

# A Perfect Storm: Mapping the Life Course Trajectories of Serial Killers

by

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## Abstract

Since the 1970s, scholars have produced a large body of research attempting to establish the mechanisms by which serial killers come to arrive at a life of repeat fatal violence. Traits such as psychopathy, biomarkers such as abnormal dopamine concentrations, and other developmental correlates such as early family environment have all been offered as proximal explanations for the motivations, psychopathology, and etiology of serial homicide. Unfortunately, however, from the standpoint of developmental psychology, these insights are far too limited in scope. Human thought, functioning, and behaviour are the product of complex reciprocal transactions that occur between the individual and their environment throughout their lifespan. Processes that serve to shape human development include neural plasticity, modifiability, resilience and adaptation, among others. Yet, these vital processes are never discussed in the developmental literature on serial homicide. Additionally, research in this area tends to lack the ‘voice of the killer.’ Instead of as active participants, offenders are viewed as objects of research and as passive participants in their own life experiences. Again, this is problematic from the standpoint of developmental psychology. Every person’s actions are formed by years of contextual experience which reinforce dominant patterns of thinking which eventually come to dominate behaviour. Thus, in order to develop a comprehensive understanding of human psychopathology, behaviour, and development one must also endeavor to understand how patterns of thought and/or behaviour

were shaped, expressed, and reinforced throughout one's lifespan. Embracing a developmental model that is complex, and dynamic, and that honors the multisystem aspects of human development is necessary should we hope to understand the motivations, psychopathology, and etiology of serial homicide. Using lifespan developmental psychology as a guiding framework, this paper traces the developmental mechanisms that come together to shape the lives and criminal trajectories of serial killers.

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## Chapter 1

### INTRODUCTION TO THE STUDY

#### Background

In the early 1980's, a spate of highly publicized acts of random killings across North America prompted a congressional meeting to address concerns about the rise of serial homicide. In her opening statement, United States Senator, Paula Hawkins, declared serial homicide to be "an epidemic" (United States, Congress, Senate, Committee on the Judiciary, Subcommittee on Juvenile Justice, 1984, p. 11). The notion that serial homicide had become an epidemic was quickly echoed by representatives of government, including senators and congressmen, judges, law enforcement, and academics. Capitalizing on people's fears, the media also reinforced this message by issuing sensationalistic news coverage, publishing stories with titles such as "Serial Killers - The New Epidemic" and "Random Slayings by Serial Killers on The Rise" (Bayles, 1984, p. 28; Lindsay, 1984, p. 13A).

In truth, while public exposure to images and media discourse on serial killers was indeed on the rise, the notion that serial homicide had reached epidemic levels was baseless. Parallel to the widespread fear about the presence of Satanic ritual abuse in one's community in the 1980's and the "moral panic" about super predators in the 1990s. A review of the history and evolution of serial killing, the transformative geospatial landscape of its offenders and the diversification of their methods, along with the development of investigative techniques used to solve these crimes, shows serial homicide to have been a well-known, yet vague and inconsistently defined phenomenon since at least the fifteenth century, and likely well before (Jenkins, 1994; Ramsland, 2006). Nonetheless, the period between the 1970's through to the 1990's represented a critical time in the history of serial killers. Not only did these decades represent the pinnacle of the serial

killers' cultural relevance and grip on the North American imagination, but it was also a time wherein public hype and mass hysteria provided an impetus for the legislative recognition of serial killing as a unique form of homicide as well as a financial commitment, by the government, toward fighting it.

In the period between the 1970's through to the late 1990's, government funding dedicated to addressing the issue of serial homicide increased; resulting in substantial intellectual and law enforcement developments. For example, during this time, the Behavioral Science Unit (BSU) at the Federal Bureau of Investigation (FBI) was established. There, pioneers including Robert Ressler and John Douglas, along with university Professors Dr. Anne Burgess (Pennsylvania), Dr. Carol Hartman (Boston College), and Dr. Arlene McCormack (Lowell) began to catalogue and classify serial offender characteristics through a series of informal interviews. These interviews were carried out with 36 sexual homicide offenders; 25 of whom were serial killers. The study was not designed to be predictive developmental model and is not generalizable due to the absence of a control model, yet the interviews yielded several important findings regarding the early life experiences of serial killers. First, the interviews suggested that sexual homicide offenders tend to have a history of impaired childhood attachments. Second, that these offenders often suffer several formative traumatic experiences. And lastly, that sexual homicide offenders tend to spend a great deal of time during childhood and adolescence wrapped in a private internal world of violent thoughts and fantasies (Burgess et al., 1986; Ressler et al., 1986; Ressler, Burgess, & Douglas, 1988).

These initial findings have since been crafted into a model explaining why some men are motivated to commit seemingly random and repetitive acts of sexual homicide. As suggested by the Motivational Model, the motivations of sexual homicide are rooted in experiences of early

childhood trauma which set into motion patterns of thinking which provide support for and sustain the offender's deviant behaviour (Burgess et al., 1986). The FBI's original study offered some of the first modern insights into the childhood backgrounds and motivations of serial killers. Following this seminal study, scholars flooded to the area of serial homicide research, and, similarly, attempted to identify the motivations, psychopathology, and developmental origin, or etiology of serial killers.

In 1991, Donald Sears, used Wertham's theory of Catathymic Crisis to explain the development of serial killers including Ted Bundy and John Gacy. In his examinations Sears (1991) argued that childhood traumas and the unique victimization experienced by these individuals shaped their subsequent victimology. A few years later criminal psychologist, Eric Hickey (1997) developed the Trauma Control Model to explain how serial killers develop. According to Hickey's (1997) Trauma Control Model, serial killers are motivated to kill due to environmental issues that exacerbate early childhood traumas and compromise the individual's capacity to appropriately interact.

Throughout the following decade the etiology of serial homicide continued to be examined, definitions for serial homicide were proposed, and classifications and typologies of offenders were developed. In addition, the systematized application of Criminal Investigative Analysis,<sup>1</sup> better known as criminal profiling was adopted by law enforcement (see: Douglas et al., 1992; Egger, 1984; Keeney & Heide, 1995). Collectively, this research transformed serial homicide from an obscure and vaguely understood phenomenon to a congressionally recognized

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<sup>1</sup> The FBI has defined Criminal Investigative Analysis as "a process of reviewing crimes from both a behavioural and investigative perspective. It involves reviewing and assessing the facts of a criminal act, interpreting offender behaviour, and interaction with the victim, as exhibited during the commission of the crime, or as displayed in the crime scene" <http://www.fbi.gov/hglisd/cirg/ncavc.htm> (accessed: 2018, August, 26).

form of violent offending, one that was acknowledged and being addressed at the highest levels of government.

Interest in the study of serial homicide continued up to the earliest years of the twenty-first century but diminished following the September 11<sup>th</sup> attacks of 2001. These attacks brought about both a financial and intellectual shift away from serial homicide and onto a newer, more global threat; terrorism and political radicalism (Macdonald, 2013; Schmid, 2006). During this period, the academic study of serial homicide dwindled. Shrinking intellectual networks of serial homicide scholars and the migration of specialized law enforcement officers from serial homicide to divergent fields including terrorism and violent crime more generally, left the discipline abandoned. Since 2001, members of the academic community have published few articles on serial killers and only a small fraction of scholars have published multiple articles (Dowden, 2005). Today, academics have become the least active contributors to scholarship on serial homicide (Dowden, 2005). The majority of research on serial homicide is now conducted by law enforcement and retained by law enforcement agencies for private use.

While there is no dispute on the practical value of increased police knowledge and understanding of serial homicide, the lack of academic engagement with serial homicide research is problematic. By failing to engage this subject area, modern scholars have created barriers for new generations to enter into this field. Though anecdotal, my observation is that students are often told to pursue more 'legitimate' career paths or to narrow their research focus to areas that are 'more scientific.' The consequence of this is that students often fail to identify mentors and/or other opportunities that could facilitate successful entry into this discipline. Furthermore, the absence of academicians from the study of serial homicide has forced the public to become reliant on outdated information. Most of what people know about serial killers comes from what

they have learned from true crime television shows and other sensationalized media. While true accounts of crime, criminals, and the law are often presented in popular media, these accounts are often punctuated with misinformation as well. In turn, this has led to a proliferation of misconceptions regarding serial killers which has left both the public and disengaged law enforcement remarkably naïve and uninformed about the more realistic aspects of serial killing, including such basic elements as its definition, populations most at risk, and the cause and motivations of this crime.

Serial killing is rare. While perhaps an underestimated figure, it is estimated that only 30 to 40 unapprehended serial killers are active at any given time (Hickey, 2004). And yet, while serial homicide is rare, the number of victims is significant (FBI, 2013; Hickey, 2004; Ministry of Justice British Columbia, 2012; Quinet, 2007). For example, in the sixteen-year period between the years 2000 and 2016 it is estimated that 2112 people throughout Canada and the United States were killed by serial killers (Aamodt, 2016). In fact, in Toronto, Ontario, between the years 2010 and 2018, eight men were murdered, by alleged serial killer Bruce McArthur (see: Image 1). To date, the full scope of McArthur's victims is unknown, but more victims are expected to be identified. This case has once again propelled serial homicide to the forefront of the public's imagination and in doing so has raised several important questions, among which the most poignant was "can we handle a serial killer case?" (Shenher, 2018).

Unfortunately, the answer appears to be no, at least not in a timely manner. As indicated by reporters who initially raised the question, Canadian law enforcement efforts are hindered by a lack of practical experience and critical knowledge of such cases. They are also stifled by the limitations posed by a lack of extra-legal experience which resides beyond the walls of police stations. Given the unique nature of serial killers, including their seemingly random motivations

and victim selection, collaborations between serial homicide academicians and law enforcement could strengthen investigative efforts. In fact, just recently, Peter Henschel, the Deputy Commissioner of the Royal Canadian Mounted Police (RCMP) voiced his opinion on the need for greater collaborative efforts between law enforcement agencies and private sector partners, such as academics and those in technology sectors (Canadian Advanced Technology Alliance, 2017).



**Image 1.** Eight victims murdered by serial killer McArthur. Retrieved from: The Toronto Star. (2018, January 29). <https://www.thestar.com/news/gta/2019/01/29/eight-men-eight-stories-what-we-know-about-serial-killer-bruce-mcarthurs-victims.html>

## Purpose

Serial homicide research is currently in need of many intellectual developments. More up-to-date research is needed to address the value and feasibility of crime linkage analysis and criminal investigative analysis in the age of machine learning. More sophisticated studies are needed to help determine the incidence and prevalence of serial homicide. Additionally, much more attention needs to be given to female perpetrators of serial homicide. Yet, while each of

these areas needs advancement, there is another promising area of research that has long been studied but has yet to be sufficiently addressed; that is, the developmental processes that contribute to the motives and psychopathology of serial killers.

### *Prevalence of Serial Homicide*

Homicide is defined as an unlawful death deliberately inflicted on one person by another person (Organisation for Economic Co-operation and Development, 2011). The homicide rate throughout the western world has fallen dramatically over the past few centuries this is especially true of both Canada and the United States. In Canada, homicide accounts for 0.2% of all deaths (Beattie, David, & Roy, 2018). In the United States, homicide deaths accounted for 6.0 per 100,000 population (National Vital Statistics Reports, 2019). Homicide in the U.S. was listed as the sixteenth leading cause of death in 2017 (National Vital Statistics Reports, 2019). Given these figures, homicide appears to account for a small proportion of all mechanisms of death.

While the share of all homicides that can be attributed to serial offenders is difficult to estimate the prevalence has been proposed to range from less than 1% (FBI, 2008; Kiger, 1990) to almost 2% (Jenkins, 1988; Sturup, 2018). As this figure only includes victims from solved cases, the true figure is presumably higher. While the odds of becoming a victim or target of a serial killer are exceptionally low, the human cost of those who are victimized is beyond calculation.

Serial killers are the most violent type of offender. Unlike most other violent criminals, serial killers draw out their murders to inflict the most amount of pain and suffering possible (Ferguson, 2010). Serial killers spend a significant period of time physically and psychologically torturing their victims, and mutilation of their victims both pre-and post-mortem is common

(Arndt et al., 2004). Serial homicide visits devastation on families and communities and, like any event of unexpected devastation leaves people asking, why did this happen? Identifying the etiology of serial killers offers us an opportunity to make sense of tragedy and, in doing so, it allows us to reduce human suffering. As stated by psychologist and criminologist, Candace Skrapec: “the conscience of humanity demands that the taking of a life by another be explained” (2001, p. 48). Therefore, one could argue that despite its rarity, there is both a theoretical and practical significance to serial homicide research on its own, closure for the families of those who’ve lost a loved one is a strong incentive.

At the same time, knowledge about the origins, causes, and pathways to serial killing offers a source of tremendous investigative opportunity. Unlike most homicides, wherein there is a single victim, and where the victim and offender are known to each other prior to the offence, and where a clear motivation can be easily reconstructed and understood by investigators, serial homicide is much more complex. The victims are often strangers, the crime scenes may be characterized by symbolic elements and ritualism, and the motivations are often not apparent. In fact, because the motivations for serial homicide exist most clearly in the mind of the serial killer him/herself, serial homicides used to be referred to as motiveless crimes (Michaud & Aynesworth, 2000). Motiveless, however, they are not.

Motive is often an important element of criminal investigations. It can help to narrow down suspects as well as the criminal culpability of the accused. Crimes without an identifiable motive can force investigators to begin at square one. A process that takes a considerable amount of time and resources which regular police departments often do not have. By having access into the thought processes that guide the motivations and behaviours of serial homicide offenders, investigators may be able to refine their investigative techniques and decrease the amount of time



and resources these crimes demand. This capacity is embodied in the technique of criminal profiling. In an ideal situation profiles can be used to help narrow down police suspect lists, focus investigative resources, and lead to the identification of an offender.

Take for example the case of serial killer John Joubert. Following a series of disappearances, primarily young adolescent boys in Bellevue Nebraska, local law enforcement called in the Federal Bureau of Investigation (FBI), asking for assistance on the case. Robert Ressler, a founding member of the FBI's behaviour analysis unit, developed a profile of the offender. According to Ressler: The offender would be a single killer with no accomplices, in his twenties, asexual, not much larger than his victims, he would live in Bellevue or on the airbase, he would be familiar with the air base, and he would be involved with young boys in some way, perhaps through BoyScouts (Ressler & Shachtman, 1992).

Ressler's profile helped to narrow the scope of the investigation and, ultimately, helped lead to the identification of John Joubert; a twenty-year-old enlisted radar technician from Offutt Air Force Base. Reflecting on this case, Ressler stated: "every ounce of information we extract from a killer about his mind and methods gives us more ammunition to track the next one" (Ressler & Shachtman, 1992, p. 125). Unfortunately, the information contained within criminal profiles is not without limitations and must be used with great caution by investigators. There are many instances in which profiles have been more harmful to investigations than helpful. Take for example the case of Behavioural Investigative Advisor Paul Britton.

While assisting the police on the case of the murder of Rachel Nickell, Britton's profile led police to pursue, and eventually convict a suspect, Colin Stagg, all whilst redirecting value time and financial resources away from the actual offender, Robert Napper (Edwards, 2008). During the period of time in which the investigation was focused on Stagg, Napper went on to

murder two more victims; Samantha and Jazmine Bisset. When Napper was convicted in 2008, Stagg received an official apology from Assistant Commissioner John Yates who described the case as a miscarriage of justice (Independent Police Complaints Commission, 2010). While Stagg may have been cleared, the apology offered little solace for the Bisset family who described the deaths of Samantha and Jazmine as needless, stating: “if they’d kept Napper behind bars Samantha would still be here today” (Randhawa & Cheston, 2008, para 9).

Academic engagement with serial homicide research could have profound implications for our ability to generate more effective and more reliable ways to identify, investigate, and adjudicate serial homicide cases (Morton, 2008). In particular, the application of developmental science, which is defined as the systematic study of human change processes, may be our best option for developing a comprehensive understanding not only of the origin, but of the developmental unfolding process, of the psychopathologies that underlie and motivate the lethal behaviour of serial killers.

In an attempt to develop such an understanding, scholars have identified several developmental correlates to serial homicide. These correlates include early parental relationships characterized by adversity, hostility, and insecurity (Burgess et al., 1986; Hickey, 1997; Knight, 2006), abnormal peer interactions (Hickey, 1997; Keppel & Birnes, 2003; Knight, 2006; Schlesinger, 2000), and the absence of a father figure (Stone, 2001). Research has also identified several biogenic and neurological correlates including a include a history of head injury and damage to the frontal lobe (Allely et al., 2014; Norris, 1988; Stone, 2001). In addition, the criminological literature has proposed that social learning and routine activities theories hold promise for explaining sexual homicide (Chan, Heide, & Beauregard, 2011). Research into the psychopathology of serial killers has also shown many of these offenders to have suffered from a

diagnosable mental health condition including psychopathy (86.5%), schizoid personality (50%), sadistic personality (87.5%), depression, narcissism, borderline personality disorder, and substance abuse (58%) disorders (Gacono, 1992; Hickey, 1991; Liebert, 1985; Lowenstein, 1992; Pollock, 1995; Stone, 1989).

Studies comparing the prevalence of mental disorders among serial homicide offenders and single victim homicide offenders are rare. However, a few studies have examined the frequency of mental illness in single-victim homicide offenders which then lend themselves to comparisons with serial homicide populations. For example, in his study of diagnostic patterns among a population of murderers, Yarvis (1990) interviewed and diagnosed 100 pretrial murderers. Yarvis (1990) concluded that 90% of this population had Axis I disorders, with substance abuse and psychotic disorders being the most common. Yarvis (1990) also found 74% of the subjects had an Axis II diagnosis with antisocial (38%) and borderline personality disorder (18%) being the most common. Compared to Yarvis' (1990) research it appears as though serial killers have a higher incidence of Axis II disorders (~87% vs 74%) and a lower incidence of substance use disorders (58% vs 90%) than single-victim homicide offenders.

Other research examining the relationship between mental illness and homicide has been conducted by Wilcox (1985) and later, by Matejkowski, Cullen, and Solomon (2008). Drawing from the offenders clinical archived records Matejkowski et al. (2008) found inmates to experience high levels of depression (60%), followed by schizophrenia (28%). Similarly, Wilcox (1985), found a high incidence of psychopathologies including: antisocial personality disorder, drug abuse, and schizophrenia in a sample of 71 murderers.

Additionally, through their clinical evaluations of 13 death row inmates Cunningham and Vigen (2002), found 100% of the sample to display evidence of either neurological damage or

psychopathology. Schizophrenia, paranoid type (26%) and depression (29%) were found to have a high prevalence in this population and were found to be higher than the general prison population for Axis I disorders (15%), but in line for personality disorders (75%) (Stoner, 2008).

Perhaps not surprisingly, the prevalence rates of personality disorders (PD) observed in serial killers, single-victim murderers, and the general prison population are much higher than the prevalence of PDs in the general population. A prevalence which ranges from 10% to 15% (Morana et al., 2006).

In any case, for those directly impacted by serial homicide through the loss of a loved one, answers which cling to a psychological disorder, substance abuse, or even childhood victimization, ring hollow. If presented in the absence of additional clarification as to how millions of other people suffering similar experiences and/or psychopathologies are able to refrain from committing or even considering similar acts of violence, these answers risk being interpreted as shallow excuses for crimes that generate profound pain and suffering. Ultimately, simplistic explanations, such as the presence of a personality disorder, arouse more questions, and in some instances, more pain, than answers.

One of the most important reasons why our current explanations of the motivations, psychopathology, and etiology of serial homicide are so flawed is that these explanations are completely stripped of the complexity that characterizes human development. Not only does current research rely primarily on static traits, biomarkers, and correlates, but it also lacks the 'voice of the killer.' Offenders are viewed as objects of research and as passive participants in their own life experiences.

Static traits, biomarkers, and correlates (such as the absence of a father figure or psychopathy) as contributing agents to this crime are the end result of overly simplistic, invalidly

reductionistic, and uni-disciplinary research. Such theories offer insights and a foundational context for considering the developmental background of serial killers; however, these insights fail to explain how serial killers develop, and what motivates them to engage in repetitive acts of lethal violence.

The critical importance of expanding serial homicide research beyond this type of simplicity to embrace a developmental model that is complex, dynamic, and that honors the multisystem aspects of human development was first suggested nearly three decades ago in the pioneering research that began in the FBI's BSU. According to Burgess et al. (1986), it is impossible to understand the motivations of offenders without first seeking to understand their viewpoint; the framework through which they interpret their actions and the moral gravity of them, as well as their motivations. Essentially, Burgess et al. (1986) argued that one cannot hope to find answers in experience or biology alone. Instead, we must be willing to bridge the divide; to expand the scope of our analysis to mechanisms beyond those that are open to direct observation.

To appreciate the complexity of the motivations, psychopathology, and etiology of serial homicide offenders, one must not only examine objective life experiences but, also, endeavor to understand how and why those experiences affected that person the way that they did. This later aspect of understanding can only be gleaned by exploring the space of the mind. This suggestion echoes the sentiments of William James, the Father of American Psychology who, in his seminal text *The Principles of Psychology*, stated:

Whilst part of what we perceive comes through our senses from the object before us, another part (and perhaps the larger part) always comes out of our own mind (James, 1952, p. 190).

Unfortunately, perhaps due to the neglect of developmental science during the ‘golden age’ of serial homicide research or due to the fall of serial homicide research in the post 9/11 era, both internal and external contexts of development have failed to be considered until now. This thesis builds upon the pioneering work of Burgess et al. (1986) who first alluded to the critical importance of interpreting perception in order to understand the serial killer’s motivations and psychopathology. To better understand the developmental processes by which serial killers come to arrive at a life of repeat fatal violence, this thesis employs a multimethod approach, and traces the developmental mechanisms that come together to shape the criminal trajectory and lives of serial killers. This thesis merges both qualitative and quantitative findings into a single developmental narrative which explains both how and why serial killers come to travel the course from childhood innocence to an adult life of repeat fatal violence.

### Conceptual Framework of Study

Lifespan developmental psychology is a relatively recent field, with major historical precursors to this scholarship beginning as early as the 1920’s with the work of American psychologist Granville Stanley Hall. Developmental psychology deals with the study of human development (ontogenesis) from conception to death (Baltes, 1987). In serving this objective, the focus of developmental psychology is on the holistic nature of human development. This includes: the sequencing of lifespan events, neural plasticity, modifiability, and adaptation, processes and mechanisms of mind and behaviour development, as well as developmental continuity and change across the entire lifespan. Rather than a specific theory or model, developmental psychology is best characterized as a perspective or an approach to human development. It’s a field that challenges scientists to cut across disciplines in a way that allows

the complex and often paradoxical qualities of development to be addressed without oversimplification or the invalidly reductionist assumptions of uni-disciplinary research (Volpe, 1980).

Because developmental psychology is not necessarily aligned with one particular theoretical persuasion (for example, cognitive or behavioural psychology) this field can appear atheoretical (Willis, 1982). To guide and direct the study of human development, however, lifespan research assumes several core theoretical positions (see: Table 1).

The first of these positions is that human development is a lifelong process. In spite of evidence to the contrary, one of the most pervasive models of human development is the belief that early experience has the most crucial effects on adult development (Volpe, 1980). The perceived significance of early infantile experiences has led to the production of uncritical and inflexible models of human development. While infancy and early childhood are important developmental periods, restricting our focus to these developmental periods is problematic because no age period holds supremacy in regulating the nature of development. Developmental psychology embraces change at all points of development, not necessarily childhood.

