while Longpré et al. (2018a) uniquely found that 27.2% of the sexual sadists in their study had a history of assaulting their peers, it was also reported that most chose to pursue a seclusive (54.7%) and isolated (71%) lifestyle, which aligns with the results from the other works. This finding aligns with Proulx et al. (2007), who reported that the childhood and adolescence of the sadistic offenders in their sample were marked by social isolation, which set them apart from the non-sadistic offenders. Knight & Prentky (1987) found similar results to these studies in that the sadistic rapist had the lowest level of peer interaction during their teens compared to the other rapist subtypes; however, the differences between group scores were not substantial, and the finding did not reach statistical significance.

In the case of Rosenberg et al. (1988), the model did not elicit a specific developmental pathway from peer interactions and relationships to the sadistic rapists in their sample. Nevertheless, divergent and limited inferences can be made about two findings: first, the established correlation between Adult Impulsive/Antisocial Behaviour, which was found to be a predictor of a sadistic outcome, and the construct 'School Problems,' which includes peer interactions; and second, Juvenile Impulsive/Antisocial Behaviour, which included behaviours like assaults on peers and was found to decrease the likelihood of a sadistic outcome (Rosenberg et al., 1988).

Contrasting this pattern is Case 2, presented by Rada (1978a), who did not experience difficulties with dating or companionship but instead had peers with whom he engaged in voyeuristic activities on numerous occasions. This exposure to deviant peers is a unique finding compared to the other sources. However, the individual denied that he and his peers participated in any other deviations (Rada, 1978a), which calls into question the level of influence that this experience may have had on his eventual offending.

Community

The studies included in this review did not investigate the role of developmental risk factors at the community level. Oliver, the case presented by Groth & Birnbaum (1979), briefly references exposure to a troubled neighbourhood where kids used to pick on him during his long trek to school. Still, this finding does little to indicate a relationship between Oliver's ecological environment and his eventual offending.

Conclusion

This paper aimed to evaluate what developmental risk factors are prevalent among sadistic rapists according to existing literature. While this type of sexual offender is not the most common perpetrator of sexual violence, their crimes are dangerous and can be fatal for the victim (Burkey et al., 2015). Moreover, the offending behaviours of sadistic rapists are categorised as sophisticated and highly organised, making apprehension by law enforcement difficult (Hazelwood et al., 2016). Thus, the goal was to understand experiences in their development that contribute to their offending in the hopes that these findings could inform developmental crime prevention efforts. Developmental risk factors were investigated within the domains of individual, family, school, peer, and community (Herrenkohl et al., 2000; Tanner-Smith et al., 2012). Additionally, recognising that literature on this topic was scarce due to a lack of typological distinction among studies observing sexual offenders, this paper also had the objective of creating a roadmap for future research.

The theoretical framework underpinning this paper consisted of developmental criminology, Farrington's Integrated Cognitive Antisocial Potential (ICAP) theory (2005), and Ward & Beech's Integrated Theory of Sexual Offending (ITSO) (2016). The inclusion of these three theories provided a more nuanced perspective into the aetiology of sexual offending that enhanced comprehension of the complex and diverse factors contributing to sadistic sexual offending.

This integrative literature review included 14 sources and each was thematically analysed, and its findings were coded to the corresponding risk domain. This paper was limited by the availability of studies that investigated developmental risk factors explicitly; as such, relevant information had to be extracted from the limited literature that aligned with the inclusion criteria.

Insights into the developmental risk factors among sadistic rapists were predominantly centred around the individual and family domain. In the individual domain, risk factors such as low self-esteem, aggressive/antisocial conduct, sadistic or deviant fantasies, and sexually deviant behaviours emerged. In the family domain, it was observed that the development of this type of offender is characterised by abuse, neglect, and an unstable family structure. Findings in the remainder of the domains were relatively limited; for instance, no risk factors in the community domain were investigated or identified by any of the sources reviewed. The peer domain showed a pattern of difficulties in social relationships and an isolated lifestyle, while the school domain established mixed findings related to academic behaviours. High rates of completing at least high school level education were also found among the sadistic rapists in the school domain, which suggests that level of education may not be a risk factor among this population.

Overall, this paper positions itself within the broader academic discourse of endeavours to understand the complex aetiology of sadistic sexual offending. It is crucial to note that establishing prevalence or correlation between variables does not necessarily imply causation. Accordingly, the results of this paper serve as a preliminary step toward understanding the developmental trajectories of sexually sadistic offending. Targeted interventions that aim to mitigate individual and familial risk factors by promoting positive self-image and strengthening parent-child relationships could prove instrumental in addressing early problematic behaviours exhibited by sadistic sexual offenders. Additionally, addressing issues of neglect, instability, and abuse within the family domain should be prioritised in intervention efforts. Furthermore, the findings emphasise the need for further primary research to clarify the relationship between risk factors and offending behaviour among this population. However, in order to do so, standard definitions and assessment criteria for sexual sadism must be set.