A second position is that human development is multidimensional. The principle of multidimensionality asserts that human development and change processes do not follow a simple single or linear path. Some change can be gradual and incremental, but many systems in human development are vulnerable to periods of turbulence and instability, with dramatic changes or growth spurts (Hayes et al., 2007). Multidimensionality is a principle that rests on the assertion that patterns in human thought, functioning, and behaviour are the products of complex reciprocal transactions that occur between individuals and their environment throughout their lifespans. Take, for example, the concept of posttraumatic growth.

**Table 1.** Theoretical Positions Characteristic of Lifespan Developmental Psychology

Concepts	Positions
Lifespan development	Ontogenetic development is a life-long process. No age period holds supremacy in regulating the nature of development. During development, and at all stages of the life span, both continuous (cumulative) and discontinuous (innovative) processes are at work.
Multidirectionality	Considerable diversity or pluralism is found in the directionality of changes that constitute ontogenesis, even within the same domain. The direction of change varies by categories of behavior. In addition, during the same developmental periods, some systems of behavior show increases, whereas others evince decreases in level of functioning.
Development as gain/loss	The process of development is not a simple movement toward higher efficacy, such as incremental growth. Rather, throughout life, development always consists of the joint occurrence of gain (growth) and loss (decline).
Plasticity	Much intraindividual plasticity (within-person modifiability) is found in psychological development. Depending on the life conditions and experiences by a given individual, his or her developmental course can take many forms. The key developmental agenda is the search for the range of plasticity and its constraints.
Historical embeddedness	Ontogenetic development can also vary substantially in accordance with historical-cultural conditions. How ontogenetic (age-related) development proceeds is markedly influenced by the kind of sociocultural conditions existing in a given historical period, and by how these evolve over time.
Contextualism as paradigm	Any particular course of individual development can be understood as the outcome of the interactions (dialectics) among three systems of developmental influences: age-graded, history graded, and nonnormative. The operation of these systems can be characterized in terms of the metatheoretical principles associated with contextualism.
Multidisciplinarity	Psychological development needs to be seen in the interdisciplinary context provided by other disciplines (e.g., anthropology, biology, sociology) concerned with human development. The openness of the life-span perspective to interdisciplinary posture implies that a “purist” psychological view offers but a partial representation of behavioral development from conception to death.

\* Source: Table retrieved from: Baltes, 1987, p. 613.



Posttraumatic growth is defined as “the experience of positive change that occurs as a result of the struggle with highly challenging life crisis” (Tedeschi and Calhoun, 2004, p. 1). Posttraumatic growth emerges in the aftermath of frightening and confusing trauma such as bereavement, cancer, and refugee experience among others. Traumatic circumstances such as these can lead to a shattering of fundamental schemas and present major challenges to a person’s understanding of the world. The challenging of previously held assumptions then offers fertile ground for unexpected psychological, behavioural, and cognitive restructuring in survivors. For example, an increased appreciation for life, more meaningful interpersonal relationships, changed priorities, and a richer existential and spiritual life (Tedeschi and Calhoun, 2004). Growth, however, is not linear because it does not occur as a direct result of trauma. Instead, it is the individual’s struggle with the new reality in the aftermath of trauma that is crucial in determining the extent to which posttraumatic growth occurs (Tedeschi & Calhoun, 2004).

According to the principle of multidimensionality behaviour is too complex to warrant simple casual relationships. Therefore, theories of development must pay consideration to the complex interrelations between people and their environment.

Another principle is that development is characterized by both gains and losses. According to this principle, any developmental process involves aspects of growth and decline. Gains and losses can involve both objective and subjective indicators. For example, people may learn to develop and cultivate friendships, but lose other aspects of their characters, such as impulsivity, in order to better conform to group norms.

Plasticity is another principle that has been articulated in this field. For example, early neurological development proceeds as an ongoing process of wiring and re-wiring the connections between synapses. The more a synapse is activated, the stronger the neural circuit it

is connected to becomes, while those that are underactivated are pruned away by programmed cell death (Chechik, Meilijson, & Ruppin, 1999). Plasticity allows human beings to adapt to the conditions of their biological and social environments and, thus, provides an evolutionary advantage for survival.

Lifespan studies also adhere to the principle that development is historically and culturally situated. Essentially, this position states that the historical and cultural time period in which we grow up affects our development. Connected to this position is that of Contextualism. Like Historical Embeddedness, Contextualism asserts that the developmental context in which we live exerts a considerable influence on our development. Contextualism includes ecological factors such as urban or rural environments, one's socioeconomic status, and neighborhoods.

Lastly, multidisciplinary is an important position of lifespan studies. For example, while the study of development is possible within a variety of sub-areas, such as abnormal psychology, cognitive psychology, neuroscience, and perception, developmental psychology is not linked to any one specific area of human development (Willis, 1982). Rather, a lifespan perspective coordinates the integration of various specializations into one overarching framework of development. These positions form a family of perspectives that together specify a coherent metatheoretical view on the nature of development (Baltes, 1987).

## Methods of Lifespan Development

### *Organizational Frames*

There are two organization frames that one can use to conduct lifespan studies: person centred (holistic) and function centred (Baltes, Lindenberger, & Staudinger, 2006). Because this

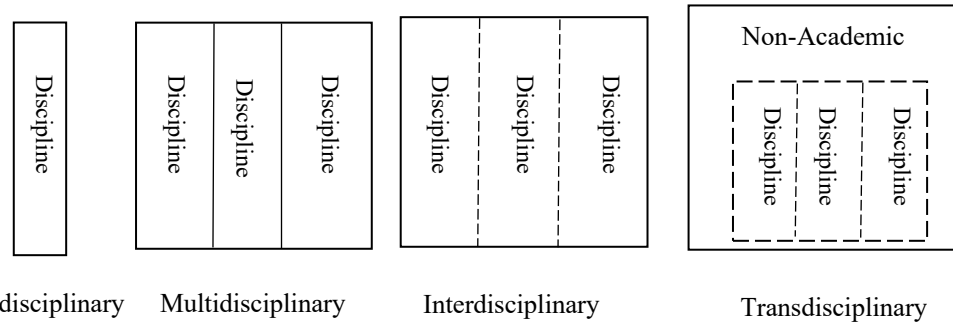
approach only considers one function of human development it will not be used in this thesis. Rather, this thesis takes a holistic approach.

The holistic approach views the person as a system and attempts to generate knowledge about human development by describing and connecting age periods into one overall, sequential pattern of lifetime individual development (Baltes, Lindenberger, & Staudinger, 2006). In a holistic approach, one's behaviour and psychology are the centre of attention. An example would be Erik Erikson's (1959) theory of psychosocial development, an eight-stage theory of development that includes all of the human lifespan, from infancy through old age. The holistic approach to human development attempts to capture more than one behaviour or function. It attempts to connect an array of various developmental processes across the lifespan. Owing to its aim to capture the complexity of individual development across the lifespan, this framework is particularly well suited for this thesis.

### *Measurements*

Multidisciplinary research is often undertaken in developmental studies (Willis, 1982). Recently, however, transdisciplinary research, as opposed to multidisciplinary research has been advocated among lifespan scholars. The major distinction between multidisciplinary and transdisciplinary research is that while multidisciplinary approaches merely juxtapose different disciplinary contributions, transdisciplinary approaches are coordinated, integrated, and draw perspectives or 'voice' from non-academic actors (see: Figure 1).

In contrast to other disciplinary research traditions, transdisciplinary contributions incorporate a combination of concepts and knowledge not only used by academic researchers but also other actors in civic society, such as non-scientist stakeholders from the non-academic



**Figure 1.** Distinction between Disciplinary Traditions (Reproduced from: Takeuchi [2014])

environment (Lawrence, 2010; Takeuchi, 2014). The contributions of non-academic actors to academic research enables cross-fertilisation of knowledge and experiences from diverse groups of people. This, in turn, promotes an enlarged vision of the subject under study (Lawrence, 2010). The cross-fertilisation of knowledge can also inspire new ways of thinking about and addressing issues. Consequently, rather than being an end in itself, the goal of transdisciplinary research is to learn to appreciate an issue from a new perspective and to develop innovative new methods for understanding.

One major task of transdisciplinary research is to confront complexity and to challenge knowledge fragmentation (Sommerville & Rapport, 2000). Its methodology is thus well suited to dealing with research problems that have been addressed by heterogeneous domains, but for which a hybridization of ideas was never achieved. As well as complexity and heterogeneity, this mode of knowledge production is also characterized by its hybrid nature, non-linearity, and reflexivity (Lawrence, 2010). Because it seeks to address research problems from many angles, transdisciplinary research transcends barriers between disciplines and, instead, embraces approaches such as grounded theory to integrate the knowledge, epistemologies and methods of established academic research with real world situations and experiences (Dwyer, Gill, & Seetaram, 2012; Lawrence, 2010).

Lastly, because its end goal is the fusion of fragmented ideas and increased knowledge production, transdisciplinary research often lacks a formal hypothesis. This method, however, is not atheoretical. A large and rich literature base provides the conceptual foundation of its design. While those who utilize transdisciplinary research should be aware of assumptions that underlie their research, they should also be willing to challenge those assumptions in an attempt to bring about new ways of theorizing and problem solving (Bernstein, 2015). Owing to the fragmentation that characterizes much of the developmental literature on serial homicide, a transdisciplinary framework is especially appropriate for this thesis.

In addition to transcending disciplinary boundaries, transdisciplinary research also attempts to transcend boundaries between the qualitative and quantitative research paradigms. Consequently, transdisciplinary frameworks often adopt multimethod research paradigms. Multimethod research is an approach to research that combines two or more different methods or styles of research within the same study. While similar to mixed methods research, which focuses on combining qualitative and quantitative methods in one study (usually independent of one another), multimethod research is the combination of “science and art, design, and serendipity, thoughtful planning and pragmatic opportunism” (Hunter & Brewer, 2015, p. 8).

Rather than questions about the principles and philosophies of methodological paradigms, multimethod research begins first and foremost with a substantive question or questions. Multimethod research then pragmatically employs the full scope of data available to address a research problem. Multimethod research is, thus, not restricted to the philosophical paradigms of qualitative or quantitative research and is open to the full variety of possible methodological combinations of the two research traditions, without having to award primacy to any.

The multimethod perspective extends beyond different types of data frameworks and strategies to include data collection and materials (Hunter & Brewer, 2015). For example, data collection can include a series of interviews conducted by the researcher him or herself as well as the collection and analysis of archival information. Materials can include surveys, video, audio, art, numerical databases, and transcribed information as well. The fact that so much of the publicly available data on serial killers comes from a variety of scattered sources - such as news, tv, radio, police interviews, court transcripts - makes multimethod research particularly attractive as a purposeful design for this thesis.

Lastly, multimethod research fits within the transdisciplinary research paradigm in the sense that, unlike mixed method research which uses triangulation to strengthen and ensure the accuracy of data (Lincoln & Guba, 2000), multimethod research encourages reflexive and refined sophistication of findings leading to creative insights (Hunter & Brewer, 2015). Of course, this leads to questions of causal inference identifying the cause-and-effect relationships of a theory's hypotheses.

Again, however, transdisciplinary research is often conducted in the absence of hypotheses. The real value of multimethod research, from a lifespan perspective, is in its ability to enhance the possibility of serendipitous discovery of unanticipated outcomes not previously considered (Hunter & Brewer, 2015). In addition to the identification of unanticipated outcomes, multimethod research may also provide a more complete picture of the "causal processes," and sequential mechanisms by which certain outcomes unfolded. Consequently, this methodology may provide an opportunity to resolve some of the ambiguities that result from methodological pluralism and/or uni-disciplinary research (Hunter & Brewer, 2015).

## Implications of a Lifespan Perspective for Serial Homicide Research

Currently, our understanding of the serial killers' motivations, psychopathology, and etiology is gleaned from studies that in no way promote an integrative effort at constructing lifespan theory. The focus on traits has been so pervasive that it has been argued that we are no closer to understanding how or why some individuals become serial killers, only that they do (Canter et al., 2004; Holmes, Tewksbury, & Holmes, 1999). Due to the lack of academic engagement with the subject, it has also been argued that much of what we know about serial killers is based on outdated information and erroneous concepts that have been reified over several decades. Though academics are now the least active contributors to serial homicide scholarships the value of their engagement with this area is predicated on the fact that every year people's lives are taken by serial killers.

A lifespan approach promises to make a major contribution towards a unifying framework for understanding the motivations, psychopathology, and etiology of serial killers. This thesis aims to establish a literature base that encourages the increased complexity and sophistication of developmental theorizing. This research also aims to reunite disparate bodies of scholarship by bringing together those whose early contributions helped to shape this field and unite non-academic stakeholders whose professional fields or personal lives have been affected by this crime with those of us who continue to study it.

## Research Question

Like all patterns of behaviour, serial killing is a multi-faceted, multidimensional, dynamic, and complex developmental phenomenon, the causes of which are deeply embedded in social, psychological, ecological, and cultural contexts. Therefore, a transdisciplinary approach,

one that incorporates multimethod analysis and inquiry driven research, is required to understand it. In addition to a transdisciplinary approach, special care had to be taken to ensure that the research questions were malleable. This is because much of what is currently known about serial homicide is the product of reification, a social phenomenon wherein antecedent knowledge is forgotten, causing concepts take on a life and a meaning of their own. The McDonald Triad is an excellent example of this.

The MacDonalD Triad is an idea which alleges enuresis, arson, and animal cruelty to presage violence. The MacDonalD Triad has found broad acceptance across the fields of criminology, psychology, and law enforcement. The ‘triad’ is often cited as a conceptual model of violence risk that has been linked to serial and single homicide (Ressler, Burgess, & Douglas, 1988), sexual offending (Prentky & Carter, 1984), and recidivist fire setting (Slavkin, 2001).

A thorough review of the literature demonstrates that the work of John M. MacDonalD, the oft-cited author and originator of the concept, has been misappropriated and misapplied by academicians, law enforcement, and the media (Henderson, Hensley, & Tallichet, 2011; Peterson & Farrington, 2007; Ressler, Burgess, & Douglas, 1988). MacDonalD (1963) never empirically established the homicidal triad as a risk factor for violence, nor did he advocate for it as a risk factor for homicide. Rather, he established the triad based solely on his “clinical impressions,” and identified it as an “unfavorable prognostic factor in those who threaten homicide” (MacDonalD, 1963, p. 130).

Additionally, almost half (48%) of MacDonalD’s sample was drawn from patients who were psychotic, a population which is known to commit a statistically significantly higher rate of homicide than the general population (Taylor & Kalebic, 2018). Perhaps owing to this,



MacDonald himself warned of the limited predictive value of the concept for serious violent offences.

In a study examining the validity of the McDonald Triad as a possibly predictive factor for serial homicide, Reid and Lee (2019) examined the prevalence of the triad among 137 sexually motivated male serial killers. Of the 137 male sexual serial murderers sampled, 9 (6.6%) had all three Macdonald Triad factors (i.e. arson, animal cruelty, and enuresis). Of the individual factors, 27 (19.7%) of male sexual serial killers suffered from enuresis, 29 (21.2%) committed arson, and 39 (28.5%) engaged in acts of animal cruelty in their youth. Ultimately, this study dispels the long-held assumption of the triad as a predictive risk factor for serial homicidal violence and demonstrated that the triad was, itself, a product of reification.

Reified beliefs about serial homicide often drive new research into old ways of thinking. Thus, posing questions framed around current developmental knowledge on serial homicide would have run the risk of invalid reductionism and oversimplification. To avoid this issue, this thesis adopted a constructivist approach to its research questions. The philosophy of constructivism arose from pioneers of developmental psychology including Jean Piaget (1962), John Dewey (1929), Maria Montessori (1912), and Lev Vygotsky (1978). Each of these people embraced the complexity and multidimensionality of human development and contributed monumentally to our ability to fully explore how people develop, cognitively and intellectually, throughout their life course.

According to constructivists, knowledge development is a constructive process which arises from a learner's active engagement with content and, in Vygotsky's case, the teacher. By interacting with content and with the teacher, the learner comes to a better understanding of that content. For example, we can see examples of a constructivist approach in a Montessori

classroom environment. Montessori classrooms are characterized by: “self-directed individual learning and cooperative group learning; the decentring of the teacher; and sequential, progressive skill development” (Ultanir, 2012, p. 206). According to Piaget (1977), active participation or immersion in an environmental context for learning strengthens one’s understanding of concepts through a process called assimilation or adaptation; a process wherein a student encounters new information. Upon encountering this new information, a student then compares this information with an existing knowledge base that exists in that individual’s mind. If the old information is inconsistent with or contradictory to the old information, the individual will reconfigure their knowledge with regards to the new information. Consequently, when examined from this point of view, cognitive development is a product of continuous effort (Ultanir, 2012).

To avoid the pitfalls of basing the questions of this thesis on reified concepts and to allow for a more sophisticated questioning of development, this thesis addressed the following two questions:

1. What salient life experiences can be found across the lifespan of serial killers: including infancy, childhood, adolescence, emerging adulthood, and midlife?

In keeping with the guiding theoretical positions of lifespan research, this thesis attempts to ensure that no one age category is given prioritization. While, ideally, lifespan research would study an individual from conception until death, this thesis limits its examination up to the point of capture, which in most instances was adulthood to midlife. This study limits its investigative scope to this age range because the features of interest, those which are most useful for investigative purposes (such as motivations, psychopathology and etiology), were fully developed and expressed at this point.

2. What can the serial killer's interpretation of their developmental events reveal to us about their motivations and the psychopathology that underlies their motivation for homicide?

In attempting to address this second question, this thesis utilizes a qualitative phenomenological methodology. The decision to incorporate phenomenology into this thesis was based on suggestions by pioneers of developmental psychology including Lev Vygotsky and Jean Piaget. Both men argued that in order to understand one's behavioural processes, researchers must attempt to adopt an emic perspective. An emic perspective is a highly reflective ontological position whereby researchers attempt to build an understanding of their participants from within their participant's own perspectives (Bergman & Lindgren, 2017). This type of research, which involves investigating the consciousness of another, is done by way of phenomenology, a concept which will be elaborated upon in Chapter 3.

This method is compelling to me as a researcher because, unlike other methodologies, phenomenology gives authority, knowledge, and wisdom to the voices of those whose experiences it seeks to interpret. The prioritization of the voice of the offenders in this thesis was purposefully chosen because current developmental explanations of serial killers give little to OR no attention or authority to the internalized logic of these offenders. Given that research has not yet identified one single risk factor shared by all serial killers, the next best source for understanding and interpreting risk would come from sources that are imperceptible, one's worldviews, perspectives, and internalized logic.

Beyond avoiding the trap of reification, there were several advantages to designing research questions that were broad, reflexive, and open-ended. By ensuring my research questions evolved and adapted, naturally, the critical depth, focus, and direction of my research was able to evolve, intellectually, with me. The broad and open-ended nature of these research

questions also motivated me to draw from a variety of data sources and encouraged me to engage, pragmatically, with several different research methodologies, a strength that ultimately culminated in a unique approach to phenomenological analysis, an approach that will be elaborated upon in Chapter 3.

### Definition of Key Terms

#### *Serial Homicide*

The most common definition of serial homicide is the definition that was developed in 2005 by the Behavioral Analysis Unit of the FBI and members of the Serial Murder Symposium (Morton, 2008). The FBI defines serial homicide as “the unlawful killing of two or more victims by the same offender(s) in separate events” (Morton, 2008, p. 21). Despite being adopted by the FBI, this definition is limited in several ways. For example, the FBI definition was explicitly developed to establish criteria for when the FBI could assist law enforcement agencies with their investigations (Morton, 2008). For this reason, the definition is purposefully generic, broad, and inclusive. The broad and non-specific parameters of the FBI’s definition of serial homicide have posed significant problems for researchers in this field (Adjorlolo & Chan, 2014; Hickey, 2012). For example, because the FBI definition of serial homicide focuses primarily on the number of victims killed as opposed to internal motivating factors, several different types of homicidal offenders can be classified under this label. Assassins and gang members would both meet the criteria of the FBI definition of serial homicide. A definition of serial homicide that includes assassins, gang members, and spree killers is problematic for the reason that the motivations underlying the lethal behaviour of the various types of killers is vastly different. For example, gang members kill for several reasons, including loyalty to their group, self-preservation, or to

follow orders. Furthermore, assassins are paid to commit homicides, and thus, like gang members, they have an external motivation for killing. Serial killers, on the other hand, are motivated internally by psychological drives and impulses (Kocsis, 2008; Reid, 2017a). The conflation of several distinct ‘types’ of killer into one category decreases the homogeneity and comparability of the population being studied so that consistent and empirically verifiable findings of etiology are limited.

To arrive at sound scientific conclusions, it is advisable to make use of carefully defined terms and descriptions that are sensitive to nuance and the subtle idiosyncrasies of the group under study. This statement is especially true for determining the etiology of serial homicide (Reid, 2017a). Recently, Reid (2017a) developed a comprehensive and historically grounded definition for serial murder, a definition which is housed under the umbrella term of Compulsive Criminal Homicide (CCH) (see: Table 2).

According to Reid (2017a), CCH offers several improvements over traditional definitions. For example, CCH directs attention to the psychological and motivational aspects of serial killers. CCH also provides operationalized criteria which must be met before the label of “serial killer” can be applied. Unlike the FBI’s definition, which was designed specifically by law enforcement for law enforcement, CCH is primarily meant to serve as a tool for academicians to ensure homogeneity in their data collection and to improve the accuracy of their etiological research. This thesis uses Reid’s (2017a) CCH definition.

**Table 2.** Compulsive Criminal Homicide (CCH)

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The goal-based and ritualized murder and/or attempted murder of human beings where:

- (A) The total achieved murders numbers 3+ OR the total achieved murders numbers 2 *and* there was at least one more attempted murder\*

- (B) The combination of total achieved, *and/or* attempted murders can be linked forensically and/or upheld judicially\*\*
  - (C) The primary goal of the perpetrator is intrinsic and based in psychological motivations of personal gratification
  - (D) The murder is not carried out at the behest of another or in response to a personal attack on oneself or a loved one\*\*\*
  - (E) The offender exercises independent conscious deliberation, purposeful control, planned forethought, and intentional action in the acquisition, constraint, handling and/or eventual elimination of the victim\*\*\*\*
  - (F) Each event of murder occurs as a discrete event which occurs at different intervals of time and which are interrupted by a break or dormant period between homicides wherein the offender returns to their usual way of life \*\*\*\*\*
  - (G) Subsequent killings meet corollaries A – F
- 

**Note A:** All corollaries (A – G) must be met in order to secure the title of CCH.

**Note B:** Those who commit a spree killing as defined by Douglas et al. (2006) will be excluded from the label of CCH *if* their murders were limited to that one instance of spree killing. If spree murders were committed at some point during the series *in addition* to the murders of at least 3 others and if the murders fit the criteria set forth in corollaries A – G the individual will then meet the criteria for CCH. Ted Bundy was one such individual who demonstrated spree-like murders near the end of his series.

*ritualized* is defined as behaviourally similar (though not necessarily identical) actions engaged in during the commission of the crime. Examples include but are not limited to: (1) engaging in specific pre-and post-mortem sexual acts (e.g. foreign object insertion); (2) the infliction of extreme humiliation and shame during the process of killing (e.g. filling mouth with dirt); (3) excessive violence and beating (e.g. infliction of 150 stab wounds); and (4) power, control, and domination including behaviour that allows the offender to exercise unlimited control over victims (e.g., binding).

\* when the total number of achieved murders is only 2, there *must* also be at least one attempted murder as well. Attempted murder is not necessary in cases where the total number of achieved murders is 3+. “Bus Stop Killer,” Levi Bellfield would be one such example.

\*\* all cases must be upheld judicially. However, because forensic analysis is not always possible in every situation (i.e., the body is never found, or there is not enough physical evidence) the forensic aspect of this corollary is only recommended.

\*\*\* the following exclusions would thus apply: murders carried out on behalf of criminal enterprise, mercenaries, revenge, loyalty, terroristic homicides, organized crime (including gangs), or contract murder, as well as on behalf of war or self-preservation.

\*\*\*\* those experiencing an acute catathymic crisis and/or those who are actively psychotic during both the planning and commission of their homicidal offenses are excluded from this nosology. So too would serial killers who have been adjudicated and found Not Guilty by Reason of Insanity (NGRI). Multiple murderer and cannibal, Hadden Clark, is an example of one who would be excluded from this nosology. Others who would be excluded include Steven Hurd, Nathan Trupp, Fredrick Mors, William Hanson, Jane Toppin, Janice Lou Gibbs, Gloria Tannenbaum, Edward Gein, James Swann, John Casablanca, Erno Soto, Charles Bischoff, Della Sorenson, Herbert Arnold, and Anthony Santo. Those who are intoxicated are not excluded.

\*\*\*\*\* No assumptions are to be made regarding the space between the crimes. So long as there is a break period wherein the serial murderer returns to their usual way of life, the criteria hold. Mass murder and spree murder would be excluded.

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\* Table retrieved from Reid (2017a).

### Organization of the Thesis

This thesis is organized into five sections. Chapter 1, the *Introduction to the Study*, provides a detailed case regarding the need to study the etiology of serial killers. This chapter reviews the purpose of the thesis and introduces the research questions to be explored. Chapter 2, the *Literature Review* introduces the concept of serial killing and describes how our understanding of this offense evolved between the 15<sup>th</sup> century and today. Research and literature on the etiology of serial killers are discussed, and gaps and limitations reviewed. Chapter 3 outlines the *Methodology*. This chapter describes each methodological phase of this research and provides a rationale for the methodological choices made. Readers will come away from this chapter with a clear understanding of the methodological approach taken by this author as well as a comprehensive understanding of how the study was conducted and the limitations of the methodology. Chapter 4 integrates the *Findings* of each stage and presents a narrative synthesis that links both quantitative and qualitative findings into a single developmental model. Lastly, Chapter 5, the *Conclusion*, presents the limitations of this thesis and explores the broader practical and theoretical implications of the findings to the more general field of developmental and etiological criminology. This chapter ends with a discussion of the importance of this thesis and possible directions for future research.

## Chapter 2

### LITERATURE REVIEW

This chapter serves two major purposes. First, it illustrates the importance of historical narratives in establishing modern day beliefs, especially the social construction of the serial killer as a “monster” or an agent of evil. By offering a historical analysis of the emergence of ‘the serial killer,’ this chapter aims to demonstrate that while the definitions and conceptualization of serial homicide have changed, our understanding of these offenders has always been situated in the meaning systems that have been available to us over time. Second, this chapter reviews the current state of knowledge regarding the etiology of serial killers. This chapter highlights both historical and contemporary etiological explanations for serial homicide and emphasizes the many limitations that accompany them. By presenting the limitations of both past and present research, this review encourages a critical reconsideration of current methodologies for understanding the etiology of serial killers. Specifically, this review advocates for an alternative approach; one that strays from strictly quantitative methodologies in favor of a combined qualitative and quantitative approach that recognizes the complexity of human development.

#### A History of Serial Homicide

It is a very human tendency to attempt to make sense of the world and its many mysteries by incorporating new information into existing cognitive structures, or mental schemas. Mental schemas are existing frameworks that have been built through experience and which form networks of associated information which impose order upon the objects or events we perceive (Bartlett, 1932). In fact, tracing the history and evolution of serial homicide reveals how



common it is for people to make sense of the unfamiliar by basing their perceptions and explanations around pre-existing and easily accessible model.

*Fifteenth Century Conceptualizations: The Devil Himself*

Serial killers emerged in historical writing during the fifteenth century with the crimes of Gilles de Rais (alternatively spelled de Retz or de Raiz) (1404 - 1440). Gilles de Rais was a fifteenth-century French Baron, a companion-in-arms to Jeanne d'Arc, a military leader in the Hundred Years War, and the Marshall of France. Despite his honorable service in the war and his many noble positions and titles, Gilles de Rais is almost exclusively remembered for his role in devil worship, witchcraft, and the sadistic torture murders of 140 children. De Rais earned this reputation in the year 1440, during which time, allegations were made that he had committed crimes including witchcraft, sodomy, child murder, and torture (Fudgé, 2016). At his trial, de Rais stated:

...because of my passion and sensual delectation, I took and caused to be taken a great number of children – how many I cannot say precisely, children whom I killed and caused to be killed...I have inflicted various kinds and manners of torture on these children (cited in Vronsky, 2004, p. 48).

For the crimes to which he confessed, de Rais was put to death (Kraus, 1995; Ramsland, 2013; Spitzka, 1888). Today, Gilles de Rais is immortalized as the world's first serial killer; however, during the era in which de Rais lived, no such term existed. At that time, the public conceptualization of serial killers was contingent on religious belief and on the Catholic interpretation of sin and morality (Reid, 2017a). Consequently, during this time, serial killers were viewed as the embodiment of evil; in some instances, serial killers were viewed as the devil himself.

For example, during his trial and in the decades following his execution, de Rais was referred to as *bete d'extermination* (the devouring beast); *diable* (the devil); and *vampire* (Mowshowitz, 1978; Reid, 2017a). Such nicknames as these were reflective of the intellectual and philosophical traditions of the fifteenth century and of the belief that evil had an origin in the supernatural (see: Berents, de Boer, & Warner, 1994; Fudgé, 2016; Madden, 1857). The categorization of serial killers into the simplistic, dichotomous, and moralistic category of evil is a tradition that continues today. The Angel of Death, Donald Harvey; the Witch of Corregio, Leonarda Cianciulli; and the Beast of Bastille, Guy Gorges, are all examples of modern serial killers whose nicknames draw reference to early Christian beliefs and superstitions.

Interestingly, although de Rais was convicted, many doubts have persisted regarding his guilt. For example, no bodies have ever been produced. No personal items nor any other physical evidence of the alleged deceased have been found at his castle at Tiffauges. Furthermore, de Rais's confession is believed to have been elicited under threats of torture and excommunication – a severe threat for a devout Catholic such as de Rais (Morgan, 2007). Counter-arguments concerning his guilt suggest that rumors of his crimes were conjured as part of a political attack due to his association with and allegiance to Jeanne d'Arc (Gusick & Heintzelman, 2012). Others contend that de Rais was a victim of the inquisition, and that he had been framed by the Catholic Church (Fudgé, 2016; Morgan, 2007).

Many still insist that de Rais's prosecution was orchestrated by political and material rivals who desired greater power and more extensive lands (Rothenberg, Foster, & Zizek, 2003; Fudgé, 2016). De Rais's guilt was heavily contested, and in 1992 De Rais was fully posthumously exonerated at a retrial at the Court of Cassation, the highest court of appeals in France. Despite his full pardon, de Rais maintains an essential role in the history of serial

homicide. Our conceptualization of serial killers began with de Rais, and our understanding of the origin of violence is rooted in the mythos that surrounds him. The epistemology of superstition and the concept of the devil provided a framework for understanding why people committed heinous acts of murder. The ‘devils influence’ was retained as an etiological explanation for serial killers well beyond the fifteenth century (Cromby, Harper, & Reavey, 2013).

### *Sixteenth and Seventeenth Centuries: The Age of Sin and Monsters*

Serial killers of the sixteenth through to the seventeenth centuries were characterized by a similar type of thinking; one that prioritized religious views and superstitious beliefs. Consequently, serial killers the sixteenth through to the seventeenth centuries were perceived of as monsters and witches; characters who had been possessed by the devil (Cromby, Harper, & Reavey, 2013). Beyond the devil, however, this period witnessed the emergence of both the lycanthrope and the witch as powerful forces of evil.

Fear and superstition were rife throughout the sixteenth century and, throughout many parts of the world, people lived in fear. For example, throughout much of Western Europe and Colonial New England, Puritan settlers lived in a constant fear of possession, bewitchment, and attacks by the devil (Aronson, 2003). In France and Germany, people feared the lycanthrope, better known as the werewolf (Otten, 1986). In Hungary and Romania, people feared creatures such as daemons, hobgoblins, faeries, specters, and the “reappeared dead” (*vampires*) (Thorne, 1998). Also, throughout Scotland and England fears of sorcery boiled to a tipping point and resulted in large numbers of executions of those accused. While fears of the supernatural may sound bizarre to some, a belief in the supernatural was the cultural and societal norm during the

sixteenth and seventeenth centuries (Thomas, 2003; Macfarlane, 1970). Because abnormal or deviant human behaviour was thought to have supernatural origins, heinous murders committed during the sixteenth and seventeenth centuries were thought to have been perpetrated, literally, by monsters.

One notable ‘monster’ of the sixteenth century was German serial killer, Peter Stubbe (Stumpf) (1525-1589). Stubbes’ crimes extended over a period of 25 years and included the cannibalistic homicides of fifteen local women and children, as well as the murder and mutilation of several animals, and various other charges including rape and incest (Ashliman, 2010; Gibson, 2012). During his trial, Stubbe explained that he had made a pact with the devil to turn into a wolf and then used his powers to transform and attack those who had wronged him and those after whom he lusted (Konstantinos, 2010; Vronsky, 2004). During his trial, Stubbe suggested that he:

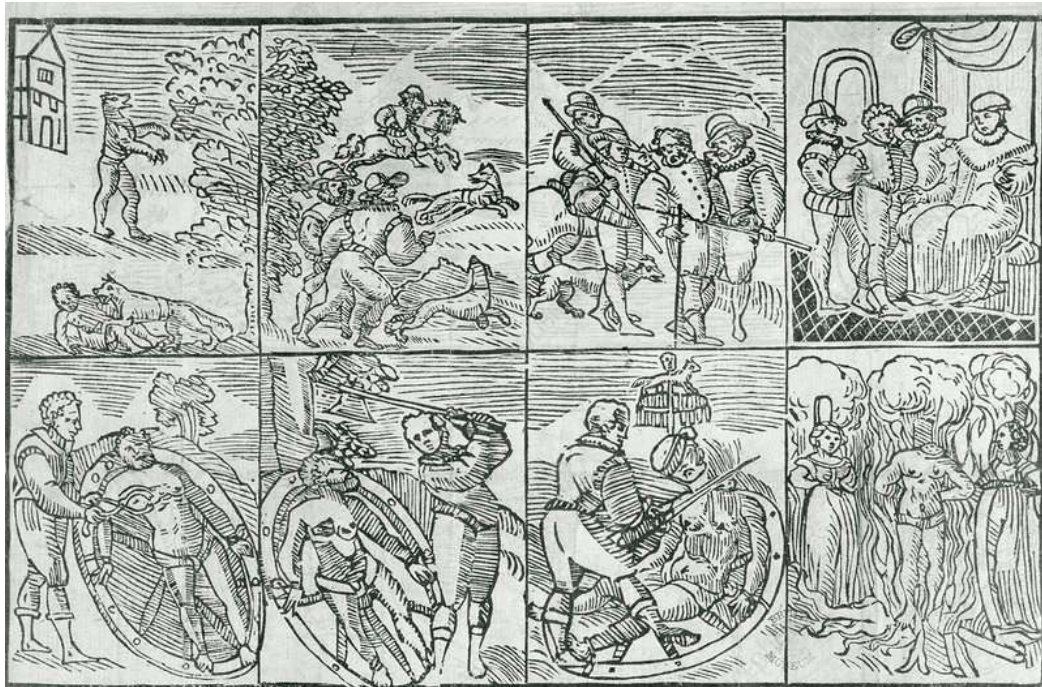
Took such pleasure and delight in shedding of blood” and evidence emerged that he was “greatly inclined to evil and the practicing of wicked arts (*A True Discourse*, 1590, p. 129; Otten, 1986, p. 69).

In defense of his crimes, Stubbe claimed lycanthropy. The use of lycanthropy as a defense was neither surprising nor odd given the time in which he lived (Ashliman, 2010; Hill & Williams, 1967). During this century, lycanthropy was viewed as a valid medical phenomenon and was considered a legitimate exculpatory factor to violence (Ashliman, 2010; Otten, 1986). Despite this defense, Stubbe was executed in 1589 for his numerous homicides and acts of rape (Ashliman, 2010; Vronsky, 2004). The savagery of his crimes earned him the nickname the Werewolf of Bedburg (see: Image 2).

Peter Stubbe was far from the only case of lycanthropy during the sixteenth and seventeenth centuries. There were several notable serial killers of this time who used lycanthropy

as a defense. A second example of lycanthropy during the sixteenth century was French serial killer Gilles Garnier (unknown – 1573). Unlike Stubbe, who reportedly killed only while in the form of a wolf, Garnier was believed to have committed his homicides both while in the form of a wolf and also while he was in his human form. For example, information from his trial states that:

[U]pon the Friday before the Feast of S. Bartholomew last, he seized a young boy aged twelve or thirteen years under a large tree near the wood [...], where he strangled him in the same manner as before, [...] had he not been seen and prevented by certain persons who came to the help of the youngboy, who was however already dead... Gilles Garnier was then and at that time in the form of a man and not of a wolf (Summers, 2003, p. 227)



**Image 2.** Woodcut illustration showing how Peter Stubbe transformed himself into a wolf to kill and how he was caught and executed. Originally published in Printed for E. Venge: London, 1590. (British Library / Science Photo Library). Retrieved from: <https://www.sciencephoto.com/media/558899/view/peter-stubbe>

Similar to Stubbe, Garnier employed lycanthropy as a defense. In his defense, Garnier insisted that “a specter appeared to him offering to ease his troubles and gave him an ointment that would allow him to change into the form of a wolf” (Kropfelder, 2015, p. 54).

While lycanthropy was a valid defense at the time, this argument was unsuccessful. On January 18<sup>th</sup>, 1573 Garnier was convicted of the murder of four children and was condemned by the court of Dole Lyons to be burned alive for his crimes (Otten, 1986). Ultimately, Garnier was denounced as a sorcerer and a werewolf and given the nickname the Werewolf of Dole. Interestingly, some have speculated that the extent to which lycanthropy had been used as a defense during this era is reflective of the fact that murder and cannibalism were common in many areas throughout Europe at that time (Otten, 1986).

Throughout the sixteenth and seventeenth centuries, stories of devils and werewolves were widespread. At the same time, stories of witchcraft spread across Eastern Europe and the witch had risen as a powerful public and moral threat, feeding further into public anxieties. The witch was a tangible reality and a ubiquitous threat to the people of this era. What made witches so terrifying was that, unlike lycanthropes, who were often social outcasts, witches were people who operated within a society, they were visible members of the community, and they were known (Cowan, & Henderson, 2011). The first female serial killer in history, Countess Elizabeth Bathory (Erzebet Bathori), was, in fact, tried for her murders and sentenced to life imprisonment as a witch.

Born in 1560, Bathory was a member of the famous Hungarian noble family of Transylvania. While legend portrays her as a 'vampire' who bathed in the blood of her victims, these stories are only a myth (Thorne, 1998). There is no documented evidence to suggest that Bathory either bathed or consumed human blood. Additionally, while Bathory is often mentioned in the context of vampirism, she would not have been considered a vampire in her historical time. For example, the vampire craze had not then begun in eastern Europe, and the term 'vampire' did not exist (Thorne, 1998). Nonetheless, Bathory was famously sadistic. For

example, Bathory stuck pins in girls who worked as servants, and as punishment, Bathory broke the servant girl's bones and cut off their fingers (McNally & Florescu, 1994; Ramsland, 2002). Furthermore, on at least one occasion Bathory dragged a servant girl outside in the middle of winter, doused her with water, and left her to freeze (Ramsland, 2002). Given her noble status, Bathory committed her crimes unimpeded by the law. It was only after murdering an aristocratic woman that Bathory was apprehended. On December 29<sup>th</sup>, 1610, Bathory's castle was raided, and several mutilated bodies were found (McNally & Florescu, 1994). For her crimes, Bathory was convicted of witchcraft and sentenced to life imprisonment, where she was condemned to be walled up in a room in her castle, until the time of her death (Thorne, 1998). Bathory died in August of 1614.

Throughout the sixteenth and seventeenth centuries, legislators had considerable difficulty separating the categories of 'sin' and 'crime' (Padhy, 2006). Therefore, explanations for crime, especially those which involved extraordinary violence were often based on religious, superstitious, and supernatural systems of belief. Given both the strength and pervasiveness of superstition during the sixteenth and seventeenth centuries, is it clear why murderers were often labeled with monikers such as "witch," "werewolf," "sorcerer," and "daemon."

### *Eighteenth Century: The Age of Science and Social Banditry*

Due to the crippling poverty that marked much of the eighteenth-century, financially motivated crimes such as armed robberies, pilfering, and property offenses predominated during this era (Aylward, 1945; Landau, 2010; Snell, 2007). Retrospective analyses have revealed that while homicides were frequently reported, the majority were "sparked by the most mundane disagreements that escalated out of control" (Snell, 2007, p. 29).

Additionally, a series of social and economic developments that had begun at this time made identifying patterns of repeat homicides very difficult. For example, before the eighteenth century, most people resided in settlements or villages that were relatively underpopulated. However, in the eighteenth-century industrialization, agrarian capitalism, and modernization facilitated a shift towards urban development (Macfarlane, 1970). Large cities flourished, and settlements which once were small became much denser. Expanding population growth in combination with the individualistic attitudes of metropolis inhabitants prevented people from noticing patterns of repetitive murder in and around their cities. To compound this issue, during the eighteenth century, most governments, including Britain, did not collect data on crime or convictions (Landau, 2010). Thus, again, identifying patterns in homicide was challenged by a lack of quantifiable data.

Beyond what has been reported in the literature, it has been suggested that the lack of recorded incidences of serial homicide during this period was due to the absence of a formal state and prosecutorial system aimed at serving the proletariat (Vronsky personal communication, 2017, February 13<sup>th</sup>). For example, during the eighteenth century, the justice system was mostly concerned with state security, including public order, the suppression of rebellions, and the protection of property and industrial commerce (Vronsky personal communication, 2017, February 13<sup>th</sup>). Beyond state security, however, the justice system had no formal role. Government sponsored organized law enforcement did not exist in the eighteenth century. There were no patrolmen or police officers to organize and secure public safety. Instead, the role of citizen protection was a voluntary effort carried out by members of the community or by Good Samaritans (Allen & Barzel, 2009). Patchwork systems of local policing were not replaced until



the 1750's when London magistrate Henry Fielding (1707 – 1754) founded the famous Bow Street Runners.

The media coverage of serial killers prior to the eighteenth century is thought to be a consequence of the administration of an Inquisitorial semi-state, one that had existed to prosecute witches (Vronsky personal communication, 2017, February 13<sup>th</sup>). Lycanthrope serial killers fell into the net of the authorities unintentionally. While the eighteenth century did not represent a significant period in either the scientific, legal or criminological theorizing of serial homicide, this period was marked by a rapid intellectual shift, the effects of which significantly affected the study of serial homicide in the centuries following. For example, during this period the intellectual movement known as the Enlightenment had long since begun. Enlightenment thinking challenged traditional religious and supernatural systems of belief and gave way to a new scientific system of belief; one that was based on the rational, the observable, and a reliance on the empirical (Mass, 1973). Consequently, during this period, both scientific and legal theorizing about crime and deviance was expanded to include non-religious and non-separational criminological theories. For example, this period was marked by the emergence of rationalist thinking and the rise of Criminology as an academic discipline of study. The eighteenth century introduced the ideas of Jeremy Bentham (1748 -1832), Cesare Beccaria (1738 - 1794), and others who make up 'The Classical School' of Criminology. These philosophers rejected spiritualistic explanations of crime and brought about a greater empirical understanding of the nature of crime and those who perpetrate it.

The eighteenth century was a time of monumental social change and scientific advancement. The philosophy of this era opposed superstition and folklore and attempted to establish a new worldview, one based on science and empirical inquiry. The influence of the

scientific worldview which took hold in this century had a resounding impact on the study of serial homicide in the following centuries.

*Nineteenth Century: The Age of Degeneracy and Sex Crime*

The consolidation of scientific thinking in the nineteenth century brought about several biological theories of crime and deviance. Subsequently, serial killers were viewed as moral degenerates (Reid, 2017b). This perception was due in large part to the work of Benedictin Augustin Morel in 1857. In his 1857 text, *Treatise on the Degeneration of the Human Species*, Morel applied the concept of heredity to mental illnesses; arguing that if one generation of people was infected by ‘poisons,’ such as urban pollutants or addictive stimulants such as alcohol, such afflictions would pass on to the second generation. According to Morel (1857), this second generation would then be prone to illnesses such as epilepsy, neurasthenia, and hysteria. The third generation would then go on to develop mental illnesses such as insanity, and the fourth and final generation would be doomed to congenital idiocy and sterility (Hurley, 1990). Essentially, Morel (1857) argued that pathological conditions, including criminality, were reflective of an individuals’ backwards evolution – or maladaptive development. Criminals, sinners, and homosexuals, according to Morel (1857) were ‘devolving.’ In his own words, Morel (1857) argued:

The degenerate human being, if he is abandoned to himself, falls into a progressive deterioration. He becomes...not only incapable of forming part of the chain of transmission of progress in human society, but he is the greatest obstacle to this progress through his contact with the healthy portion of the population (in Shorter, 1997, p. 94).

The belief that mental illnesses and pathology get worse as they are passed on from generation to generation formed the intellectual backbone of Morel's (1857) theory of degeneration. The theory of degeneration was widely influential throughout the nineteenth century and was adopted as an explanatory model of pathology by several disciplines beyond its medical origins (Felthous & Sass, 2008; Shorter, 1997). For example, the theory of degeneration was eagerly picked up by criminologists and it became the primary explanation for crime causation and deviance up until the early twentieth century.

Though Morel himself never sought to understand the development of serial killers, a later proponent of his did. In 1876, physician and criminologist Cesare Lombroso (1835 – 1909) proposed the theory of atavism. As an offshoot of degeneration, the theory of atavism related certain biological stigmata such as large foreheads, wide cheekbones, protruding chins, large jaws, and 'jug ears,' to psychological or social defects that were believed to be indicative of one's evolutionary failure (Knepper & Ystehede, 2013). Morel's (1857) theory of degeneration was particularly compelling to Lombroso who had been studying phrenology since 1853 (Wolfgang, 1961). Phrenology, pioneered by Franz Joseph Gall, is now a discredited theory based on the assumption that bumps on the skull reflect a person's character or personality traits. The notion that human pathology manifests itself in physical deviations was much in line with Morel's (1857) theory of degeneration.

Lombroso fits into the history of serial homicide research because he was the first criminologist to offer a neurobiological perspective to explain the deviance of convicted serial killers. For example, during the 1880's, a person by the name of Vincent Verzeni was convicted of the sexual assault, murder, and mutilation of three women (Wilson, 2015). Upon Verzeni's execution in 1883, Lombroso was invited to examine the skull. Lombroso, who approached his

examination through the lens of phrenology, concluded that “there is a congenital arrest of development of the right frontal lobe” (in Von Krafft-Ebing & Chaddock, 1886, p. 67). Atypical as they may be today, Lombroso’s medical deductions were in harmony with nineteenth-century scientific practice (Ellwood, 1912). By identifying a possible neurological abnormality in Vincent Verzeni, Lombroso stands as the first scholar to offer a biological explanation for the etiology of serial homicide.