Discussion

While some of the findings may have been mixed, developmental risk factors among sadistic rapists predominantly emerged in the individual and family domains. In terms of the individual domain, the prevalence of aggressive/antisocial conduct was not surprising, as Tanner-Smith et al. (2012) identified these types of behaviours as salient risk factors. Moreover, this pattern reflects the common expression that denotes past conduct as the best predictor of future behaviour.

By the same token, a wide array of deviant sexual behaviours were exhibited by the sadists in childhood and adolescence, an outcome that also embodies that phrase. While no singular form of sexual deviancy emerged as predominant, the available evidence suggests an early onset of these behaviours among sadistic rapists (Dietz et al., 1990; Groth & Birnbaum, 1979; Langton & Torpy, 1988; MacCulloch et al., 1983; Proulx et al., 2007; Rada, 1978a; Robertson et al., 2018). Further research should be conducted in this area to determine the specific types of sexually deviant behaviours that manifest earliest and how these behaviours escalate into sadistic sexual offending. Additionally, delineating what behaviours are specific to sadistic sexual offending, thereby informing more targeted prevention and intervention measures.

The early onset of violent, sadistic, or rape fantasies is a noteworthy finding, as it reflects a risk factor that is more unique to this offender subtype than some of the other variables, like aggressive conduct or abuse, which can be associated with general offending behaviours (Tanner-Smith et al., 2012). The emergence of these fantasies at an early age suggests the potential efficacy of primary prevention strategies under appropriate conditions. As seen with Oliver (Groth & Birnbaum, 1979), who left his court-mandated psychiatric treatment still experiencing fantasies of rape that he did not disclose, it can be difficult to identify individuals who are experiencing these urges until after they offend. However, cases like 'X' (Langton & Torpy, 1988), who sought help before he began offending, illustrate the potential for intervention before these urges escalate and an individual offends.

Withal, the prevalence of fantasies, in conjunction with rates of low self-esteem reported by five of the studies (Groth & Birnbaum, 1979; Langton & Torpy, 1988; Longpré et al., 2018a; MacCulloch et al., 1983; Proulx et al., 2007) highlight an overlap between these findings and those reported in the peer domain. Most often, risk factors in the peer domain include association with delinquent peers (Tanner-Smith et al., 2012); however, this was only seen in one of the studies (Rada, 1978a). In turn, most of the studies reported difficulties in forming and maintaining social relationships (Knight & Prentky, 1987; Longpré et al., 2018a; MacCulloch et al., 1983; Pardue & Arrigo, 2008; Proulx et al., 2007). Accordingly, three of the studies in this review briefly theorise about the links between fantasies, low self-esteem, social difficulties, and isolated lifestyles (Longpré et al., 2018a; MacCulloch et al., 1983; Pardue & Arrigo, 2008), although the direction and nature of the relationships between these risk factors are not investigated. On the one hand, fantasy could be a coping mechanism for sadistic offenders who want to gain a sense of power and control they lack in their real social interactions, which are impeded by their low self-esteem and self-assurance (Longpré et al., 2018a; MacCulloch et al., 1983; Pardue & Arrigo, 2008). Conversely, low self-esteem and isolation may emerge as a result of the fantasies, as individuals may feel ashamed or different, fear acting on them, deny or dismiss concerns, or the urge to indulge in the fantasy is too strong, so they avoid others (Longpré et al., 2018a).

Building on these hypotheses through findings in the family domain, the prevalence of exposure to unstable family structures during development may lead these offenders to fantasies where they aim to gain a sense of control that they did not experience growing up. Furthermore, the high rates of neglect and abandonment among sadistic sexual offenders may contribute to the rates of low self-esteem. To better understand the interplay between these variables, the direction and nature of their relationship warrants further investigation in future research.

Observations regarding abuse and victimisation were significant. However, these kinds of adverse experiences have been found to increase the likelihood of offending in general (Malinosky-Rummell & Hansen, 1993, as cited by Farrington et al., 2012), so these findings may be limited in their unique applicability to sexual sadists.