Another early theorist who investigated the etiology of serial killers was Richard von Krafft-Ebing. In 1886, Von Krafft-Ebing (1886) published his medico-legal text, *Psychopathia Sexualis*. Therein, subsumed under a lengthier discussion of sadism, Von Krafft-Ebing (1886) described what he believed underlay the criminal pathology of the serial killer Andreas Bichel. Bichel had been convicted of murdering several women in a series of sexually motivated homicides. Von Krafft-Ebing (1886) described Bichel as a ‘lust murderer’ (*Lustmörder*), meaning one whose lust is potentiated as cruelty or one whose murderous lust extends to anthropophagy (cannibalism) (Von Krafft-Ebing & Chaddock, 1886). Von Krafft-Ebing (1886) believed Bichel’s proclivities toward homicidal sexual violence were the result of a “perversion of feeling” (quoted in Von Krafft-Ebing & Chaddock, 1886, p. 62). By “perversion of feeling,” Von Krafft-Ebing (1886) was referring to Bichel’s notable lack of empathy, guilt, and remorse. Unfortunately, Von Krafft-Ebing (1886) did not offer an in-depth explanation of the pathology of serial killers further than this. His central focus was on the issue of sexual pathology and criminal offending, more generally. Regardless, Von Krafft-Ebing (1886) stands as an influential figure in the history of serial homicide research. Like Lombroso, Von Krafft-Ebing (1886) provided one of the earliest theorizations for the pathology of serial killers. While Von Krafft-Ebing’s (1886) studies were carried out at a time where there was no terminology for serial

homicide, much of what is known about serial homicide is contained in that work and investigators still use the descriptions he provided to profile crimes committed by contemporary serial murderers (FBI, 2016).

Other early contributors to the literature on serial homicide include nineteenth-century French anthropologists Jean-Baptiste-Vincent Laborde and Léonce Pierre Manouvrier, as well as French physician and criminologist Alexandre Lacassagne. Each of the aforementioned scholars were involved in some capacity in the 1898 trial of serial killer Joseph Vacher (*The French Ripper*), whose crimes included the murder of several children. Though a student of Lombroso's, Lacassagne considered one's social environment as the primary 'breeding ground' for crime (Ramsland, 2011). Believing that Vacher's personal biographical history would reveal insights into his pathology, Lacassagne conducted an examination of Vacher's early developmental experiences and social environment. Lacassagne, examined Vacher extensively during the trial, interviewing him as well as his relatives and associates. What Lacassagne found was that while there was no familial history of degeneration or other 'stigmata,' Vacher had a long history of cruelty and violence (Ramsland, 2010). The jury was unsympathetic to these findings and Vacher was eventually executed for his crimes. Interest in Vacher's case, however, did not end following his execution; Vacher's case began to raise important questions about the role of brain physiology as it related to homicidal violence (Starr, 2011). Following Vacher's execution, a series of post-mortem examinations were conducted. Lombroso, who stressed a biological causation for crime, concluded Vacher's brain to have all the indications of degeneration. Laborde and Manouvrier, however, declared Vacher's brain to be perfectly healthy (Ramsland, 2011). Inconsistencies in the findings are reflective of the folk nature of nineteenth century neurological sciences.

Regardless of the accuracy or validity of their discoveries, nineteenth-century scholars provided some of the first insights into the pathology of serial killers. The concept of the degenerate criminal became popular throughout the nineteenth-century and with the advent of empirical scientific criminology and in the age of increased knowledge of biology and human psychopathology, serial killers were no longer viewed as supernatural ‘monsters,’ but as deeply pathogenic and dangerous human beings. Consequently, superstitious labels such as werewolf, witch, and vampire no longer held sway and were almost entirely replaced by those that were more appropriate reflections of new biologically-based and scientific views. One label that was particularly popular during this century was the ‘ripper.’

During the nineteenth century, the ‘ripper’ referred to a distinct type of sex criminal. Specifically, the ripper was best defined as a sexually motivated male who violently targeted women, often stabbing them in the genitals, breasts, and buttocks (Caputi, 1987; Clark, 1987; Masters & Lea, 1963). Perhaps the best-known ripper of the nineteenth century was the Whitechapel murderer, *Jack the Ripper*. Jack the Ripper was a nineteenth-century serial killer who terrorized London’s East End during the last decade of the nineteenth century. Though he was never caught, Jack the Ripper has been linked to the murder and mutilation of five women, all of whom worked as casual prostitutes.

While Jack the Ripper was not the first serial killer to have been branded a ‘ripper’ during this time, he is the best known and most remembered ripper of the nineteenth century. The Whitechapel murders represented the fullest articulation of the new ‘age of sex crime.’ The infamy of Jack the Ripper has lived on as a modern myth and has contributed to the reified (but incorrect) image of the serial killer as an isolated, sexually motivated male who targets female strangers in the night (Caputi, 1987). Since the nineteenth century, the image of the serial killer

as a sexually motivated ‘prowler’ has been particularly resistant to change and has significantly impacted the focus of current etiological examinations.

While the first modern serial killer (Jack the Ripper) emerged during the nineteenth century, scholars had yet to identify that these criminals represented a unique category of offenders. The ripper terminology created a new class of offenders. Rippers were not specifically serial killers, nor were they necessarily criminals who committed fatal acts of violence. The ripper terminology was reserved for any sexually motivated criminal. Because serial killers had yet to be identified as a unique category of offender, targeted studies of serial killers and their etiology were not conducted during this period. However, the advent of empirical scientific criminology had begun to raise important questions about the role of biology as it related to homicidal violence (Starr, 2011). Thus, during the nineteenth-century, scholars began to theorize about the etiology of homicidal violence and while no targeted studies specifically examined the etiology of serial killers, the first hypotheses for the developmental origin of these criminals emerged.

#### *Early Twentieth Century (1900 – 1959): The Age of the Slayer*

Throughout the early twentieth century, terms such as slayer, ripper, butcher, and maniac were common descriptors of serial killers and other, non-serial killers who committed acts of sexualized homicidal violence (Reid, 2017a). Despite significant scientific advancements which had served to reframe the image of a serial killer from a ‘monster’ to a human degenerate, the social perception of serial killers had yet to evolve formally. Scholars like Lombroso and Morel had advanced the notion that homicidal criminals had a phenotypic appearance that was distinct from non-criminals. The idea that criminals could be distinguished from their non-criminal

counterparts by physical traits and appearance alone was a cemented belief among the non-educated and lay public. Thus, while in the scientific imagination, homicidal criminals were understood as being deeply pathogenic human beings, the popular image of these offenders did not reconcile with that knowledge.

The belief that serial killers and other homicidal offenders were visually distinct and phenotypically unrelatable to most people is reflected in the public's response to the capture of serial killer Peter Kürten. Peter Kürten was a German serial killer who committed a series of murders and sexual assaults in 1929 in the city of Düsseldorf. Prior to his arrest, the media had developed several imaginative nicknames for Kürten including the *Vampire of Düsseldorf* and the *Düsseldorf Monster*. While it is likely that these nicknames were created to help bolster newspaper sales, the image of 'vampire' and 'monster' had the unfortunate effect of reinforcing the nineteenth-century criminological vision of criminals. That is, these nicknames supported the lay belief that serial killers were the visual and symbolic embodiment of the human capacity for sin.

When caught, however, Peter Kürten, did not fit this popularized image. Kürten was well dressed, mild-mannered, and seemingly friendly (Finbow, 2014). He did not look anything like the pictures in the books of criminal anthropologists. There was no misshapen skull, no crooked teeth, and no glassy stare. He did not resemble the image of the *Criminal Man* as proposed by Lombroso. Kürten's regular appearance was so surprising that, following his arrest, one shocked reporter commented: "is this what a murderer looks like?" (Mladek, 2007, p. 103). Kürten's case marked a crisis in belief of the visual regime that had long dominated criminality and prompted people to rethink their long-held perceptions of homicidal criminals as visually distinct and easily recognizable (Bowling, 2012; Mladek, 2007) (see: Image 3).



Not only did Kürten's appearance challenge the belief that serial killers (and other homicidal offenders) could be easily distinguished based on physical traits and 'stigmata,' but so too did his social background. For example, Kürten had been an unremarkable person from an unremarkable background. He was born into poverty, which he overcame to live an unremarkable existence as a married man (Newton, 2006). Kürten was a unique character in the sense that he was unlike other serial killers who had existed in the centuries before him.



**Image 3.** Peter Kurten, The 'Vampire of Dusseldorf,' circa 1931. (Bundesarchiv, Bild 102-11502 / CC-BY-SA 3.0). Retrieved from: [https://commons.wikimedia.org/wiki/File:Bundesarchiv\\_Bild\\_102-11502,\\_Polizeiaufnahme\\_eines\\_Massenmörders.jpg](https://commons.wikimedia.org/wiki/File:Bundesarchiv_Bild_102-11502,_Polizeiaufnahme_eines_Massenmörders.jpg)

For example, most early serial killers had either been from noble or wealthy backgrounds (Gilles de Rais and Elizabeth Bathory) or had lived hermetic lives as social cast offs (Peter Stumph and Gilles Garnier). Unlike serial killers of the past, Kürten's background was relatable, it was knowable, and it was familiar. Kürten's case provoked a new public discussion regarding how one should conceptualize not only the phenotypic appearance of serial killers, but also

caused people to rethink all supernatural portrayals of serial killers (Bowling, 2012). For perhaps the first time in history, serial killers were relatable, they were knowable, and they could be imagined as anybody's next door neighbor.

In addition to the evolution that was taking place in people's conceptualization of serial killers, there was a growing yet informal recognition that serial killers were indeed distinct from offenders of single victim homicide. For example, on April 8<sup>th</sup>, 1930, Berlin Chief of Police Ernst Gennat, published a case study in a special issue of the *Deutsches Polizeiblatt*. Drawing on the case of Peter Kürten, Gennat (1930) proposed a new terminology to describe the type of crime committed by individuals like Kürten. According to Gennat (1930), repetitive acts of homicide should be referred to as *Serienmörder*. Translated from its original German, *Serienmörder* becomes 'serial murderer.' While infrequently cited, Gennat (1930) was one of the first individuals to distinguish between individuals who killed one time and those who killed many people over a lengthy period of time. Unfortunately, and perhaps owing to translational barriers, Gennat's (1930) label and definition would not be adopted for another fifty years; at which time it was then popularized in the North American literature and the credit for coining this term was given to another.

Another essential scholar of this era was criminologist Grierson Dickson (1958). In his publication, *Murder by Numbers*, Dickson (1958) argued that the offender of what we now call serial murder represented a unique class of homicidal offender. Dickson (1958) took the position that broader labels which were being used to describe these offenders during the time, such as mass murderer, were inadequate and failed to capture the totality of the uniqueness of the offender (Schmid, 2006). According to Dickson (1958), 'series murders' were motivated by profit or perversion (Leyton, 2011). Despite the significance of his work, Dickson's (1958)

contributions remained obscure for at least another two decades, at which time the study of serial murder would reach its 'golden age' and, for the first time in history, its formal recognition.

*Late Twentieth and Early Twenty-First Century (1960 – 2010)*

*1960's – 1970's: The Dawn of the Age of the Serial Killer*

Beginning in the 1960's, a rapid acceleration of violent crime, including murder, rape, assault, burglary, and arson occurred across the United States (Jenkins, 1992; Leyton, 1986). As violent crime increased, the amount of scholarly literature dedicated to explaining the nature of violence grew as well. One scholar who took notice of this increase in violent crime was Bruno Cormier. Canadian psychiatrist Bruno Cormier spent his life studying the pathology of violent offenders and the social psychology of criminal conduct. In 1973, Cormier presented at the first International Symposium on Victimology. There, Cormier (1973) argued that in order to effectively study the psychology of criminal offenders and to conduct better research into diagnosis, and treatment, murderers should not be lumped together, but separated into subgroups. Specifically, Cormier (1973) argued that to understand the etiology, motivation, and psychogenesis that leads individuals to kill we needed to begin distinguishing different categories of murder.

In 1973, Cormier introduced the term 'multicide.' According to Cormier (1973), multicide was defined as: "a number of homicides committed by one person but spread over a longer period of time...months or even years" (p. 71). The terminology of multicide was developed as a way to differentiate between homicidal subgroups such as mass murderers, criminals who commit homicide as part of their careers, and genocides. Additionally, Cormier (1973) offered insight into the etiology of those who commit multicide by stating that these homicides:

Generally, correspond to an unfolding, deep-seated psychopathological process where the author usually selects a type of victim and repeats the murders periodically up to the time of arrest (p. 71).

The work conducted by Cormier (1973) stands as a historical springboard for the advancement of the modern study of serial murder.

Cormier (1973) was not alone in the belief that different offenders of multicide could be better understood if their pathology was considered unique and distinct from more general types of murderers. Robert Ressler also strongly believed in distinguishing one particular group of homicidal offenders. While Cormier (1973) was advancing the term ‘multicide,’ Ressler began to advocate and popularize the term ‘serial killer.’

After joining the FBI in 1970, Robert Ressler began to use the term with frequency, believing it to be the perfect analogy to characterize a murderer “whose psychopathology compels him to satisfy a thirst for killing” (Boggs, 2013, p. 278). Like Cormier (1973), Ressler believed that understanding the psychopathology of serial killers was a valuable and necessary undertaking. In the early 1970’s, Ressler began to conduct a series of informal interviews with convicted serial killers, asking them why they thought they had killed (Vronsky, 2004). Unfortunately, Ressler encountered several barriers to this work, including reprimands by his superiors who described these interviews as “the role of a social worker” (Vronsky, 2004, p. 326). Nonetheless, Ressler’s insistence on the value and importance of interviewing serial killers paid off. In 1978 the FBI’s initial project on serial murder began (Ressler, Burgess, & Douglas, 1988). The purpose of this project was to conduct in-person interviews with serial murderers and discover how it was that they avoided capture for as long as they did (Goodwin, 2008). This work was influential in that it identified two sub-groups of offenders who fell under the umbrella

term of ‘serial killer.’ Organized and disorganized typologies emerged as important considerations for investigations into cases of serial murder.

At the same time Ressler et al. (1988) and Cormier (1973) were beginning to investigate the psychopathology of serial killers, several other investigations had begun to examine the psychopathology of non-serial sexually violent murderers. Chief among those researching this subgroup of criminal offender was Freudian psychologist Richard Rada. According to Rada (1978) many rapists harbor extensive feelings of both personal and sexual inadequacy. Their early life experiences are characterized by several important features such as parental rejection, domination, cruelty, and sexual seduction. Rada (1978) concluded his examination of the rapist’s psychopathology as a defense. Specifically, Rada (1978) identified the psychopathology of rapists to be a defence against feelings of sexual inadequacy, against dependency needs, and against homosexual wishes. The rapist’s crimes, according to Rada (1978) were a displacement of hostility that resulted from unresolved conflicts originating during the anal period of development.

Interestingly however, Rada (1978) made the distinction early on between rapists who kill and so-called ‘lust murderers’; a classification of homicidal sexual offender in which some serial killers would fit. For example, a lust murderer is defined both by the possession of a particular urge to kill and by a need to ravage their victims (Arrigo & Purcell, 2001). Jeffrey Dahmer, who mutilated and cannibalized his victims, would be an example. In his seminal publication *Clinical Aspects of the Rapist*, Rada (1978) stated that, “the rapist murderer and the lust murderer are quite different in terms of motives and personality dynamics” (in Leibert, 1985, p. 190). The defining difference between the rapist murderer and the lust murderer, according to Rada (1978) was that the rapist who murders rarely derives any sexual pleasure from the murder

itself. Conversely, the lust murderer requires the murder in order to achieve sexual interest. Additionally, because it is the murder itself that arouses sexual interest, the lust murderer often does not perform sexual intercourse with the victim. Rather, they achieve sexual gratification through the mutilation and dismemberment of the victims.

Rada (1978) also went so far as to suggest that the lust murderer and the rapist-murderer were two distinct forms of offenders, not merely a variance on a continuum. Rada's (1978) research offered a significant contribution to the field of sexual violence and sexual homicide in the 1970's. Research into the psychopathology of violent sexual aggression and serial killing, however, became intertwined at this time and the findings became amalgamated in people's collective theorizing about the motivations behind serial murder specifically. Essentially, as people began to associate serial homicide primarily with sex crimes, the full spectrum of motivations, especially those outside sexual gratification, were overlooked. This conflation of serial homicide as a sexually motivated crime had significant consequences for the study of serial killers throughout the 1980's and 1990's.

#### *1980's – early 2000's: The 'Golden Era' of Serial Homicide Research*

The decades between the 1980's and the early twenty-first century encompassed the 'golden age' of research on the study of serial killers. At this time, serial killers became larger than life cultural icons and were established as a type of 'celebrity.' For example, during the 1990's Jeffrey Dahmer, John Wayne Gacy, Aileen Wuronos, and Ottis Toole were the subject of numerous news reports and TV interviews. During this period, serial killers were viewed as exotic and tantalizing. Their behaviour was unexpected, abnormal, and inexplicable. In addition, because of its lurid complexity, serial homicide became compelling to large audiences. At this

same time legal, academic and media discourse on the subject of serial homicide proliferated. For example, rich historical reviews conducted by Jenkins (1988/1989) began to reveal that serial murder was not at all a new phenomenon and that its history in both England and the United States extended well before the 20<sup>th</sup> century.

Articles published by Liebert (1985) began to advocate for the establishment of a “definitive, unitary psychological model for serial murder” (p. 1), as well as for the creation of consistencies within its definition. Using the method of ideal-types<sup>2</sup> and through interviews conducted with incarcerated serial killers, Holmes and De Burger (1988) developed a series of typologies to help differentiate between different categories of serial killers. These different categories included the visionary, missionary, hedonist, and power/control killer. Additionally, academic accounts describing the motivations and etiology of serial killers began to point to a variety of factors, including: sadism; sexual rage; early developmental issues such as domineering mothers, rejection, humiliation, abandonment, and abuse; as well as a number of clinical psychiatric disorders including narcissism and borderline personality disorder (Liebert, 1985; McKenzie, 1995; Prentky et al., 1989; Ressler et al., 1986).

In contrast to nineteenth-century scholars, whose work addressed the etiology of serial homicide only indirectly and in passing, scholars of the twentieth and early twenty-first centuries studied serial killers directly and with intention. The direct focus on serial killers was a consequence of the fact that this crime, for the first time in history, has been identified as a unique form of homicide and had been given an official label. During this time, serial killing was

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<sup>2</sup> Ideal-types are abstracted idea constructs formed from the collection of data. They are not constructed “as an average of” their instances, but by selecting and accenting elements such that it is then a matter “of determining in each individual case, the extent to which this ideal construct approximates to or diverges from reality . . .” (Weber 1949, p. 90). They are rarely found in their pure form in real life.

officially classified as: “three or more separate events in three or more separate locations with an emotional cooling off period in between homicides” (Douglas et al., 1992, p. 21).

As the study of serial homicide became a discipline of its own, the intellectual backgrounds of scholars who examined serial killers also became more varied. For example, while the backgrounds of early theorists were primarily restricted to medicine, criminology, or the combination thereof, contemporary scholars included those in the fields of critical linguistics (Gregoriou, 2011); history (Jenkins, 1988, 1989, 1994); forensic investigation; phenomenology (Skrapec, 2001); sociology (DeFronzo et al., 2007); geography (Godwin & Canter, 1997; Rossmo, 1995); biology (Raine & Sanmartin); and, of course, psychology. The insights offered by multidisciplinary analysis significantly expanded the scope of etiological research. In fact, the majority of what is currently known about the etiology and psychopathogenesis of serial killers comes from research studies that were conducted from the 1980’s through to the early decade of the twenty-first century. Given the amount of research that was conducted over the course of these few decades, this review will now shift focus away from the historical study of serial homicide and give proper attention to the etiological examinations that inform our current understanding of serial killers.

### Modern Explanations for the Etiology of Serial Homicide

The modern study of serial homicide can be broken down into three primary fields of analysis: (1) biological, which encompasses such things as head injuries, organic neuropathology including structural and functional abnormalities, metabolic dysregulation, neuropsychiatric diagnoses and illness, hereditary and other genetic factors, as well as fetal toxin exposure and prenatal trauma; (2) social including early childhood development such as relationships with



parental figures, the stability of one's home environment, and other structural and environmental condition, and; (3) psychological, such as the presence of animal cruelty, fantasy, and responses to trauma. The following section reviews each of these fields and offers insights into gaps and limitations of our current state of knowledge in each.

### *Biology*

Biological explanations for serial killing include acquired pre-and-perinatal brain injuries such as Traumatic Brain Injury (TBI); organic neuropathology, including general structural and functional abnormalities, neurochemical and metabolic dysregulation; genetics and hereditary; and fetal toxin exposure.

#### *Traumatic Brain Injury (TBI)*

Traumatic brain injury is described as an important developmental disruption that occurs early in the lives of many serial killers (Norris, 1988). A list of serial killers who are known to have sustained severe brain injuries in their childhood includes Henry Lee Lucas, who incurred multiple head injuries due to parental abuse (Norris, 1991); Richard Ramirez who, at the age of two, received 30 stitches in his forehead after a dresser fell on him (Allely et al., 2014); and John Wayne Gacy whose head injury at the age of 11 resulted in the formation of a blood clot that went unnoticed until he began to suffer blackouts at the age of 16 (Raine & Sanmartin, 2001). Fred West also sustained a head injury, which placed him in a coma for a week, and after which West was reported to have shown a marked deterioration of personality (Stone, 2001).

The relationship between TBI and subsequent violence is argued to be the result of permanent brain-behavioural impairments. For example, numerous case studies have suggested

that lesions to the frontal lobes can cause dramatic changes in behaviour, including impulsivity, violence, and other anti-social conduct (Bechara et al., 1994; Burns & Swerdlow, 2003; Goldberg, 2001; Harlow, 1993; Lavergne, 1997; Lewis et al., 2004; Nyffeler & Regard, 2001; Price, 1990; Relkin et al., 1996). In fact, acquired sociopathy, which is defined as a personality disturbance similar to psychopathy, is observed following acquired lesions of orbitofrontal cortex; or more specifically, the ventromedial prefrontal cortex (vmPFC) and the orbitofrontal cortex (OFC) (Damasio et al., 1994). Patients with impairments to these areas specifically show no reduced executive functioning but, rather, demonstrate decreased emotional processing and decision making (Blair, 2003). Patients with acquired sociopathy also show increased reactive aggression (an aggressive response to a perceived threat or provocation) and impaired social responses (Blair & Cipolotti, 2000; Kempes et al., 2005; Mendez, Shapira, & Saul, 2011). The association between frontal lobe damage and aggression is so robust that injuries to the frontal lobes are increasingly levied as an exculpatory factor used to mitigate or excuse criminal behaviour (Seiden, 2005).

### *Limitations of TBI Explanations*

The prevalence of TBI among serial killers is higher than what one would expect in the general population (see: Allely et al., 2014). In fact, at least one study suggests that one in four serial killers have suffered a head injury during their early years (Stone, 2009). However, while many serial killers have experienced some form of head injury in their youth, the role that these obstructions play in the developmental pathology of serial killers' is highly exaggerated (Brower & Price, 2001). For example, while instances of TBI are more common among serial killers' than the general population, TBI or even minor head injuries are by no means a universal feature of

this population (Sears, 1991). For example, at least one study identified that only 10% of serial killers had evidence of a sustained a head injury during their lifetime (Allely et al., 2014).

Therefore, a major limitation to head injury as an explanatory factor is that while many serial killers have suffered head injury during childhood, many others have not.

Another problem with this explanation is that, of the serial killers who have suffered a head injury, many have also experienced adverse psychosocial environments, such as divorce or abuse (Allely et al., 2014). Psychosocial adversity and maltreatment at a young age has a profound impact on the developing brain. For example, several studies have indicated maltreatment to impact the developmental formation of several areas including the corpus collosum (Teicher et al., 2000), amygdala volume (Driessen et al., 2000), the hypothalamic pituitary adrenal axis (HPA-axis) (Tarullo & Gunnar, 2006), and the prefrontal cortex (Carrion et al., 2008; Mueller et al., 2010). Findings such as this make it difficult to differentiate the origin of pathology, because there is likely to be a complex interaction between psychosocial adversity and resulting brain or neurological abnormalities.