The lack of findings related to sexual deviance was surprising, as developmental criminology posits that criminal behaviour stems from early experiences and learned behaviours (Cullen et al., 2012; Tremblay & Craig, 1997, as cited in Lab, 2014). Thus, it would not be a far reach to theorise that witnessing or experiencing sexual deviance at home may play a role in the development of sexual offending, especially when considered alongside the proportions of abuse endured by sadistic sexual offenders whose crimes reflect a fusion of aggression and sexual deviance. Nevertheless, the absence of risk factors related to familial sexual deviance may not be indicative of a lack of correlation or prevalence; it may just reflect the absence of investigation among the studies reviewed.

In the school domain, the majority of studies indicated that sadistic rapists had obtained at least a high school education. This observation was not surprising, given that their crimes are often premeditated (Burkey et al., 2015), bringing a level of sophistication and organisation to their offending behaviour that requires a certain level of intelligence (Hazelwood et al., 2016). Even where contradictory findings emerged, such as 'X' (Langton & Torpy, 1988), who dropped out of school, are not necessarily inconsistent, as he dropped out to work and tried to pursue further education later on. Accordingly, it has been found that individuals who drop out engage in less delinquency if employed full-time (Ellis et al., 2009, as cited in Tanner-Smith et al., 2012). Ultimately, this trend suggests that the level of education may not pose a developmental risk factor.

In terms of academic behaviours exhibited, results were inconclusive regarding the prevalence of problematic conduct, given the contrasting evidence (Groth & Birnbaum, 1979; Langevin et al., 1985; Langton & Torpy, 1988; Rosenberg et al., 1988). This variance in observations was surprising, given the prevalence of aggressive/antisocial conduct generally exhibited among this offender type. As such, questions arise as to whether this limitation stems from a lack of investigation into academic behaviours or if external factors play a role in mitigating these behaviours in an academic setting. The exploration of these queries marks another suggestion for future research endeavours.

The lack of findings in the community domain could be indicative of many things. First, given the inherently psychological component of sexual sadism, it could be that scholars have disregarded the impact that community factors would have on the development of such conditions and the crimes of sadistic offenders. Additionally, because studies investigating the developmental risk factors among sadistic rapists are minimal, it may be that no one has approached an investigation into the etiology of sadistic sexual offending through the lens of the five risk factor domains. Since observing variables in the other domains is easier than assessing the impact of community or neighbourhood characteristics, these factors may simply be overlooked. Nevertheless, all of these theories are just speculation. Empirical evidence to

validate or refute the role that community risk factors play in the development of sadistic rapists is necessary, thus, presenting an avenue for future research.

Implications for Crime Prevention

Given that the majority of findings were related to individual and familial risk factors, it seems prudent that, at this stage, any developmental crime prevention measures informed by this paper would target these two domains. Low self-esteem, aggressive/antisocial conduct, and sexually deviant behaviours may be the easiest risk factors to address because they are more easily observed than violent or sadistic fantasies. As such, increasing support systems that promote positive self-image and the development of social skills could be beneficial in mitigating some of the early problematic behaviours exhibited by sadistic sexual offenders. Furthermore, implementing these types of measures in an academic environment may increase their efficacy, as it was observed that sadists were educated at least until high school (Dietz et al., 1990; Gratzer & Bradford, 1995; Groth & Birnbaum, 1979; Longpré et al., 2018a; Nitschke et al., 2009; Pardue & Arrigo, 2008)

Additionally, addressing the prevalence of neglect, instability, and abuse within the family domain should be a primary focus of intervention efforts for this population. Initiatives that aim to educate expecting parents on how to provide a healthy environment for children, improve parent-child relationships, provide resources and support for families experiencing instability, and intervene for victims of abuse may help mitigate some of the risk factors prevalent among sadistic sexual offenders.

Limitations

An important limitation to acknowledge is the population or the participants observed by the studies in this review. As previously mentioned, Longpré et al. (2018b) identified that a

central issue in researching sadistic behaviour is that definitions and behavioural standards for sexual sadism lack consistency and differ based on the study. This discrepancy can be seen amongst the varying populations and assessment criteria employed by the works reviewed. Given that the behaviours and offending characteristics of sadistic rapists overlap with sexual sadism, it is imperative that this limitation is addressed moving forward. Establishing a universal definition and more standardised assessment criteria for sexual sadism will ensure consistency across studies, increase generalisability and facilitate a better understanding of the developmental risk factors associated with sadistic sexual offenders.

Recommendations for Future Research

In addition to recommendations made in the discussion section, future studies should employ a developmental criminological perspective to explore the relationship between variables in each of the risk domains and their impact on the criminal careers of sadistic rapists. Furthermore, longitudinal research would be beneficial in determining how certain behaviours and experiences manifest into sadistic sexual offending. Comparative studies will also benefit the development and efficacy of prevention and intervention measures that target risk factors among this particular type of offender. These kinds of studies should also move beyond investigation into this typology of rapist to address risk factors among other subtypes of sexual offenders. Lastly, conducting cross-cultural studies may provide insight into cultural determinants related to the development of sadistic sexual offending.

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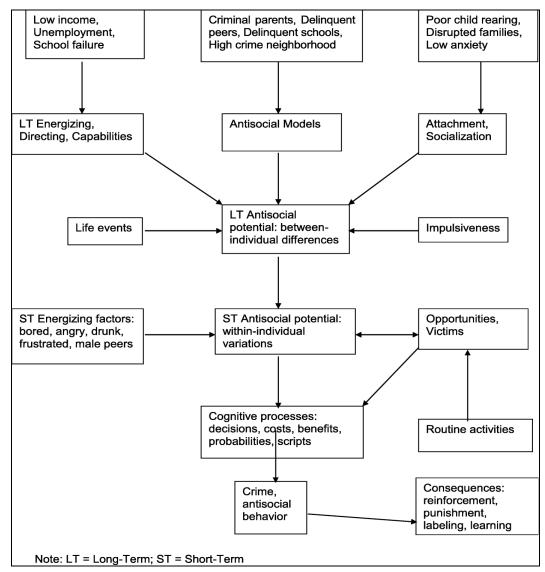
Appendix A

Model of Farrington's Integrated Cognitive Antisocial Potential Theory Figure 1

Model of Farrington's (2005) Integrated Cognitive Antisocial Potential (ICAP) Theory

The arrows indicate the direction of influence, demonstrating how each factor contributes to the next. Beginning at the top, socioeconomic factors (e.g. low income, unemployment, school failure) feed into long-term (LT) energizing factors; determinants like criminal parents or delinquent peers contribute to antisocial models; and variables like poor child-rearing or disrupted families impact attachment and socialization. All three of these long-term predisposing factors/constructs, along with life events and impulsiveness, dictate an individual's LT antisocial potential.

LT antisocial potential then feeds into ST antisocial potential, which is the product of interactions between ST energizing factors, victims, and opportunities. Victims and opportunities are informed by routine activities, representing environmental or situational factors that increase the likelihood of crime (e.g., the presence of potential victims). All of the model's factors then culminate in cognitive processes, which reflect the factors an individual considers before engaging in criminal or antisocial behaviours. The output of the complex interaction between these variables is criminal or antisocial behaviour, which leads to consequences that influence future behaviour by encouraging or deterring similar conduct.



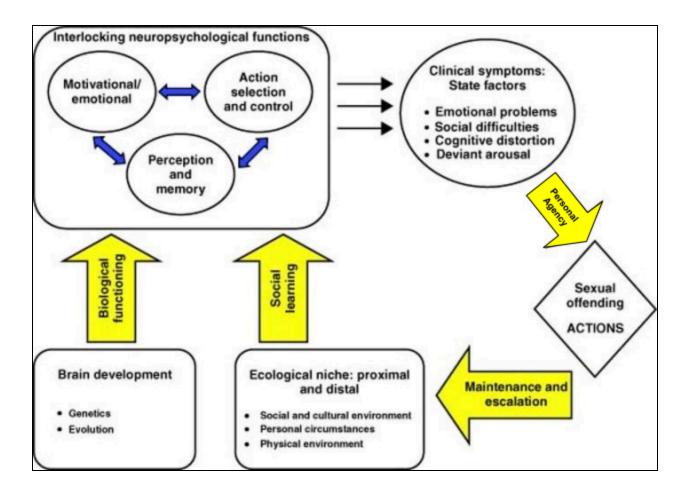
Note. Farrington, D. P. (2005). The integrated cognitive antisocial potential (ICAP) theory. In D. P. Farrington (Ed.), *Integrated developmental & life-course theories of offending* (pp. 73-92). Transaction Publishers.

Appendix B

Model of Ward & Beech's Integrated Theory of Sexual Offending Figure 2

Model of Ward & Beech's (2016) Integrated Theory of Sexual Offending (ITSO)

Beginning at the bottom left, factors related to biological functioning and the ecological niche feed into the three neuropsychological systems (motivational, action and perception/memory). When factors in the first two spheres impede the development of these three systems, these deficiencies result in the presentation of clinical symptoms linked to sexual offending. These are mediated by the personal agency sphere, which determines if a person acts on these symptoms and escalates to sexual offending. The ITSO proposes a feedback loop, implying that when a person sexually offends, the feelings they get from that behaviour serve as data that feeds back into their ecological niche and into their memory and perception system. The next time they are in a similar situation, their neuropsychological system will remember the actions they took previously, prompting the individual to act in a similar manner and re-offend. This cyclical process reinforces sexually violent behaviour and strengthens the feedback loop.