Also complicating the task of determining the role of head injuries and TBI as a risk factor for serial killing is the fact that, while common among serial killers, head injuries are also found with similar frequency among both violent and non-violent criminal populations (Grafman et al., 1996). For example, according to the Center for Disease Control (CDC) (2007), 25-87% of inmates report having experienced a head injury or TBI. This number compares with 10% in a population of serial killers, and 8.5% in a general (non-criminal) population (Schofield et al., 2006; Slaughter, Fann, & Ehde, 2003; Morrell et al., 1998). Thus, while head injury may have the effect of impairing specific neurobiological regions that increase the risk for violent and non-violent criminality generally, one cannot make the argument that head injury is specifically

related to an increased risk for serial killing. No study to date has been able to demonstrate that neurological dysfunction caused by head injuries or TBI predicts violent crime; it is only correlated. Ultimately, while there may be a role for head injury in the development of lesions or neurobiological impacts that increase some behaviors associated with criminality such as impulsivity, head injuries offer a limited explanation for serial killing.

### *Organic Neuropathology*

#### *General Structural and Functional Abnormalities*

Assumptions of the underlying neurobiology of serial killers have been based, almost exclusively, on examinations which were conducted on non-serial killer populations. For example, much of what is inferred about the neurobiology of serial killers is derived from studies of the following groups: psychopaths, aggressive non-homicidal criminals, repeat offenders of non-homicidal sexual violence, and sexually motivated murderers. The following section briefly reviews the problems and limitations that are associated with generalizing neurobiological findings from these criminal populations to serial killers, specifically.

#### *Psychopathy*

Psychopathy is a personality disorder characterized by a specific cluster of behavioural and interpersonal traits, which include a lack of remorse, lack of empathy and guilt, a grandiose sense of self, and criminal versatility (Hare, Hart, & Harpur, 1991). Psychopathy is believed to affect approximately 1% of the general population and 25% of the North American prison population (Hare, 1998). Given psychopaths' capacity to pursue personal gratification at the expense of others without any accompanying feelings of guilt or remorse, this disorder is

frequently synonymized with serial homicide and is often viewed as a fundamental pathology underlying the behaviour of serial killers. Support for the notion that psychopathy and serial homicide are viewed synonymously can be seen in statements like the following: “nearly all serial killers are psychopathic sexual sadists” (Dietz, 1986, p. 483). Of course, such statements are not entirely accurate, but they are reflective of the social and intellectual climate in which the research was being conducted. Remember, at this time, the conflation between serial homicide and sexual violence had reached a critical peak.

Despite the frequency with which psychopaths and serial killers are synonymized, there is no evidence to support this claim. For example, studies have shown that not all serial killers are psychopaths (Raine & Sanmartin, 2012). In at least one study, psychopathy was present in only 4 out of 7 cases (57%) (Beasley, 2004). Another study found that just 63% of repeat murderers had been diagnosed with antisocial personality disorder (ASPD); a disorder that is less severe than psychopathy. Peter William Sutcliffe, Jeffrey Dahmer, Albert DeSalvo, and Kendall Francois are all examples of serial killers who do not meet clinical criteria for psychopathy. Given that many serial killers fail to meet the clinical criteria for psychopathy (when diagnosed by the Psychopathy Checklist-Revised, second edition [PCL-R-2]). Thus, while psychopathy offers a convenient explanation for serial killing, in truth, this answer is far too simplistic and is not empirically supported; such generalizations should therefore be avoided.

Etiological models that are generalized from findings drawn from psychopathic populations are equally problematic because psychopaths are characterized by neurobiological, neurochemical, and structural and functional impairments. This is true regardless of whether the psychopathic individual is criminal or non-criminal (Babiak & Hare, 2006; Fallon, 2006; Koenigs, 2012; Mahmut, Homewood, & Stevenson, 2008; Perri, 2011; Skeem & Cooke, 2010).

For example, the amygdala is central to the pathology associated with psychopathy (Glenn & Raine, 2008). Impaired amygdala functioning disrupts the brain's ability to form a stimulus-reinforcement association. Impairments in one's ability to form stimulus-reinforcement associations hinder individuals from learning to associate their harmful actions with the pain and distress of others (Glenn & Raine, 2008). Damage to the amygdala is a consistent and widely reported neurological feature of psychopathy (Anderson & Kiehl, 2014). Among serial killers, however, damage to the amygdala is not frequently present.

Furthermore, psychopaths tend to have structural abnormalities including abnormal hippocampal asymmetry and reduced prefrontal grey matter volume, which contribute to their emotional dysregulation and poor fear conditioning (Gao et al., 2009). Structural abnormalities such as these are not typical of serial killers. Lastly, psychopaths have been found to show significant prefrontal grey matter volume reductions and deficits in their orbitofrontal prefrontal cortex (PFC) (Gao et al., 2009). Reduced prefrontal grey matter volume contributes to psychopaths' poor decision-making, emotional dysregulation, and impaired moral judgments (Gao et al., 2009). Again, similar findings are not consistent across serial killers. In fact, as stated by Reid (2017b) while structural and functional neurological impairments play at least some role in the serial killer's etiology, there is no conclusive evidence that specific organic factors play a causal role in the creation of a serial murderer. Due to the significant neurobiological component of psychopathy, combined with the fact that not all serial killers are demonstrating the same or even similar neurological abnormalities as psychopaths, generalizations of developmental findings from psychopaths onto serial killers should be refrained.

### Sexual Sadism

For much of its conceptual history, serial homicide has been viewed as a sexually motivated crime. Thus, explanations for the behavioural and developmental pathology of serial killers are often derived and generalized from the literature on sexual sadism. The equation of serial killing with sexual motivations is problematic, simply, because not all serial killers are sexually motivated sadists. The belief that all serial killers are sexually motivated is a reified concept with no empirical basis (Reid, 2017a). The reason all serial killers are believed to be sexually motivated is because, sexually motivated crimes began to increase around the 1960's (Jenkins, 1994). The rise in sexually motivated crimes attracted a great deal of public interest. Specifically, public interest was fueled by the media, which gave an enormous amount of attention to sexually motivated homicides such as that of Adam Walsh. Intense news coverage of this, and similar, crimes contributed to a sense that children weren't safe anywhere and resulted in a moral panic about children's safety and an intense fear of sexual predators (Hughes, 2017).

This fear was known as "Satanic Panic." Satanic Panic was pop-cultural paranoia of the late 1970's – 1980's and was characterized by widespread fear about the presence of Satanic sexualized ritual abuse of children across North American communities. This fear was used for political advantage and resulted in an enormous amount of funding dedicated to the study of violent crime; specifically, crimes with a sexual motivation. It is no coincidence, that studies into serial homicide flourished during this era. Many serial killers were sexually motivated. The problem was that because funding was dedicated primarily to studying sexually motivated serial killers, those who were not motivated by sex fell outside the scope of study.

Since the late 1970's, researchers have prioritized sexually motivated serial killers in their studies. However, it is important to remain aware that not all serial killers are sexually

motivated. Serial killers are motivated primarily by internal psychological drives for personal gratification (Reid, 2017a). How that gratification is expressed and in what way that effects the modus operandi (MO) of the actual murders is entirely varied (Fox & Levin, 2014; Holmes & Deburger, 1985; Knight, 2006). Because the motivations of serial killers are not confined to sex, one cannot generalize about the etiology or developmental pathology of serial killers based on sexually motivated criminals.

### *Autism Spectrum Disorders (ASD)*

The role of Autism Spectrum Disorders (ASD) in the etiology of serial killing has only recently begun to be explored. For example, Silva, Ferrari, and Leong (2002) suggest that sexually motivated serial killers, including Jeffrey Dahmer, may have suffered from Asperger's syndrome; a developmental disorder under the autism umbrella. Additionally, a recent systematic review conducted by Allely et al. (2014) found that 10% of serial killers display evidence of ASD. The identification of ASD as a potential factor in the developmental pathology of serial killers represents a unique area of exploration that has yet to be thoroughly examined. Despite the promise of revealing an etiological pathway to serial homicide, ASD offers only a limited explanatory framework. For example, in the study conducted by Allely et al. (2014), a significant portion of the serial killers examined had a history of exposure to adverse psychosocial mediators including child abuse, neglect, and adoption. The study conducted by Silva et al. (2002) had a similar limitation; the individual they studied, Jeffrey Dahmer, had a history of prenatal drug exposure and a childhood history of psychosocial adversity including parental divorce. The presence of adverse psychosocial events poses a challenge to research using ASD as a framework for the etiology of serial homicide because we have not yet found a way to



disentangle the mediating effects of psychosocial adversity on ASD traits. Furthermore, ASD is argued to appear more frequently among sexually motivated serial killers (Silva et al., 2002). Because not all serial killers are sexually motivated, ASD would be insufficient for explaining the development of a larger group of serial killers whose motivations extend beyond sexual gratification. While there is some consensus that a complex interplay of neurodevelopmental and environmental factors produces homicidal tendencies, the relevance of these findings to the etiology of serial killing is yet to be adequately addressed.

### *Early Childhood Illness*

Injuries caused by organic neurobiological conditions have also been identified among some serial killers. For example, both Michael Sams and Tommy Lynn Sells suffered from a severe bout of meningitis during their youth (Clark Prosecutor, U.S. Executions, 2014; Stone, 2001, 2009). In fact, the illness killed Tommy Lynn Sells' twin sister. The role of early childhood illnesses in the etiology of serial killing has rarely been investigated (Allely et al., 2014). This author has been unable to find research that specifically addresses this issue. It is thus an area that warrants further examination.

### *Case Studies*

To date, the best neurobiological explanations for serial killing are found in case studies that have been conducted with serial killers themselves. In one case study, Dietz (1986) examined an unnamed serial killer known only through his description as a: "white man in his mid-30s charged with approximately a dozen murders in several states" (p. 484). Through his examination, Dietz (1986) discovered that the subject had a long history of head injuries dating

back to his childhood. These head injuries resulted in blackouts and multiple instances of unconsciousness. Dietz (1986) also found that at the age of 20, the subject had sustained a head injury so severe that the subject was rendered comatose for over a week. Furthermore, through a computerized tomography (CT) scan of the subject's brain, Dietz (1986) identified abnormally enlarged sulci and slightly enlarged ventricles. Additionally, Dietz (1986) conducted a battery of psychometric tests including the Halstead-Reitan Neuropsychological Battery and the Luria-Nebraska Neuropsychological Battery. These tests are designed to assess the condition and functioning of the brain, including the presence, type, and localization of damage and help to identify neuropsychological deficiencies in the domains of learning and other cognitive skills. Following this examination, Dietz (1986) concluded that the subject had damage to his right frontal lobe.

Dietz's (1986) case study is one of only a few that have provided a detailed overview of the neurodevelopmental profile of a serial killer. Despite this, however, the study is limited in the sense that all data was collected following years of significant head trauma and possible brain injury. The retrospective nature of this study precludes any attempts to differentiate organic pathology from that which was acquired. Limitations such as this are typical for this field and represent one of the more challenging barriers to determining the neurobiology of serial killers.

In another case study of an unnamed serial killer, Kraus (1995) examined the case of an individual who was convicted of the murder of 11 women for which he was serving 250 years. In this examination, Kraus (1995) used series of tests designed to assess neurological functioning, including the Wechsler Adult Intelligence Scale (WAIS) and the Minnesota Multiphasic Personality Inventory (MMPI). Kraus (1995) also conducted a chromosomal analysis on the individual and performed a CT scan. Kraus's (1995) examination, indicated that the subject had:

“a patchwork of widely scattered areas of mild brain damage” (p. 21). CT scans revealed a slight enlargement of the left lateral ventricle, slight atrophy of the right temporal lobe with an absence of the inferior tip right temporal lobe and bilateral scars in the frontal white matter, and more prominent neurological damage in the left hemisphere than the right. Magnetic resonance imaging (MRI.) scans revealed an old healed right frontal skull fracture, small subarachnoid cyst right middle cranial fossa, and bi-frontal scarring (Kraus, 1995). Lastly, through single photon emission computed tomography (SPECT), it was discovered that the individual had reduced cerebral perfusion in his left parietal lobe.

Kraus’s (1995) study is an important contribution to the literature because it represents one of only a handful of in-depth case studies ever to have been conducted with a serial killer. However, the study has several limitations. For example, according to Kraus (1995), the brain damage found was: “likely due to previous head traumas and cerebral concussions” (p. 21). Thus, again, the retrospective nature of the study precludes one from drawing causal inferences. Another limitation is that many of the neurological examinations that Kraus (1995) conducted were found to be within reasonable limits. For example, the results from the electroencephalogram (EEG) were normal. Even some of the ‘abnormal’ findings such as enlargement left lateral ventricle were still within normal limits (Kraus, 1995). Thus, at most, these clinical results suggest that aggressive and violent behaviour may be associated with a matrix of neurological deficits.

Renowned neurocriminologist Dr. Adrian Raine has also contributed to case studies looking at the neurobiology of serial killers. For example, Dr. Raine has studied the positron emission tomography (PET) scan of serial killer Randy Kraft. Kraft was an American serial killer found guilty of murdering at least 16 men, mostly homosexual drifters between 1972 and

1983. Raine's PET scan of Kraft revealed heightened activity in the thalamus and normal functioning of the prefrontal cortex. This finding was interesting to Raine (2013) who, in studies conducted with single murderers, found the opposite; that is, Raine found that single-victim murderers had reduced functioning in their prefrontal cortex.

According to Raine (2013), this neurological difference explains why serial killers such as Kraft can avoid detection for more extended periods of time than single victim murderers; the prefrontal cortex operates more efficiently in serial killers. For Raine (2013), the presence of prefrontal activity in the multiple murderers is: "consistent with the planned, careful execution of [serial] murders [as opposed] to the more impulsive acts of the one-time murderer" (p. 149). Interestingly, this finding directly conflicts with neurological findings characteristic of psychopathy. As described earlier, psychopaths have been found to have reduced activity in their prefrontal cortex. They have also been found to display difficulties with regard to impulse control (Gao et al., 2009). This finding complicates and obscures the hypothesis that serial killers are all psychopathic and that their crimes are an extreme behavioural expression of criminal psychopathy.

#### *Limitations of Organic Neuropathology Explanations*

Case study examinations with serial killers have yielded valuable insights into the neurobiology potentially underpinning some of their behaviour. In particular, case studies have revealed the presence of contusions, healed skull fractures, widely scattered areas of multiple brain damage, abnormally enlarged sulci and slightly enlarged ventricles, damage to the right frontal lobe, enlargement left lateral ventricle, slight atrophy right temporal lobe with absence of the inferior tip right temporal lobe and bilateral scars in frontal white matter. While fascinating,

these results are comprised of the combination of findings discovered through multiple case studies; thus, many of these findings are specific to individual serial killers and are not generalizable across the population. Results such as these have made it difficult to conclude the influence of neurological impairments on serial killers' behaviour.

Also complicating the validity of neurobiological explanations for the etiology of serial killing is the fact that there are many serial killers for whom neurological testing was conducted, but for whom no evidence of neurological dysfunction was found. Ted Bundy is an example of one such case. Throughout his incarceration, Ted Bundy was subjected to extensive neurological testing. No evidence of organic brain injury or disease was discovered (Rule, 2013). Structurally, there was nothing that distinguished Ted Bundy's brain from a healthy brain. In fact, one of the medical examiners who conducted Bundy's autopsy stated: "when it was finally removed and examined, Ted Bundy's brain looked like anyone else's" (Maples & Browning, 2010, p. 132). While there may have been evidence of pathology on the molecular level, such an investigation was never attempted. The absence of molecular examination is a limitation of most neurobiological investigations conducted with serial killers. Analyses of the neurobiology of serial killers rely heavily upon studies of dead brain tissue because examinations of live tissue among offender populations are not allowed due to issues regarding ethics and consent. The one exception to this is the work that is currently being conducted by Professor Kent Kiehl who, in collaboration with the Mind Research Network, is using a transportable MRI machine to establish the world's most extensive database of brain data from incarcerated populations; mainly psychopaths.

Jeffrey Dahmer was another serial killer whose neurological examinations exhibited no explanatory evidence or clues to his offending. For example, psychological tests, including the

MMPI-II and the Rorschach, MRI scans, EEG, and chromosomal analysis all ruled out organic, neurological, and genetic pathology (Palermo, 2008). Another serial killer, John Gacy, was found to be neurologically intact. For example, after his execution, Gacy's brain was dissected in an attempt to locate an organic explanation for his offending. Studies of the brain have come up with nothing remarkable (Fox & Levin, 2014). According to the psychiatrist who is currently in possession of the brain:

There's actually nothing abnormal, so no tumor, no growth, no sign of any injury...the ventricles are fine, no sign of hydrocephalus" (interview in the Chicago Tribune, 2004).

There is continuing speculation about the role of neurobiological risk factors in the etiology of serial killing. While brain damage, head injury, and structural deficits have been identified, the role of neurobiology in the etiology of a serial killer is somewhat limited. Current explanations regarding the role of neurobiology vary widely. On one end, serial killers have been found to exhibit gross neurobiological deficits, while on the other end, serial killers have been found to have no evidence of neurobiological abnormality at all. There are many possible explanations for the varied conclusions concerning the role of neurobiology in the etiology of serial killing. These include (1) generalized findings from populations of non-serial killers; (2) lack of standardization in the definition of serial homicide and, thus, the use of heterogeneous samples; and (3) the fact that only a small amount of research has been conducted in-person with serial killers and has subsequently been published. While structural/functional neurological impairments likely play some role in the etiology of serial killing, given the variability of the literature at this time, there is no conclusive evidence that specific neurobiological factors play any causal or correlational role in the etiology of serial killers (Pincus, 2002).

### *Neurochemical and Metabolic Dysregulation*

Investigations into the etiology of serial killing have also pointed to the role of neurochemical and metabolic dysregulation. For example, low serotonin (5-hydroxytryptophan or 5-HT) levels are hypothesized to be a possible contributing factor to the violence that is demonstrated by serial killers (see: Choi & Lee, 2014). The hypothesis of the role of 5-HT in serial killing is based on the premise that low serotonergic activity is a predictor of pathological aggression (Montoya et al., 2012; Söderström et al., 2001). While a valuable direction for studying the etiology of serial killers, examinations into the role of 5-HT and its associations with aggression and impulsivity have been conducted primarily with non-serial killer populations, including psychopaths. One must be careful not to generalize findings of metabolic dysregulation onto serial killers if the initial studies were conducted with psychopaths. Such generalizations would be problematic because, again, not all serial killers are psychopaths.

Low levels of monoamine oxidase-A (MAO-A) have also been hypothesized as potentially relevant to the etiology of serial killers (see: Allely et al., 2014). The monoamine oxidase-A enzyme is primarily involved in serotonin and noradrenaline catabolism. It is associated with sensation-seeking and reductions in impulse control. Studies that have examined the role of MAO-A in violence and aggression have primarily been conducted within psychopathic populations as opposed to serial killer specific populations. Thus, again, the extent to which these findings can be generalized is limited.

### *Hereditary Factors and Genetics*

Jacob's Syndrome (JS) is a rare genetic disorder characterized by the addition of an extra Y-chromosome. JS disorder has been sensationalized by some as the genetic "Mark of Cain"

(see: Raine, 2013; Voorhees et al., 1970) and since its identification in 1961, it has been discussed almost synonymously with violence and diminished morality<sup>3</sup>. Individuals affected by XYY tend to be very tall, have severe acne during adolescence, and have a host of additional symptoms including learning disabilities and impulsivity (National Organization for Rare Disorders [NORD], 2012). Although there is little empirical support for XYY linked violent behaviour, the theory sparked interest in the role of genetics in the development of criminal behaviour when it was found that XYY men, though rare in the general population, are common among the offender population (Howitt, 2009; Siegel, 2005). One notable XYY serial killer is Arthur Shawcross. Shawcross was an American serial killer who murdered 14 women (mostly sex workers) and two children between the years 1972 – 1989. While Shawcross is known to have the additional Y chromosome, most serial killers do not. Furthermore, while there is a known correlation between XYY syndrome and violence, there has yet to be a study which assesses the role of biology or any other genetic or hereditary factor specifically to serial killing. The relationship between XYY and serial killing is, therefore, a tenuous one.

### *Fetal Toxin Exposure and other Prenatal Traumas*

Teratogens, such as exposure to environmental toxins including lead and radiation have devastating and long-term effects on child development. For example, research from Harvard University has found that cities that use lead service pipes have considerably increased city-level homicide rates, reaching levels four times higher than those who do not make use of old lead-based pipes (Feigenbaum & Muller, 2016). There is a significant amount of research on infant

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<sup>3</sup> Interestingly, abnormalities of the sex chromosome (XYY) are frequently associated with Autism Spectrum Disorders (ASD) (see: Margari et al., 2014). This provides more evidence for the potential viability of further examinations into this area.



and prenatal teratogen exposure and subsequent violence; however, research that addresses teratogen exposure as a developmental risk factor for serial killing is absent in the literature.

### *Birth Complications*

Birth complications such as anoxia and traumatic preterm delivery represent another possible contributing factor in the etiology of serial killing. For example, studies have shown a significant correlation between exposure to perinatal trauma during delivery and subsequent violence and impulsive criminal offenses (Fazel et al., 2012). Again, this line of inquiry has received no direct examination of serial killer populations and therefore represents another line of investigation that has yet to be addressed.

### *Biology: Summary*

Biology represents only one small part of a complex interplay of factors which result in serial killing. While various biological explanations for serial murder exist, there are, as of yet, no conclusive findings to support the correlation between any one biological factor and serial killing (Allely et al., 2014; Hickey, 2006). More so, no inheritable quality causing serial killing has been identified as of yet. Consequently, there is no empirical support for the argument that the etiology of a serial killer is connected to biological traits. Explanations that describe serial killing as a consequence of biological aberrations run the risk of oversimplification.

### *Early Childhood Development*

Early childhood represents a period of significant importance for one's social and emotional development. Therefore, when studying the early childhood backgrounds of serial

killers, one must give attention to the types of environments individuals were exposed to during their development. Specifically, attention should be paid to the overall quality of the home environment including the parents' marital status, the quality of the individuals' relationship with their parents, and the quality of the relationship between the parents themselves. Currently, a large body of literature exists regarding the early developmental experiences of serial killers. The following section reviews this research and simultaneously presents the gaps and limitations of this literature.

### Mothers

Investigations into the parent-child relationship between serial killers and their mothers have revealed relationships typified by abuse. For example, studies have frequently shown that serial killers had mothers who were pervasively rejecting, punitive, hateful, smothering, controlling, and infantilizing (Hickey, 1997; Knight, 2006; Miller, 2014). The mothers of serial killers' have also been found to exude traits characterized as domineering, controlling, and overprotective (Liebert, 1985; McKenzie, 1995; Prentky et al., 1989; Ressler et al., 1986). Also, a substantial amount of literature has revealed the presence of what has been described as an 'unusual' or 'unnatural' relationship between mothers and the children who became serial killers (see: Leyton, 1986; Scott, 2000). For example, Lunde (in Leyton, 1986) offered the opinion that an intense relationship with the mother is evident for most serial killers and that many serial murderers have had maternal relationships filled with abuse and sexual attraction; the confluence of abuse and hypersexualized relationships appears to be one of the more robust findings present in studies examining the early parent-child relationships of serial killers. Another finding is that many serial killers had mothers who combined humiliation with sexual and emotional abuse. For

example, in an in-depth case study conducted by Dietz (1986), the early relationship between one serial killer and his mother is described as follows:

His mother, who had been married four times and brought home a succession of short-term extramarital sexual partners, frequently told her son that she had been raped by her father when she was nine. She ridiculed her son's bedwetting, which persisted to age 13, by calling him "pissy pants" in front of guests (p. 484).

This type of relationship, while not universal among serial killers, is also not uncommon. For example, serial killer Edmund Kemper had a similar relationship with his mother. Kemper was raised in a single-parent home with an emotionally abusive mother who targeted and ridiculed him for his 'unnerving' physical appearance and 'weird' personality (Schechter, 2003). As the only male in a household of three women (mother and two sisters), Kemper's mother would make him sleep in the basement for fear that he 'might rape' one of the sisters or even the mother herself.

Perhaps one of the most pathogenic parent-child relationships that exist in the literature is that of Henry Lee Lucas and his mother, Viola. Viola Lucas was described by Henry as a prostitute and a vicious drunk (Norris, 1991). Allegedly, it was not uncommon for Viola to send Henry off to school dressed in girl's clothing. During fits of drunken rage, she would beat Henry so severely that, on more than one occasion, he required medical attention (Norris, 1991). More so, Viola frequently invited 'clients' to her home. During these visits, Henry was forced to watch her service her clients, which was made all the worse by the fact that Henry's father (Anderson Lucas) was unable to intervene in any of this behaviour due to his physical incapacitation; in a drunken incident, Anderson had been hit by a train and had lost the use of his legs (Berry-Dee, 2003). Viola would also frequently physically abuse Anderson and emasculate him in front of Henry.

Hypersexualized environments combined with humiliating emotional abuse, specifically in the form of emasculation, are commonly found in the backgrounds of serial killers. In fact, the 1988 study conducted by Ressler, Burgess, and Douglas concluded that 74% of serial killers had reported a history of psychological abuse that involved humiliation. Findings such as these have been a rich source of inquiry for both psychologists and psychoanalysts alike. For example, McElroy (1978), suggested that when mother-infant attachments are too intense that the sexual and social development of the individual may be interrupted.

Despite the fact that a large portion of serial killers had experienced abusive and rejecting relationships with their mothers, there are many serial killers for whom such a relationship did not exist. For example, both Keith Hunter Jespersen and Ted Bundy enjoyed a seemingly positive relationship with their mothers. Both have described their mothers in positive terms. In fact, in at least one instance, Jespersen described his mother as his 'protector.' Joel Rifkin had also experienced a positive relationship with his mother. Randall Woodfield was also reported to have been born into to a functional, educated, upper-middle-class family who loved and doted upon him (Lachman & Lachman, 1995). Evidence of abuse inflicted by maternal figures is, thus, by no means a universal experience of all serial killers. Consequently, while these relationships may have some effect on the development of serial killers, poor maternal relationships offer only a limited insight into their developmental pathology.

### Fathers

There is limited research into the role of the fathers of serial killers. There are several reasons for this. One is that the fathers of serial killers tend to be absent from their children's lives (Stone, 2001). Many serial killers have had fathers who were literally absent (they

abandoned the family), or who had been emotionally absent (neglectful of their children) (Knight, 2006). In fact, one study found that just under 50% of serial killers had been raised without a father or by a non-biological step-father (Stone, 2001). Given this, the research on the role of father is far less detailed and comprehensive than research that has looked at the role of the mother. The studies that do exist portray the fathers of serial killers' as being authoritative, sadistic, and highly disciplinarian in their parenting style (Scott, 2000). The father of serial killer John Wayne Gacy is one such example. Gacy was an American serial killer convicted of the murder of 33 young men and boys. As a child, Gacy suffered physical and psychological abuse. He was regularly beaten by his father who would simultaneously berate him for being a 'sissy.' It was also common for Gacy to witness his father physically abusing his mother (Ebrite, 2005).

#### *Limitations of Child Abuse Arguments*

The instances of poor parenting described above represent extreme cases. It is important to note that while abuse is prevalent among serial killers at a rate that exceeds the general population, many commentators have argued that a history of childhood abuse is not universally present among individuals who commit serial homicide (Mitchell & Aamodt, 2005; Stone, 2001). For example, in an examination of 50 serial killers, Mitchell and Aamodt (2005) found that 32% had not experienced abuse in childhood. Additionally, in a study conducted by Jenkins (1988), it was discovered that half of serial killers studied (n=6/12) had respectable and superficially normal childhoods. Similarly, studies conducted by Dietz, Hazelwood, and Warren (1990), found that the majority of sexually sadistic murderers had no evidence of child abuse whatsoever. These findings have been replicated by Gratzer and Bradford (1995). One possibility that may account for these differences is the heterogeneity in the populations studied. Again,

because researchers typically use vastly different definitions of serial killers in their examinations of the etiology of serial killers', conflicting results, such as these, are common. As a result, consensus on the prevalence of abuse has yet to be achieved.

In response to these conflicting findings, some have argued that the absence of reported child abuse on the part of some serial killers does not, in fact, indicate a lack of abuse. Rather, some have argued that: "abused children who later become violent often display an inexplicable loyalty to the abuser, especially when the abuser was a parent" (Ebrite, 2005, p. 706). Thus, some believe the finding of a lack of abuse to be an effect of non-reporting. Others have argued that the suppression of memories has led to an underreporting of abuse experiences (Pincus, 2002). Regardless of the reason for the varied conclusions about the prevalence of child abuse among serial killers, the belief that child abuse is a precursor to serial killing is tenuous. Many serial killers were raised in families characterized by unremarkable or loving relationships and whose medical record indicates no evidence of early child abuse.<sup>4</sup>

Thus, while an early history characterized by a failure of empathic bonding and attachment between the child and the caregiver forms the basis of serial killing (see: Burgess et al., 1986; Liebert, 1985), there is conflicting evidence on the presence of child abuse on the development of serial killers. This is likely due to how serial killers have been defined within the different studies that have examined this issue. In any case, it is unlikely that background factors such as child abuse offer explanations that are adequate in themselves. Childhoods characterized by brutality are unfortunately common, and yet serial murder is very rare. These findings cannot explain why certain individuals seemingly have a compulsion to commit murder.

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<sup>4</sup> The use of medical records (when access is permitted) offers one way to circumvent the issue of non-reporting or under-reporting of abuse by serial killers.

## *Structural and Environmental Explanations*

### *Frequent Moving*

In his examination of several serial killers, Ressler et al. (1988), found that only 1/3 reported growing up in the same location throughout their lifetimes. Ressler et al. (1988) also concluded that more than 40% of serial killers in the sample lived outside of their familial homes by the age of eighteen. In many instances, the serial killers' place of residence shifted from the family home to an institutionalized setting such as a foster home, a detention center, or a mental hospital. Frequent residential mobility has been cited as having a primarily adverse effect on the overall health and well-being of a child (Murphey, Bandy, & Moore, 2012). It is argued that moving may impact several domains of a child's development, including their physiological, cognitive, and affective health (Murphey, Bandy, & Moore, 2012).

In addition to impacts on the child's physiological, cognitive, and affective health, Ressler et al. (1988) argue that frequent moving was suggestive of the fact that, as a child, the serial killer may have had had only:

Minimal attachment to a community, thus reducing the child's opportunities to develop positive, stable relationships outside the family; relationships that might compensate for family stability (p. 20).

While frequent moving during childhood can cause negative psychological health impacts, the extent to which these effects affect one's development in the long-term is speculative. For example, according to the U.S. Census Bureau (2011), while frequent moving is not common overall, single moves are a normative experience for many U.S. children. For example, in 2011 alone, more than nine million children (ages 1-17, about 13 percent) changed residence (U.S. Census Bureau, 2011). However, an analysis of the 2007 National Survey of

Children's Health found residential mobility to be associated with few child health effects either positive or negative, once other characteristics of the child and his or her family were considered.

These findings suggest that the cumulative effects of moving may be particularly significant and that other forms of turbulence that often accompany mobility, such as family disruption, may be important. However, research on this topic is limited.

### *Culture*

Fox and Levin (1999) believe serial killers to be the by-product of a youth-oriented North American culture which places a high value on physical appearance. Fox and Levin (1999) argue that within North American society there is a sub-population of sexually undesirable males who lack remorse, cannot build and maintain meaningful long-term relationships and cannot accept their lack of sexual desirability. These men become increasingly frustrated, and when this frustration melds with increasing post-adolescent arousal needs, they achieve release by taking what they want aggressively (Fox & Levin, 1999). It is further argued that with every act of aggression these males perpetrate, they require greater stimulation to achieve and maintain sexual arousal. The result of this is that, over time, these men progress to committing sadistic acts of torture and murder in pursuit of their sexual gratification and emotional release (Fox & Levin, 1999). The principal limitation to this argument is that not all serial murders are male (Keeney & Heide, 1994). Additionally, though many are, not all serial murderers are sexually motivated (Hickey, 2012; Reid, 2017a). Thus, while this argument may help to explain some classifications of serial killers (male sexually motivated serial killers in particular), this case cannot be generalized beyond that.



### *Early 'Prisonization,' Conduct Disorder, and MAO-A*

According to research conducted by Aamodt (2015) 75% of serial killers spend time in jail or prison during their youth. This finding is important because, according to social learning theorists, deviant socialization which occurs from early prison experiences plays a fundamental role in the criminal trajectories of serial killers (Delisi & Walters, 2011). Prisonization is the process by which the uninitiated acquire the mores, values, and attitudes conducive to physical and psychological survival in the harsh prison environment (Stretesky et al., 2007). Prisonization in youth is believed to result in failed moral learning whereby young inmates learn to model instrumental aggression and other forms of violence (Blair, 2000). Given that so many youths who become serial killers spend time either incarcerated or in other institutional settings such as mental health facilities, it has been suggested that these types of environments are at least as important a consideration as biology in understanding serial homicide (Delisi & Walters, 2011).

Aamodt's (2015) findings are also important in that they point to a higher prevalence of conduct disorder (CD) in this group at a young age. Conduct disorder (CD) is characterized by a pattern of behaviour that violates the basic rights of others or age-appropriate norms and rules of society (Children's Mental Health Ontario, 2001). The prevalence of conduct disorder is estimated at between 1.5% and 3.4% of the general child and adolescent population (Bartol & Bartol, 1989; Feehan et al., 1993). Children with conduct disorder often have co-morbid disorders including attention-deficit hyperactivity disorder (ADHD), depression, anxiety, developmental disorders, and are known to come from families with significant differences in comparison to other families (Frick et al., 1993; Plomin, 1994). For example, children with CD tend to come from single mother households, households with lower socioeconomic status (SES), and the parents of children with CD often have high rates of mental illness including

depression, substance abuse disorders, and antisocial personality disorder (Children's Mental Health Ontario, 2001). Each of these avenues presents a vulnerability to developmental risk that have yet to be adequately explored within the literature on serial homicide.

One area that may be of particular interest for further examinations the role of monoamine oxidase a gene (MAOA). MAOA is a gene that is responsible for metabolizing neurotransmitters such as serotonin (5-HT) and dopamine (DA). While a biological correlate to aggression, an impressive body of research has revealed that low levels of MAO-A activity, levels which predict violence and aggression, increase in the presence of detrimental environmental conditions. This is important in the context of CD because research has shown that parents of children with CD tend to use corporal punishment more often and engage in higher rates of child neglect and physical abuse (Luntz & Widom,1994; Patterson et al., 1989). Consequently, this is one more avenue worthy of examination.

#### *Unhealthy Parental Behaviours*

Aside from potentially abusive early home environments, the early home environments of many serial killers are characterized by a modeling of unhealthy parental behaviours such as drug or alcohol abuse (FBI, 1985). For example, a study conducted by Ressler et al. (1988), found that 70% of the families of the serial killers studied had a history of alcohol abuse and 1/3 had a history of drug abuse. According to Family Systems Theory, introduced by Bowen (1978), individuals can only be understood in relation to their family units, viewed as a whole. Bowen (1978) emphasized the family as an emotional system and argued that family interactions become embedded in the emotional matrix of individuals through time. In relation to serial killers, it has been suggested that their homicidal behaviour may be a learned response to the

perpetuation and escalation of faulty coping strategies and problem-solving attempts within a family system (Del Fabbro, 2006)

### *Structural and Environmental Explanations: Summary*

Understanding the developmental pathology of serial killers from the viewpoint of a structural and environmental perspective is important because it helps to elucidate the impact of multi-level influences that reside outside the direct consciousness of the individual. Overall, however, structural and environmental explanations for serial killing offer no simple, unitary, causal explanations for their development. While violent behaviour learned in childhood appears to be an essential part of what guides or conditions the behavioural trajectories of many serial killers, it cannot be the determinate factor as it fails to explain how serial killers whose childhood experiences were not marked by these factors developed the way that they did. As a result, structural and environmental explanations may be part of a more complex matrix of developmental risk factors underlying the offending behaviour of serial killers.

### *Psychological Insights*

The following section briefly reviews the most notable psychological findings throughout the literature on serial homicide offenders. This section is broken down into psychological findings noted throughout childhood and then noteworthy adult psychological findings.

#### *Childhood Relationships*

Many serial killers have been known to display abnormal peer interactions in their youth and their play has been described as aggressive as well as dysfunctional (Hickey, 1997; Keppel

& Birnes, 2003; Knight, 2006; Schlesinger, 2000). For example, as a child, serial killer Arthur Shawcross: “preferred to be by himself, and at the age of seven years was referred to a mental health clinic after hitting other school children with an iron bar on a school bus” (Kraus, 1995, p. 12). Serial killer, Edmund Kempner, also enjoyed a schoolyard game where he pretended that he was being executed in the gas chamber and found enjoyment in dismembering his sister’s dolls (Schechter, 2003).

### Isolation

In 1988 Ressler and colleagues concluded that 71% of the serial killer killers reported a sense of isolation in their childhood. As they grew into adolescence, the sense of isolation apparently increased to 77% of subjects. Childhood social isolation (i.e. loneliness) has been one of the most common characteristics found among both male and female serial killers. According to Martens and Palermo (2005), one result of social isolation is an associated lack of the possibility of utilizing the constructive psychosocial, emotional, and moral feedback of others. Moral numbing, indifference, and anger are also argued to result from early childhood social isolation (Martens & Palermo, 2005).

### Animal Cruelty

Animal cruelty is a common finding in the childhood and adolescent developmental stages of many serial murderers. Ressler et al. (1988), who recorded the frequency of animal cruelty among adult sexual murderers found that nearly half (46% or n =12) described adolescent cruelty toward animals. Despite this small sample size, the argument that the early violent

behaviours of serial killer may first be acted out toward animals is echoed by other scholars, including FBI criminal profiler John Douglas. In his book, *Anatomy of Motive*, Douglas states:

The male who is going to grow into a violent or predator personality becomes aggressive to his peers. He gets involved in antisocial acts such as burglary, arson, theft from his parents or other family members, mistreating animals (Douglas, 1999, p. 39).

#### *Pornography and other Addictive and Harmful Behaviour*

In his study of serial killers, Caputi (1987) concluded that many find an outlet for their vivid sexual fantasies in pornography. For example, Edmund Kemper scoured detective magazines for pictures of corpses and enjoyed watching ‘snuff’ movies in which intercourse was a prelude to murder. In his own words, Kemper described pornography not as the cause of his violence, but as the fuel that added to the fire (Caputi, 1987). Ted Bundy had a similar experience. For example, Bundy famously denounced pornography stating that it caused him to commit his violence (Rule, 1980). Addictive and other harmful behaviours such as alcohol and drug use, compulsive masturbation, and a preoccupation with death, are frequent childhood features of many serial killers. In fact, it has been reported that 82% of serial killers have problems with compulsive masturbation from the time of their youth (Ressler et al., 1988).

#### *Daydreaming/Violent Fantasies*

The presence of violent fantasy is believed to be one of the most robust psychological findings in the lives of serial killers (Knoll, 2006). In fact, studies with convicted serial killers have consistently indicated that this population experiences a high frequency of violent fantasies (Johnson & Becker, 1997; Warren et al., 1996). For example, Leyton’s (1986) qualitative examination of several serial killers revealed that offenders often spent their free-time fantasizing

about killing. Dennis Rader is one example. After being apprehended, Rader admitted having developed fantasies about the bondage, and the torture of women at a very young age (Douglas & Dodd, 2008). While the nature of the fantasies experienced by serial killers can vary greatly, there are several themes that often reoccur. These themes include necrophilia, rape, and cannibalism. Despite knowing that fantasies are common among this population, questions remain as to how these fantasies develop and at what developmental age they begin to be experienced. While some believe the fantasies are caused by dissociative trauma (Carlisle, 2000; Lewis, 1998; Meloy, 1997; Stein, 2004), while others believe the fantasies originate through more organic means. In any case, fantasy is considered, by some to be the underlying basis for serial murder (Alley et al., 2014; Ressler et al., 1988).

#### *Other Childhood Psychiatric Disturbances*

Regarding formal psychiatric diagnoses, most data come from individual case studies and retrospective analyses. Examinations of the psychological records of children who would grow up to become serial killers reveal a great deal of hostility and insecurity, especially within the context of the family environment. For example, Kraus (1995) described the results of the Blacky Pictures Test of an unnamed child who became a serial killer in later life.<sup>5</sup> The report is as follows:

He does not like school...does not like his sisters and brother because they won't play with him...harbors a fair amount of diffuse hostility, especially toward his mother...seems unable to find legitimate outlets for it...he feels he should identify with both parents but does not want to identify with either of them... (Kraus, 1995, p. 13).

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<sup>5</sup> The Blacky Pictures Test is a projective psychological task which employs a series of twelve picture cards and investigates children's psychosexual development (Taulbee & Stenmark, 1968).

While Kraus's (1995) study was not prospective, because he had attained access to the childhood psychiatric records of one serial killer, his findings are important, nonetheless. Very few studies have analyzed the childhood psychiatric records of serial killers. In fact, the only other studies this author has identified as having access to the early child psychiatric reports of serial killers are studies conducted by the FBI. For example, in a study conducted by Ressler et al. (1988), 70% of serial killers for whom data were available had histories of early psychiatric difficulty. However, beyond the statistics offered, very little other detail was published. Thus, the child psychiatric functioning of most serial killers is currently unknown.

### *Adult Psychological Findings*

#### *Narcissism*

According to Hazelwood and Michaud (2001), three personality disorders that are most commonly found in the serial killer population are antisocial personality disorder (ASPD), narcissism, and paranoia. However, Hazlewood and Michaud (2001) place a particular emphasis on narcissism, stating that it is the most common personality disorder among serial killers. The role of narcissism in the developmental pathology of serial killers is a topic that has been explored by many theorists. For example, drawing on the biographies of 300 notorious murderers, including serial killers, Stone (1989) explored the connection between homicide and narcissistic personality disorder. Through a survey of those biographies, Stone (1989) concluded that: "many of the perpetrators can, with a fair degree of certainty, be considered examples of malignant narcissism" (p. 643). Malignant narcissism, as described by Stone (1989) is a "pathologic personality characterized by the coexistence of marked narcissistic and antisocial traits" (p. 644). The notion that serial killers embody some aspects of narcissistic personality

disorder is supported by additional scholars, including Liebert (1985). Liebert (1985) insists that most serial killers fall into the category of borderline and narcissistic personality disorders. Hickey (1991) also argues that highly developed narcissistic features are present in many serial killers. The presence

Both Summers (1999) and Kernberg (1992) have suggested serial killers' narcissism reflects a defensive maneuver against a sense of inferiority, rejection, and insignificance. For these scholars, serial killers' narcissism is seen as a specific type of defensive mechanism that hides the individuals 'defective self.' A self that likely emerged as a result of being raised in an abusive home or an un-nurturing environment. According to psychoanalytic views, it is not at all uncommon for one to develop narcissistic traits as a defense against pathological lack of self-esteem (Freud, 1914; Kernberg, 1974). In such instances, narcissism is often referred to as 'compensatory grandiosity.'

Knight (2006) states that: "sexually motivated male serial killers are pathological and destructive narcissists" (p. 1196). Knight (2006) goes on to further explain this statement by providing an object-relations explanation to describe the etiology of serial killers. For example, Knight (2006) describes serial killers as lacking self-esteem due to profoundly rooted and inadequate pre-oedipal infantile experiences. In particular, Knight (2006) argues that during the serial killers' early childhood development they experienced either too little or no responsive caretaking.

### *Other Paraphilias*

In addition to narcissistic personality disorder, many serial killers are diagnosed with one or more paraphilias (Knight, 2006). Paraphilias are defined as:



Any intense and persistent sexual interest other than sexual interest in genital stimulation or preparatory fondling with phenotypically normal, physically mature, consenting human partners (DSM-5, 2013, p. 685).

Paraphilias are so common among this group that they have been described as: “the rule rather than the exception” (Stone, 2001, p. 9). From a review of the backgrounds of serial killers, Stone (2001) discovered that 70% of serial killers exhibited at least one type of paraphilia throughout their lifetime. The most common paraphilias among serial killers are sadomasochism, fetishisms, and voyeurism (Geberth, 1996; Hickey, 1997; Knight, 2006; Prentky et al., 1989; Ressler et al., 1988). In comparison to single homicide offenders, there is a higher prevalence of paraphilia’s in serial killers (Prentky et al., 1989). Consequently, paraphilias should be considered when trying to understand the developmental pathology of serial killers.

#### *Obsessive Compulsive Disorder*

The compulsive nature of serial killing has been understood since 1973, when Cormier first described offenders of what he called ‘multicide.’ Since this time, the compulsive nature of serial killing has been more thoroughly explained. For example, Schlesinger (2000) describes the compulsion aspect of serial homicide as a tension state which is fueled by the offender’s fantasy life. The compulsive drive for personal gratification is believed to be so powerful that any attempt to resist it results in anxiety and somatic manifestations (Kocsis, 2008; Reid, 2017a). According to Kocsis (2008), Reid (2017a), and Schlesinger (2000), the pathology underlying the development of serial killers is, in part, the result of this inner compulsion, and the offender’s desire to return to a non-tension psychological state. In fact, according to Schlesinger (2007), ‘serial’ has become the accepted adjective for describing homicidal offenders. However, while this term is easily understood, the term ‘compulsive murderer’ would be a more accurate

descriptor than serial murderer. The reason for the distinction, Schlesinger (2007) argues, is that the term compulsive murderer reflects: “the main motivational dynamic within the offender that pushes him to kill” (p. 248).

### *Limitations of Psychological Insights*

While there is ample evidence of varying levels of pathology throughout the life course of most serial killers, many serial killers fail to meet diagnostic thresholds for *any* clinical psychopathology at all. In fact, many scholars have argued that the majority of serial killers are have no formal clinical diagnosis of mental illness (Fox & Levin, 2005; Holmes & Holmes, 1998).

### *Impact of Trauma on the Etiology of Serial Murder*

Given the prevalence of early childhood abuse and other traumatizing experiences found among the childhood backgrounds of serial killers, some researchers have begun to theorize on the role of trauma on the developmental trajectories of serial killers. The following section reviews some important theories that have attempted to explain the developmental pathology of serial killers through models of trauma exposure.

#### *Trauma Control Model*

Hickey (1997) introduced the Trauma-Control Model as a way to explain how traumatic events can gradually influence a person to kill. In his model, Hickey (1997), hypothesized that serial killers experience certain destabilizing events during their most formative years.

Destabilizing events include an: “unstable home life, the death of parents, divorce, corporal

punishments, sexual abuse, and other negative events” (Hickey, 2002, p. 86). According to Hickey (2002), when left unresolved, traumas originating from various destabilizing influences cause individuals to experience a deep sense of anxiety, mistrust, confusion, inadequacy, and self-doubt. Hickey (2002) also argued that traumatized individuals eventually learn to cope with their feelings by way of suppression. According to Hickey (2002), when feelings are suppressed to such an extent that they are no longer experienced on a conscious level, the individual will experience a splitting detachment from their past traumas. The trauma, though not consciously recalled, surfaces unexpectedly through violence. Though not empirically validated, Hickey’s (1997) Trauma-Control Model is a well-known and respected theory throughout the discipline of serial homicide research.