Note. Figure adapted from Ward, T., & Beech, A. R. (2016). The integrated theory of sexual offending- Revised. In D. P. Boer (Ed.), *The Wiley handbook on the theories, assessment and treatment of sexual offending* (pp. 123-137). John Wiley & Sons.

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Appendix C

Groth & Birnbaum's Clinical Data

Table 1

Six Offender Samples Comprising Groth & Birnbaum's (1979) Clinical Data

Offenders who were not apprehended.	Information about such individuals was retrieved from their victims, who reported the incident and gave an account of the offense, and from consultation with state and federal law enforcement agencies in their investigations of particular unsolved cases.		
Offenders who were identified or detected but who, for a variety of reasons, were not prosecuted.	Information about such individuals was obtained through private referrals and through requests to the Forensic Mental Health Program of Harrington Memorial Hospital in Southbridge, Massachusetts, for court diversion evaluations.		
Offenders who were apprehended but adjudicated either incompetent to stand trial or not criminally responsible for their offense.	Information regarding these individuals was acquired through research and clinical work by the senior author at the Whiting Forensic Institute in Middletown, Connecticut, a maximum-security mental hospital whose patient population included such subjects.		
<i>Offenders who were apprehended and tried but not convicted.</i>	Information about such individuals was derived in some cases from referrals for pretrial evaluations of accused offenders and, in other cases, through functioning as victim advocates or expert witnesses in trials that resulted in acquittal for the accused.		
Offenders who were convicted of sexual assaults or other sex-related offences and sentenced to prison.	Information about these individuals was obtained through clinical work and research with inmates in the Connecticut Correctional Institution in Somers, Connecticut, a maximum-security prison.		
Convicted offenders who were adjudicated dangerous and committed to a special security treatment center.	Information about these individuals was drawn from clinical work and research performed at the Center for the Diagnosis and Treatment of Sexually Dangerous Persons at the Massachusetts Correctional Institution in Bridgewater, Massachusetts. Convicted sexual offenders who were adjudicated as "dangerous" (that is, likely to repeat their offences and, in doing so, to jeopardize the safety of a potential victim) and civilly committed for an indeterminate period of one day to life (in lieu of or in addition to a fixed prison sentence) compose this population sample.		

Note. Table adapted from Groth, A. N., & Birnbaum, H. J. (1979). Men who rape: The

psychology of the offender. Plenum Press.

Appendix D

The Massachusetts Treatment Center for Sexually Dangerous Persons Sadism Scale

Table 2

Dimensions and Indicators on the MTC Sadism Scale (MTCSS)

The MTCSS is a research scale comprised of 16 dichotomous indicators of sexual sadism (listed under the 'indicator' column) that were coded as either absent (0) or present (1). These indicators are distributed across five dimensions (listed under the 'dimensions column'). The item-total correlation reflects how well each indicator correlates to the scale's overall score. The KR-20 measures internal consistency and reliability, and the frequency column details how often each indicator was reported in the sample.

Dimensions	Indicators	ltem-total correlation	KR-20 if item deleted	Frequency (%)
Control	Use of weapon	.66	.74	40.5
	Victim tied	.25	.78	11.3
Aggression	Instrumental aggression: brutal or damaging beating	.36	.77	10.3
	Brutal or damaging beating before the sexual assault	.56	.75	20.8
	Brutal or damaging beating after the sexual assault	.36	.77	6.4
	Kicking	.17	.78	2.1
	Cuts, bruises, and abrasions	.61	.74	49.2
	Burns	.20	.78	1.4
	Medical problems requiring physician	.61	.74	25.7
Cruelty	Cruelty to animals	.18	.78	3.7
	Cruelty to people	.18	.78	10.9
Torture	Sadistic assaults on victim's genitals/breasts	.31	.77	5.3
	Uncontrollable rage and anger leading to mutilation before the sexual assault	.19	.78	2.3
	Uncontrollable rage and anger leading to mutilation after the sexual assault	.23	.78	1.4
Insertion	Anal insertion of object	.14	.78	1.0
	Vaginal insertion of object	.12	.78	1.4

Note. Longpré, N., Guay, J-P., & Knight, R. A. (2018a). The developmental antecedents of sexually sadistic behaviours. In J. Proulx, E. Beauregard, A. Carter, A. Mokros, R. Darjee, & J. James (Eds.), *Routledge international handbook of sexual homicide studies* (pp. 283-302). Routledge. <u>https://doi.org/10.4324/9781315212289-17</u>