#### *Fractured Identity Syndrome (FIS)*

Holmes, Tewksbury, and Holmes introduced the Fractured Identity Syndrome (FIS) theory in 1999. The FIS theory argues that exposure to one traumatic event may cause a fissure in an individual’s identity which, if triggered later on in life, can cause a fracturing of an individual’s personality. Examples of single traumatic incidents that Holmes et al. (1999) believed could cause an individual’s personality to fracture include unreasonable punishment, the discovery of the subject’s illegitimacy or adoption, or any event wherein psychological abuse or shock is insinuated. According to Holmes et al. (1999):

Serial killers are much like everyone else during the primary years of personality development...[but] there [is] nothing in their early years that would have prepared them for the sequential predation that would occur later in their lives (p. 267).

Although Holmes et al. (1999) stresses the timing of these identity fracturing events, this theory is controversial in the sense that it has a deterministic quality about it that negates the reality of the human capacity for resilience and psychological adaptation.

### *Emotional Release Model*

Hensley and Wright's (2003) Emotional Release Model incorporates a graduated hypothesis. For example, they explain that during childhood, 'would-be' serial killers repeatedly express their anger and frustration upon smaller, weaker objects or animals. Over time, the children progress from venting their feelings upon objects and animals to venting upon humans. Another example comes from Hensley and Singer (2004), who argue that serial murder results when a child experiences parental rejection and parental abuse. These abuse experiences are argued to leave the child both traumatized and frustrated. Owing to the relative powerlessness of the child, they are unable to retaliate directly against their abusers. This theory then holds that the child exacts their retaliation through other means such as fire-setting. In this model, the children go on to set fires to vent their frustration and regain a sense of dignity and personal power. Because the feelings of dignity and power are short-lived, the fire setting repeats and escalates to the point at which killing humans replaces fire setting.

Emotional release theories have been critically analyzed by and further expanded upon by psychoanalysts. For example, Hale (1994) has argued that serial murder results when people suffer deep humiliation during an early stage of their life but fear the 'humiliator.' This fear prevents people from seeking revenge directly against the humiliator. As they grow to adulthood, this humiliation becomes internalized as a permanent threat to oneself. When people reach adulthood and encounter stimuli that re-threatens that sense of self and that threat reminds the

person of the original humiliation, the pent-up emotions ‘explode’ and the person seeks rectification by killing those who remind them of the original humiliation (Hale, 1994). However, because no victims survive the violence, the conquest cannot be validated, and the humiliated person is doomed to repeat their behaviour in the pursuit of permanent psychological redress (Hale, 1994).

### *Self-Selection Theory*

Self-Selection theorists argue that serial killers make conscious decisions to kill and that the murders that they commit are the result of pre-planned fantasizing which materializes in reality. While the direct reasons underlying the serial murderer’s decision to kill vary with each version of the self-selection paradigm, the primary principle is that the serial killer makes a conscious decision to murder. One self-selection theorist (Sears, 1991) argues that serial killers kill entirely for their own pleasure. According to Sears (1991), serial killers raised in unstable homes that lack nurturing and where physical and emotional abuse is endured precludes the development of a sense of self-worth. Such environments leave the child unable to form close emotional ties with other people (Sears, 1991). As a result, these individuals become loners who then turn to fantasy as a means through which to escape the experience of psychological pain. As the individual matures, he/she may come to view other people as objects. Sears (1991), argues that when the lingering effects of childhood suffering fuse with adolescent frustration over a lack of sexual and social contact, one begins to develop fantasies centered around ideas of violence. By the time that individual reaches adulthood, the boundary between reality and fantasy are blurred and the individual begins to act out their violent fantasies upon others (Sears, 1991). One major issue with Sears (1991) theory is that it presupposes a childhood filled with abuse and

social torment. As the review above has shown, such features are not universal among serial killers.

Fox and Levin's (2001) version of the self-selection model holds that self-selection occurs most often with Caucasian males in their late twenties or early thirties who experience little remorse for their behaviour and rationalize their acts as benefiting society. Not only do these males make a conscious decision to kill, they consciously repeat the act of killing because of the pleasant feelings they experience when committing murder. Lastly, Egger's (2003) self-selection model argues for a cumulative progression to murder. For example, Egger (2003) argues that the serial killer has a psychiatric pre-disposition toward violence. When this disposition is combined with brain damage, plus childhood sexual and physical abuse, and an intense relationship with the mother, it may spark a violent person who consciously decides to kill. In Egger's (2003) model, the violent predisposition precedes the occurrence of brain damage.

#### *Psychological Insights: Summary*

Psychological theorization has added immensely to the study of the developmental pathology underlying the serial killer. Psychological examinations have revealed some early developmental patterns such as the presence of atypical behaviour, faulty coping mechanisms, and pathologies of the personality. While valuable, psychological insights are limited in the sense that investigations have primarily been done through the use of quantitative data measures, such as surveys. The failure to levy information gathered through qualitative analysis into a more complex discussion of causation, or more expansive developmental mechanisms are one major limitation of current psychological analysis.

### *Summary of all Limitations*

While academic scholars throughout the late twentieth largely contributed to the evolving conceptualization of this criminal type, twenty-first-century scholarship has been almost entirely shaped by law enforcement. Though the twenty-first century saw the intellectual migration away from serial homicide, academics who remained have been harsh critics of the research that emerged. The current state of contention is primarily one of the needs of scholarly academia versus the needs and priorities of law enforcement. At the very heart of this issue is how serial murder has been defined (Reid, 2017a).

What are the developmental mechanisms underlying the offending behaviour and motivational pathology of the serial murderer? This is a question that has long been examined, but one for which a comprehensive answer does not yet exist. The confusion surrounding the definition of serial killing and the inconsistency with which its many explanations have been employed are primarily to blame for this failure. A recent paper by Reid (2017a) has attempted a clarification of this crime and hopes to bring about greater standardization in the way that serial homicide is defined. Because this definition offers standardized inclusion criteria for studying serial killers, this study specifically relies on this definition. However, even with the added strength of a homogenous sample, examinations into the etiology of serial homicide will continue to be hindered by the following complications.

First, serial killing is a rare form of criminal offending. As a result, studies into the etiology of these offenders are hampered by small sample sizes. Small sample sizes are problematic in three significant ways: (1) any observed effects are subtle and can be missed if the sample size is not large enough (i.e., the sample has limited power); (2) serial killers develop in multiple risk contexts that require large sample sizes in order to control for mediating variables

and; (3) small sample sizes limit comparability. Because studies of serial killers are restricted to small sample sizes, examinations are limited by an inability to be empirically generalizable.

Second, researchers are often unable to gain first-hand access to offenders (Allely et al., 2014; Silvio, McCloskey, & Ramos-Grenier, 2006). There are multiple reasons why researchers are denied access to serial killers. There may be instances where penal institutions are unwilling to facilitate communication or research access to inmates. In some other cases, researchers are denied inmate/prison requests. In other cases, access is rejected by the killer's lawyer(s) and by the killer him/herself (Hinch & Hepburn, 1998). Sometimes subjects refuse to cooperate (Holmes, 1989). There have even been cases where the offender may be deceased, or the family of the deceased refuses to grant permission for further scientific study or analysis. The case of Jeffrey Dahmer represents one such example. In a motion hearing by the State of Wisconsin in the matter of the estate of Jeffrey Dahmer, his father, Lionel Dahmer argued successfully for Jeffrey's brain to be cremated with the rest of his body and not to be seized for scientific inquiry (Case No. 94-PR-175, 1995). Furthermore, in some instances, detailed records and other data on serial homicide offenders are kept by criminal justice entities and are not made available to researchers (Kraemer, Lord, & Heilbrun, 2004). Consequently, criminologists construct data sets from news accounts and other media sources (DeLisi & Scherer, 2006). Complications such as these are not uncommon for homicide researchers. In fact, it's been suggested that:

Homicide researchers operate under a severe constraint from the outset; given its rarity, researchers are unlikely to directly observe the subjects in their studies (Smith & Zahn, 1999, p. 75).

Consequently, researchers who are interested in homicide must often rely on data which is available in the public domain (Allely et al., 2014). These sources include diaries,



autobiographies, court transcripts, and police interview transcripts. Other examples may include police interrogation footage, home videos, and recorded manifestos.

Reliance on publicly available sources has been extremely helpful for researchers in this field because it has allowed researchers to circumvent the issue of offender access. However, this data does not come without its limitations. For example, publicly available data does not allow the researcher to directly address the experimental hypotheses being tested. Most data are unstructured, descriptive, and much of what is available must be sought out through dozens of different search avenues. While the use of publicly available data may not be ideal, it is a widely practiced methodology in this field. Scholars of serial murder who have used this or very similar methods include: Alley et al., 2014; Canter et al., 2004; Hickey, 2015; Holmes & De Burger, 1988; Jenkins, 1988; Keeney & Heide, 1994; Levin & Fox, 1985; Ressler et al., 1988 and many others.

While the use of publicly available data is a conventional method, for some, the limitations that come with this method are too significant. As a result, some scholars conduct studies with other more accessible types of violent offenders such as psychopaths and generalize their findings onto offenders of serial homicide. While neither of these methods is ideal, they represent both the most common and the most practical data source for investigations into serial killing.

Gaps in our understanding of the origins of the psychopathology that motivates serial killers continue to exist because scholars have only attempted to address this phenomenon using relatively simple research methodologies. Since the early 1980's we have relied on very simple quantitative measures, mainly descriptive statistics. Descriptive statistics is a class of statistics that includes summarizing, organizing, and graphing quantitative data. It is an excellent

methodology for presenting numerical facts and illustrating relationships between certain variables. However, descriptive statistics is a limited methodology for studying human development because it does not offer any depth of meaning beyond that which is measurable.

To offer a hypothetical example, such a methodology may reveal that 51% of serial killers experience childhood maltreatment and thus may conclude childhood maltreatment to be a risk-factor for such violence. However, child abuse and neglect are highly prevalent with self-report data suggesting that at least 1 in 7 children have experienced child abuse and/or neglect in the last year (Finkelhor et al., 2015). In fact, in 2005 a nationally representative study of children and youths ages 2 to 17 found that more than half had experienced a physical assault in the previous year (Finkelhor, Omrod, Turner, & Hamby, 2005). Evidence exists that a person who was abused as a child is at risk of suffering long-term effects, such as substance abuse or a major mental health disorder, which may contribute to his or her violent behaviour as an adult (Gratz, Paulson, Jakupcak, & Tull, 2009; Smith & Thornberry, 1995; Widom, 1989). However, not all people who victimize others share the same social background. Not all criminals, abusers, or murderers have experienced childhood maltreatment, and not all those who have experienced childhood maltreatment become victimizers (Glasser et al., 2001). Thus, while descriptive statistics are certainly valuable for illustrating relationships, they do not provide all the information that is useful or needed to understand the mechanisms underlying their findings. This is the major limitation of using simple descriptive methodologies and static trait-based explanations when studying the cause of serial homicide.

By utilizing multiple levels of analysis, a life course approach to human development, and critical empathy, this thesis aims to expand our understanding of the origin of the psychopathology that drives the motivations of serial killers.

## Chapter 3

### METHODOLOGY

A successful application of the transdisciplinary framework is often achieved through the participation of non-scientist stakeholders from the non-academic environment throughout the research process, as well as a collaborative team effort of researchers with qualitative and quantitative research expertise. What follows is an overview of the methodology employed throughout this thesis, including the sample population, the materials used, and the two stages into which this thesis was divided. It also highlights how the many facets of transdisciplinary research came together for the purpose of this study.

#### Sample Population

While serial homicide is rare, over 5000 offenders have been known/apprehended since the year 1900. In the United States alone, there have been over 3000 serial killers since the start of the twenty-first century (Aamodt, 2015). Because there have been so many serial killers throughout history, it was necessary to narrow the population I would be studying. The following section offers a description of the criteria used for selecting subjects for this study as well as an explanation as to why I chose that specific criterion.

- (1) Serial killers met the criteria for Compulsive Criminal Homicide (CCH).

Rationale: A precise definition of a serial killer is crucial for those investigating the etiology of these offenders. Without clear or established criteria, the definition of a serial killer can take many shapes and forms (Dowden, 2005; Gibson, 2010). Recently, Reid (2017a) introduced a comprehensive and historically grounded

definition of serial homicide. The criteria of Compulsive Criminal Homicide (CCH) offers several improvements over traditional definitions of a serial killer. For example, CCH directs attention onto the psychological and motivational aspects of serial killers. CCH also provides operationalized criteria that must be met before the label of 'serial killer' can be applied. Unlike the FBI's definition, which was designed specifically for law enforcement whose broad and non-specific parameters have posed significant problems for researchers, CCH is primarily meant to serve as a tool for academic researchers (Adjorlolo & Chan, 2014; Hickey, 2012). Specifically, CCH was designed to ensure that researchers can achieve homogeneity in their data collection. Therefore, this definition and its criteria were adopted for this thesis.

(2) Sexual elements were reflected in the serial killers' crimes.

Rationale: offenders whose crimes were explicitly sexual in nature were selected because there is very little ambiguity about the external motivations of their offences (Hickey, 2002; Holmes & Holmes, 2002; Knight, 2007). The similarity of offending motivations helped to create a relatively homogenous sample group of serial killers. Beyond serving the purpose of establishing a homogenous sample group, it has been argued that serial killers who offend sexually are distinct from non-sexual serial killers concerning their demographics, diagnosis, and etiologies (Dietz, 1985; Myers et al., 1993). To ensure that findings in this thesis were not confounded with information gained from studying dissimilar groups, I focused specifically on serial killers whose actions were explicitly sexual in nature.

(3) Serial killers were male.

Rationale: Male serial killers far outnumber females. In fact, only about 15% of serial killers spanning the past two centuries have been (Hickey, 1997; Kelleher & Kelleher, 1998; Perri & Lichtenwald, 2010). By including only male serial killers, I was able to ensure a larger sample size than could have been achieved if only females had been considered. Also, between 55% - 81.5% of serial killers are motivated by sexual gratification. Of serial killers who are sexually motivated the vast majority (over 90%) are male (Hickey, 2002). Given that the vast majority of serial killers are male, it made sense to limit this thesis specifically to a male population. Other reasons for limiting this thesis to the examination of male serial killers pertain to the feasibility of data collection. For example, female serial killers are largely ignored both by the media and by academics (Keeney & Heide, 1994). Given that a significant amount of data for this thesis was drawn from media sources, it would have been far too time-consuming, if not completely unfeasible, to identify enough comprehensive information on female serial killers to have justified their inclusion in this thesis. The decision to exclude female serial killers was one that was made primarily based on feasibility and issues of practicality. In addition, female serial killers often commit their crimes with a male partner. Thus, it is difficult to identify and untangle the true motivations underlying the criminal motivations of female serial killers (Hickey, 2002). Lastly, the decision to exclude female serial killers was made because sex may have its own influence on the developmental pathologies of serial killers. For example, studies have shown that: “there may be more differences than

similarities between female serial killers and their male counterparts” (Keeney & Heide, 1994. p. 392). In particular, differences have been found in such areas as the offenders’ psychosocial histories, demographics, and victim types (Keeney & Heide, 1994). To ensure that the finding of this thesis was not confused or complicated by sex, I restricted the examination to male serial killers.

(4) Serial killers must have had sufficient information coverage to be included in the thesis.

Rationale: Due to the control and standardization that is afforded to researchers who conduct their own interviews, in-person interviews with serial killers was preferred. However, due to geographical feasibility, time permissions, institutional obstacles, and barriers, as well as prohibitive financial costs, this thesis instead relied on the collection and analysis of secondary source data. Secondary source data, which is discussed in further detail below (see: Materials and Data Collection), included police interview transcripts, trial transcripts, biographies, and psychiatric records. Secondary source data was located through several online channels. The internet hosts an extensive repository of comprehensive information on thousands of serial killers and, thus, offered a practical solution to what was initially viewed as a methodological challenge. For example, serial killers whose crimes were headline news, such as Ted Bundy, Robert Pickton, and John Wayne Gacy, were subject to intense and frequent media exposés. These individuals were interviewed by journalists, as were their siblings, close friends, co-workers, and even their teachers. Furthermore, their

police interrogation videos, trial information, and medical documentation have all been made public. The availability of information online has been a boon for researchers giving them the type of depth that one would likely achieve in the context of an in-person interview. Unfortunately, while one can find detailed information on many serial killers online, the reality is that more information exists for some serial killers than others. The extent to which comprehensive information is available on any one serial killer is directly related to how much media interest that person's crimes aroused. Serial killers whose crimes were given less media attention, such as Wayne Henley Junior, Dennis Nilsen, and Surinder Koli may have received some news coverage but do not receive a great deal of public attention. The lack of public interest resulted in very few, if any, interviews or exposés. In cases such as this, there is a breadth of information, but very little depth. The lack of depth is problematic because there is very little one could hope to gain to know about these individuals without personally interviewing them. Because in-person interviews were not feasible for this thesis, I chose to include only those individuals whose personal information was so complete and so comprehensive that the knowledge available would have been similar to what I would have hoped to get out of an in-person interview.

(5) Serial killers were convicted between the timeframe of 1900 - 2018.

Rationale: So long as reliable and comprehensive information could be found for serial killers who had been convicted during these timeframes, there was no valid reason to exclude them.

(6) Cases were limited to North America and the United Kingdom.

Rationale: This thesis focused on serial killers from primarily westernized countries. This decision was made because westernized cultures overlap. Also, linguistic analysis of translated documents may have caused ambiguity in terms of legal proceedings and diagnoses, so this was avoided.

The names of the individuals who were ultimately included in this study can be found in Appendix A.

## Materials and Data Collection

### *Materials*

This thesis used multiple data sources so to arrive at a multi-faceted, complex, and comprehensive conclusion, one that offered insights based on the amalgamation of several points of view. This thesis used a variety of material including text, audio, and video, all of which were found in the public domain. Specifically, the materials used in this thesis include diary entries written by serial killers; autobiographies; home videos; media interviews and exposés conducted with serial killers, their families, friends, and acquaintances; police interrogation interviews; trial transcripts and video footage during the trial process; biographies which had been written by journalists, FBI agents, known acquaintances, or the family members of serial killers; news media reports; as well as medical and psychiatric documents which had been released and were available in the public domain. Police files and criminal records were also utilized as too were personal correspondences between serial killers and members of the general public. Personal correspondences were not addressed to me. Rather, I obtained letters from individuals who had



exchanged letters with serial killers and who had posted their letters for viewing, online. The material used throughout this thesis consisted of both primary and secondary source literature.

The use of multiple data sources was beneficial to this thesis. The use of various sources enabled me to analyze the serial killers' responses and biographic information from several different angles, which gave a critical depth and sophistication to the overall analyses that would not have been possible otherwise. The use of multiple data sources was also a strength of this particular thesis as it gave me an opportunity to critically evaluate my data against other sources, thus ensuring a certain degree of validity among the sources and material used.

### *Data Collection*

To obtain the material for this thesis I consulted a variety of online sources. Online sources included the University of Toronto library system; news databases such as Factiva, Lexis-Nexis, and Google News Archives; YouTube and other video hosting web-sources; Google Books; the Serial Killer Information Centre<sup>6</sup>; FBI Records: The Vault<sup>7</sup>; and information from the Vidocq Society<sup>8</sup>. Data was located from each of these sources by way of a simple search using the following key phrases and keywords:

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<sup>6</sup> [http://maamodt.asp.radford.edu/Psyc%20405/serial\\_killer\\_timelines.html](http://maamodt.asp.radford.edu/Psyc%20405/serial_killer_timelines.html): The serial killer information center was created by Dr. Mike Aamodt at the Department of Psychology, Radford University to provide students, researchers, and the media with accurate data on serial killers. The project began in 1992 and is revised on a continual basis. To date, the Radford Serial Killer Database contains data on 2750 serial killers with online access to information on 196 of these killers.

<sup>7</sup> <https://vault.fbi.gov/>: The FBI Vault contains 6,700 documents that have been released to the public through the Freedom of Information and Privacy Act.

<sup>8</sup> <http://www.vidocq.org/>: a cold-case murder solving organization headed by Forensic Interrogator, William Fleisher and former Inspector Generals, Benjamin Redmond and William F. Gill III.

([insert name of serial murderer] pdf), (serial murderer<sup>9</sup> pdf), (biography [insert name of serial murderer]); ([insert name of serial murderer] transcript); ([insert name of serial murderer] diary), ([insert name of serial murderer] psychological evaluation); ([insert name of serial murderer] police interview); (V [insert name of serial murderer]); (The People V [insert name of serial murderer]); ([insert name of serial murderer] V Her Majesty the Queen); ([insert name of serial murderer] juvenile del\*); ([insert name of serial murderer] childhood); ([insert name of serial murderer] medic\* [OR] psych\* [OR] lega\*); ([insert name of serial murderer] mother [OR] father [OR] sibling [OR] family [OR] relative); ([insert name of serial murderer] school [OR] bull\*).

Material for this thesis was also obtained from news agencies such as *The Toronto Star*, the Canadian Broadcasting Company (CBC), *The Vancouver Sun*, and *The Globe and Mail*. Each news agency has a dedicated crime reporter; a journalist who covers local and international crime news. Crime reporters are often granted access to judicial hearings which are closed to the public and are capable to efficiently using legal channels, including access to information requests, to obtain information that is difficult for one to obtain on one's own. For example, while YouTube hosts a 13-minute cell-plant video of Robert Pickton, the Vancouver Sun had the full 72-hour video (personal correspondence with Lori Culbert, a reporter with the *Vancouver Sun*). *The Toronto Star*, *The National Post*, and *The Globe and Mail* also have complete and more comprehensive transcription and video footage for a range of serial killers, including Clifford Olson, Russell Williams, and Paul Bernardo. News agencies and crime reporters were contacted by phone and by email.

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<sup>9</sup> The term 'murderer' was used interchangeably with the terms homicide, and killer.

Materials that could not be found online were sought out in person. For example, attempts were made to see if information existed within the University of Toronto library system. If so, I visited the library in person to read and check-out relevant literature. Also, when and wherever possible and appropriate, I reached out to specialists who had privileged access to information on serial killers. Specifically, I contacted individuals who were both willing and ethically able to share information publicly. For example, I reached out to several retired detectives, private investigators, members of the RCMP, and the FBI. Through the RCMP, I was able to obtain the criminal records of 43 Canadian serial killers including Clifford Olson, Paul Bernardo, and Peter Woodcock. I also reached out to several lawyers of adjudicated serial killers whose names I found on court dockets. I reached out to police officers involved in serial homicide investigations. I also reached out scholars who have had the opportunity to meet with serial killers and interview them. I contacted each either by phone or by email.

Additionally, in cases where it was necessary, I retrieved information on offenders through the Canadian *Access to Information Act*, using a Freedom of Information Request. Applications for the Freedom of Information Request were found and filled out online.<sup>10</sup> The primary requirement for information was Canadian citizenship. The fee for requests was \$5.00; a cost which was covered by me. In cases where the offender was American and where their information was not available publicly but could be accessed through the American *Freedom of Information Act*, I enlisted the assistance of several American colleagues who share similar research interests. Any costs incurred were covered by me.

In addition to the above sources, this thesis drew from interviews that had been conducted with serial killers and that had been published in the public domain. Specifically, I

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<sup>10</sup> Application page: <http://www.cic.gc.ca/english/department/atip/requests-atip.asp>

consulted the work of Nadia Fezzani; a Canadian journalist. Due to the comprehensive nature of her interviews with several serial killers, her book, *Through the Eyes of Serial Killers: Interviews with Seven Murderers*, was a rich source of data. I personally contacted Ms. Fezzani, the author of this book, asking permission to use her information for this thesis; a request to which she agreed. Other books I consulted included *Ted Bundy: Conversations with a Killer*, by Stephen Michaud and Hugh Aynesworth (1989). The interview data contained in this book was obtained from more than 150 hours of exclusive tape-recorded interviews with Bundy. In my view, this book is the most comprehensive interview conducted with this Bundy. *Talking with Serial Killers: The Most Evil People in the World Tell Their Own Stories* by Christopher Berry-Dee (2003) was also consulted specifically for interview information. Berry-Dee is an investigative criminologist who conducted several interviews with serial killers. Berry-Dee's verbatim interview data was a valuable source of information. I also drew from James Gilks' (2014) *Ultimate Serial Killer Interview Collection*. This book contains over 300 rare and exclusive interviews with serial killers. Lastly, I made a personal phone call to Dr. Al Carlisle, PhD. Dr. Carlisle has conducted several interviews with a number of serial killers including Ted Bundy. Dr. Carlisle shared his reflections on his interviews with the serial killers he interviewed.

## Research Stages

The multi-faceted nature of this thesis required the research be conducted in two stages. Each stage of this thesis was approved by an Ethics Review Board (ERB) at the University of Toronto. Each stage took approximately one year to complete. The following section provides a comprehensive overview of each of the two stages including the specific steps taken during each stage, the different materials used, and the methodological framework that was employed. A

discussion of the purpose of each particular stage, as well as the research aims, and limitations are also presented.

## Stage 1

### *Overview*

The first stage addressed the following research question:

*What are the salient life experiences found across the lifespan of serial killers; including infancy, childhood, adolescence, emerging adulthood, and midlife?*

The objective of this stage was to identify developmentally relevant factors and events that occurred across the lifespan of serial killers who met the criteria outlined in the above sections (see: Sample Population and Methods and Data Collection). A literature review was conducted and a list of all known developmentally relevant variables was compiled. Developmental factors that have been understudied or are currently neglected in the literature were also identified and added to the list. Upon completion, this list of developmental factors was then converted to a spreadsheet with each factor recorded as a column header and each serial killer recorded as a row. In total the spreadsheet contained over 600 demographic and developmental factors for 70 serial killers, totalling 42,000 data points.

After identifying both the developmental variables and the sample population, I populated the spreadsheet using a wide variety of material including: diary entries written by serial killers; autobiographies; home videos; media interviews and exposés conducted with serial killers, their families, friends, and acquaintances; police interrogation interviews; trial transcripts and video footage during the trial process; biographies which had been written by journalists, FBI agents, known acquaintances, or the family members of serial killers; news media reports;

police files and criminal records; as well as medical and psychiatric documents. All information was obtained with the permission of an Ethics Review Board (ERB) and was located in the public domain.

### *Data Analysis*

Descriptive statistics were used to summarize the developmental characteristics of the serial killers as well as the ages at which certain developmental events occurred. Additionally, chi-square tests for association were conducted between all relevant and appropriate variables. This step was primarily exploratory, no hypotheses or *a priori* assumptions were established. The sole objective of this stage was to identify developmentally relevant factors and events that occurred in the backgrounds of serial killers

### *Limitations*

This stage had several methodological limitations. First, the sample population was not randomly drawn. While random sampling would have added reliability and validity to this thesis, random sampling was an unfeasible design strategy (see: Sample Population). Because this thesis made no claims about the generalizability or causal nature of the findings, the lack of random sampling was only a minor limitation. Second, due to the fact that intense public interest in serial killers had produced an online community of ‘amateur web-sleuths,’ it is very likely that I encountered conflicting biographic information. To counteract the negative effects of conflicting information, all information collected during this step was verified across three distinct sources. For example, if a news article stated that a serial killer had experienced child abuse, I sought out two distinct additional sources to verify the statement. Additional sources included psychiatric

reports, books, and interviews with family members. The more distinct the sources, the better. A reliance on multiple sources was used as a method to diminish the influence of possible speculation and false information. If, conflicting information was still found upon examination of different sources I either: (a) sided with the sources that had the most agreement, (b) sided with the sources that were the most objectively reliable [i.e. psychiatric records, medical records, police reports] or, (c) sought out a fourth source and then sided with the sources that had the most agreement.

Another limitation was a lack of control groups or comparative designs. To this criticism, I can only respond that this is not, in actuality, a limitation; it is a strength. A lack of comparative group designs offers a valuable opportunity to focus more fully on the subjects under study. While comparative group designs are useful in that they allow one to infer causality, I found such studies to lack room for rigorously in-depth examinations. The absence of depth is not a criticism made solely by this author, but rather, is a longstanding criticism argued by many individuals. For example, Jane Anton, a Clinical Psychologist at Washington University has argued fervently about the need to preserve the integrity of human experience in research. In her presentation of an intensive experimental model, Anton (1978) cited one of the failings of traditional research as being the fact that models using comparative group designs reveal little about the individuals with whom studies are primarily concerned (p. 274). Rigid adherence to one model, she asserts: “violates the purpose of the process of experimentation, replacing it with the idea of the experiment as an end in and of itself” (Anton, 1978, p. 273).

The last limitation is the that while I have made every attempt to include a wide range of developmentally relevant variables, there will invariably be some that go undetected. This is especially true of variables that are abstract and seemingly inconsequential. Some variables that

may be viewed as inconsequential include the age at which a person was bullied, for how long bullying lasted, and whether or not the person grew up in a house painted with lead-based paint. I personally do not find these variables to be inconsequential. However, for those without a background education in developmental psychology, they may appear to be irrelevant.

Consequently, these facts are ignored by the literature and left unknown. I concede that the database I have compiled will never be complete in so far as the information contained therein will always have gaps because of what we consider relevant. What I have done instead, is made note of seemingly irrelevant variables so that future researchers can focus the direction of their studies on filling those informational gaps. In the immediate thesis, however, this remains a limitation.

**Table 3:** Summary Overview of Stage 1

<b>Research Question</b>	<b>Purpose</b>	<b>Hypothesis</b>	<b>Method of Analysis</b>
What salient life experiences are found across the across the lifespan of serial killers: including infancy, childhood, adolescence, emerging adulthood, and midlife?	To illuminate developmental patterns and trends across the lifespan of serial killers.	None	Descriptive Statistics

## Stage 2

### *Overview*

The second stage of research addressed the following research question:

*What can the serial killer's interpretation of their developmental events reveal to us about their motivations and the psychopathology that underlies their motivation for homicide?*

This stage utilized a qualitative methodology, mainly Interpretative Phenomenological Analysis (IPA). This methodology was employed to reveal more complex and multifactorial explanations about how serial killers come to travel a path from childhood innocence to an adult



life of fatal violence. Though no formal hypotheses were made, this research is not atheoretical. A large and rich literature base from multiple disciplines will be used to provide conceptual understanding of the findings. A small sample size of twenty serial killers was drawn from the original seventy serial killers which comprised the first stage of research. These 20 serial killers were chosen based on the availability of extensive first-person qualitative data such as police transcripts, psychiatric reports, published interviews with journalists, and audio/video recorded informational interview sessions with law enforcement. This stage was completed with the assistance of a 3-person research team who transcribed audio and video, helped develop themes, analyzed data, and engaged in a series of round robin discussions aimed at refining the analysis of each theme. The time allotted for the analysis of each theme was proportional to the amount of available data; the minimum time spent analyzing a single theme was one week.

### *What is Phenomenology*

Phenomenology was originally a philosophical research methodology established by German philosopher, Edmund Husserl, at the start of the 20<sup>th</sup> century. This methodology was later expanded upon by others including philosophers Martin Heidegger, Maurice Merleau-Ponty, and Jean-Paul Sartre (Rasmussen, 1998). Phenomenology is both a research method and a philosophy which initially arose from the desire to explore the structure of experience and cognition (Creswell, 2003; Morse, 1991). Phenomenologists operate under the shared belief that there is no substantial difference between the subjective and the objective world and that the only ‘reality’ that exists is one’s own consciousness of our experiences and the meaning we assign to those experiences (McPhail, 1995). Consequently, the focus of phenomenology is one’s lived experience, and the aim of phenomenological analysis is to understand the meaning and

significance of a particular experience, as it is recalled and described by another person (van Manen, 1990; Merleau-Ponty, 2004). Phenomenology rejects the idea of objectivity imposed by quantitative paradigms and embraces subjectivity as an essential characteristic of experience (Gallagher, 2016; Sanders, 1982; McClelland, 1995). Additionally, phenomenology makes no predictions beforehand and thus, does not incorporate hypotheses into its methodology (Orbe, 1998). While there are several different ways in which phenomenology can be utilized, to bring insight into how salient life experiences shaped the worldviews of serial killers I utilized a phenomenological methodology known as Interpretative Phenomenological Analysis (IPA) (Smith & Osborn, 2003).

#### *What is Interpretative Phenomenological Analysis (IPA)*

IPA is a qualitative approach for exploring how meanings are constructed by individuals within their own social and personal worlds (Larkin, Watts, & Clifton, 2008; Smith, 2004; Smith & Osborn, 2007). IPA embraces an emic (insider's) perspective as opposed to an etic (outsider's) perspective and thus begins the bracketing of one's presuppositions, values, and beliefs. Phenomenologists must be prepared to surrender, through a stance of openness, what they currently know, and be willing to reshape their understanding of human phenomena by fully understanding the contextual, complex life of individuals, and by understanding how individuals make sense of their personal and social worlds (Holroyd, 2007). In addition to the suspension of pre-conceived judgement, phenomenological analysts must attempt to enter deeply and appreciatively into the lifeworld's of their participants. This type of immersion requires a profound openness and critical empathy toward those whose minds and lives are being studied. This latter aspect of phenomenology is often referred to as empathic hermeneutics. The

application of critical empathy invites one to cultivate emotional identification and sympathy which serve to offset the conscious illusions of separation between human minds (Fiorenza, 2011). As a meaning-based form of analysis, IPA is a well-suited methodology for exploring human experience.

### *Data Analysis*

While IPA is a multistage research process, it is not a prescriptive methodology. Rather, phenomenologists are guided by a set of principles, including description, reduction, and interpretation. These principles guide researchers, allowing them to discover the meaning of subjective experiences, and to then effectively communicate “the other’s” way of seeing things (Barritt, Beekman, Bleeker, & Mulderij, 1986). The following section provides an overview of the particular way in which I utilized IPA.

#### *Step 1: Focus Sample and Collect Data*

Typically, phenomenological analysis involves the detailed analysis of verbatim accounts of a small number of participants (typically under 10) (Callary, Rathwell, & Young, 2015; Larkin et al., 2008; Smith, 2004). Small sample sizes are preferred so that analysts can explore each case with the necessary time, energy, and rigor required for this type of analysis (Smith & Osborn, 2003). Phenomenological analysis is not concerned with empirical generalizability and therefore, does not employ random or representative sampling (Smith & Osborn, 2003). Consequently, this thesis employed purposive sampling, a non-probability technique.

The selection of the thesis sample was based on the criteria outlined described in the section: Sample Population. Specifically:

1. Serial killers met the criteria for Compulsive Criminal Homicide (CCH).
2. Sexual elements were reflected in the serial killers' crimes.
3. Serial killers were male.
4. Serial killers must have had sufficient information coverage to be included in the thesis.
5. Serial killers were convicted between the timeframe of 1900 - 2017.
6. Cases were limited to North America and the United Kingdom.

Additionally, all materials were collected following the procedure outlined in the section:

Materials and Data Collection. While all material used in this stage was collected using the procedure outlined earlier, the material used in this second stage was different from that used in the first. For example, while in the first stage I drew from any and all information I could collect and verify, in this second stage, materials were restricted to comprehensive interview data, all of which was located online. Sources used included police transcripts; psychiatric reports made available to the public; published interviews with journalists; and audio/video recorded informational interview sessions with law enforcement. All of the audio and video interview data was manually transcribed by me and a team of research assistants: Ayah Ellithy, M.A., Aleece Katan, M.A., and Ran Della Stua. The transcription process consisted of manual verbatim transcription of the verbal interview content, along with any nonverbal communication (e.g. laughter, pauses, or sighs). To ensure that the content was accurately documented, each member of the research team proofread each transcript. A total of 20 serial killers were examined in this second stage.

### *Step 2: Reading and Thematic Analysis*

Following the collection of all interview material and the transcription thereof, the second step of the analysis involved a detailed reading and re-reading of all of the interview information collected for each of the 20 serial killers. Over the course of several weeks, I, along with my 3-

person research team, individually recorded initial thoughts and comments on each individual transcript. As we read through and commented on the content of the selected transcripts, several themes began to emerge. For example, one theme to emerge was “Discussions of Relationship to Mother.” Another was “Discussions of Relationship to Father.” An additional theme identified was “Reflections of Childhood.” These themes were categorized as developmentally relevant and the quotes and information contained therein became the focus of a more detailed analysis.

Consensus between the research team was established during all steps of the process in order to increase reliability and the internal validity of identified topics. The following themes were established as the key focal points for analysis:

1. Reflections of Childhood
2. Discussions of Relationships to Mother
3. Discussions of Relationships to Father
4. Talking About Their Murders
5. Explaining Their Homicidal Behavior
6. Pre-Crime Thoughts
7. Thoughts During the Crime
8. Post-Crime thoughts
9. General Reflections About the Murders
10. General Reflections About the Victims
11. Compulsions
12. Fantasies

In order to ensure that the emotionality of the respondent was accurately captured in the transcripts, myself, along with my research team, also watched any available video interviews from which the transcripts were derived. This exhaustive process familiarized each member of the research team with the material and the sample population prior to analysis.

### *Step 3: Creating Quote Packages*

The third step involved a process of extracting block quotes from each of the transcripts that aligned with the selected themes. These quotes, acquired from the individual transcripts,

were then grouped into separate documents. For example, all quotes for each serial killer that fell under the theme of “Reflections of Childhood” were organized into one document, while all quotes that fell under the category of “Discussion of Relationship to Mother” were sorted into another document. Once all of the quotes had been organized into their respective documents, the research team randomly selected one theme upon which to focus their attentions and later, conduct an in-depth interpretative phenomenological analysis (IPA).

#### *Step 4: Analysis of Quote Packages*

After identifying which quote package to examine, the research team spent a minimum of one week analyzing all quotes in the document. For example, one week the research team focused on all quotes that were categorized as “reflections of childhood,” while the following week, the team examined all quotes that fell under the heading of “discussion of relationship to mother.” This process continued until all themes were exhaustively analyzed. The analysis itself consisted of each of the members of the research team reading and re-reading each of the quotes in the quote package. As the research members read through the quotes, they recorded their thoughts and observations about each individual quote within the quote package document and offered insight into how they believed the serial killers were describing the content of that theme. Each research member had their own copy of the quote package and analyzed the quotes independent of the other researchers so as to minimize the possibility of group think and confirmation bias.

### Step 5: Round Robin Sessions

The fifth step involved a series of ‘round robin’ discussions. Round robin discussions are typically used within the context of the classroom but were employed as a research strategy in this thesis for its ability to enhance critical thinking and overall comprehension of a topic (Asari, Ma’rifah, & Arifani, 2017). During each discussion, the members of the research team met and compared their notes, thoughts, and observations of the selected block quotes for a particular theme. The discussion was initiated by me. I began each round robin session by sharing my reflections, observations, and thoughts on the quotes that I had analyzed. This initial reflection was followed by an interactive exchange of thoughts and dialogue amongst myself and the other members of the research team. Each member was given time to present their own findings and was encouraged to use their own intellectual, academic, and experiential backgrounds as a foundation. The members of the research team were also encouraged to scrutinize each other’s interpretations by questioning findings and asking for additional clarification or a more detailed reasoning. In total, 12 round robin sessions took place over a period of 11 months. The time allotted for the analysis of each theme was proportional to the amount of available data; the minimum time spent analyzing a single theme was one week. The research team ended each round robin session with a refined analysis of each specific theme.

### *Limitations*

Although this method has the potential to significantly contribute to the literature regarding the developmental psychopathology of serial killers, certain limitations exist. First, it is possible that some portions of the narratives were not included in their respective sources for practical reasons related to the quality or quantity of the data. Another limitation was

that because the narratives were drawn from several sources, the questions asked were not always standardized. This is a limitation because the sequence in which the questions are asked may have an impact on what kind of information is recalled and how much detail is offered. The current thesis was also limited with respect to the population studied. Because the sample was purposively selected, it is possible that other types of serial killer present with different characteristics. These limitations are not uncommon to serial homicide research; however, it is suggested that future research should attempt to better address these limitations by exploring divergent avenues through which to access and analyze the narratives of this unique population.

**Table 4.** Summary Overview of Stage 2

<b>Research Question</b>	<b>Purpose</b>	<b>Hypothesis</b>	<b>Method of Analysis</b>
<i>What can the serial killer's interpretation of their developmental events reveal to us about their motivations and the psychopathology that underlies their motivation for homicide?</i>	To extend our current theorizing about the developmental psychopathology of serial killers beyond positivist explanations and to see whether an emic approach would reveal more complex and multifactorial explanations to describe how serial killers come to travel a path from childhood innocence to an adult life of fatal violence.	None	Interpretative Phenomenological Analysis (IPA)



## Chapter 4

### FINDINGS AND ANALYSIS

*I wish that I could plug you into my head. I wish that I could plug every person who wishes to see me executed into my head. Then you all could see what I see. Then you would know what I know. Then you would see it as I do. You would then be able to see and know the monster. And most importantly, you would then see that it is not me. You would then see that we are truly separate and distinct entities. But..I can't plug you, or anyone else, into my head. So, you are unable to see what I see, know what I know. And you are unable to understand who I am and what it is; you are unable to distinguish between the two of us.*

Michael Bruce Ross, Serial Killer  
(Ross, 2005, para. 1)

The narrative passages in this study are all authentic. Their purpose is to bring the reader inside the minds of serial killers, to “plug you in” so to speak so that you can learn to appreciate the development of these offenders from their point of view. To see their crimes as experienced by them, and to view their motivations and psychopathology as understood by them. Owing to the desire for authenticity, no embellishing details have been added and no composite characters have been created. All information contained herein has either been volunteered freely by each individual in the hope that their life histories might be of assistance to others or that they could help enlighten society regarding the experience of serial homicide. No attempt had been made to conceal the identities of the people in this narrative. Photos are presented along with the narrative in the aim to capture the stories of these individuals with accuracy and feeling. Lastly, although the following discussion facilitates a better understanding of the serial killer’s developmental trajectory, one must appreciate the fact that human development evolves gradually and uniquely for every individual. There is no one story that can be told, no unitary narrative that unites the developmental experiences of the men in this study. There are only similar experiences whose trajectories trace a similar pattern. It is this story that is told in the thesis below.

## Part 1: Introduction

*Behind every look, every word, each violent act or disenchanting gesture is a history of anguish and degradation, a self-writ tale with new chapters added each day and scarcely a happy end.*

Dr. Gabor Mate, M.D., Addiction Expert  
(2009, p. 17).

*“I’m not an animal, and I’m not crazy and I’m not a split personality”* Ted Bundy explained to veteran journalists Stephen Michaud and Hugh Aynesworth (Michaud & Aynesworth, 2000, p. 254). Though he had been sentenced to death, Bundy clung to the hope that people would be able to see beyond the media portrayals; that they would come to recognize him not as a monster, nor as insane, but as an individual who was, at times, subordinate to an abnormal darkness. *“I’m not a lizard, I didn’t come from under a rock...”* Edmund Kemper insisted during a 1984 interview with American television network, Home Box Office (HBO) (Horvath, 1984). Like Bundy, Kemper stressed, that despite media depictions, he lived as an ordinary person throughout much of his life. The ‘sickness’ that dominated the later part of his adulthood prior to his apprehension, was just that; a sickness that dominated a parallel life.

Confusion, distress, and hopelessness; these are the feelings that embody the narrative reflections offered by serial killers when explaining how and why they started to offend. In an attempt to better understand their situation and to gain better insight into how and why they turned to homicide, serial killers often reach for explanations that are familiar to us all: *“Maybe it was something that was programmed by some kind of genetic thing,”* Ted Bundy argued (Michaud & Aynesworth, 2000, p. 24). When attempting to describe the origin of his violent motivations Michael Bruce Ross explained: *“My world was viewed through the colored glasses of my mental illness”* (Ross, 2005, para 5). When asked the same question Arthur Shawcross,

adding a touch of conspiracy to his explanation, stated: “*sometimes I wonder... if I was tampered with by somebody*” (Martin, 2008).

Poor parenting, faulty DNA, having grown up in a social or environmental context that is not conducive to one’s mental health; not only are these explanations those which resonate with us, but they are those that carry with them some form of legitimacy. For example, within the legal system, courts allow evidence of poor parenting, including child abuse and neglect, to be used as a mitigating factor while sentencing offenders. This is because years of research has shown such factors to have devastating effects on the developing child. For those who experienced trauma as children or who were raised in unloving or neglectful families, we tend to apply the principle of leniency, conceding to the knowledge that the individual’s behaviour is very much a product of their environmental circumstance. The same is true of those who were born with genetic, biological, or intellectual deficits. When confronted with undesirable behaviour, we are able to offer compassion and sympathy.

Yet, compassion and sympathy are qualities that society does not readily extend to serial killers. Our reticence to interpret their actions with either compassion or understanding is due, not only to the extreme nature of their crimes and the pain they inflict upon both victims and families, but also to the fact that the sources of their behaviour are not understandable to us. For example, while it makes sense that people who experience abuse as children may be more predisposed to engage in violence in their later years, it does not make sense that someone who experienced child abuse would engage in repetitive acts of homicidal violence. And while it makes sense that a neurologically impaired individual may express inappropriate behaviours or engage in poor decision making at times, in our collective imagination, it does not make sense that a neurologically impaired individual would commit multiple acts of murder, seemingly for

the thrill of it. Again, the exceptional callousness, violence, and cruelty that often characterize the crimes of serial killers defies what we, as a society, are willing to accept as normal or even acceptably atypical developmental outcomes. As a result, these regular avenues of redemption are neither entertained nor accepted, either by society or by serial killers themselves.

While serial killers may latch onto conventional explanations when asked to explain themselves, they also tend to find such explanations reductive, misrepresentative, and/or generally unsatisfying. Take, for example, Keith Hunter Jespersen who murdered at least eight women throughout the 1990's. While Jespersen admitted to having been raised in the same family environment as his brothers and sisters, he could not understand why only he became a murderer. In a letter penned to his hometown newspapers, *The Selah Optimist* and *The Yakima Herald*, Jespersen wrote: "*My brothers and sisters are not murderers and yet they had the same parents and lived in the same community as I had*" (Olson, 2003, p. 328). While his letters were never published, Jespersen had a second chance to explain himself. In a jailhouse interview with Canadian journalist Nadia Fezzani, Jespersen argued: "*I am asked countless times why I became a murderer... The only words that make sense to me are: 'because I must have wanted to do it...'*" (Fezzani, 2015, p. 89). This explanation, however, rings hollow to Jespersen who continues: "*But that just isn't enough of a reason to kill. There has to be more, some underlying reason tucked into my psyche that triggers a murder*" (Fezzani, 2015, p. 89).

'There has to be more.' This sentiment echoes the frustrations of serial killer's when attempting to understand how and why they engaged in murder. Take for example Joel Rifkin who, during sentencing hearing, lamented: "*Not only will I go to my death reliving these horrors, but I will go there never knowing why I did them at all*" (Mcquiston, 1996, para. 14). Rifkin was 37 when he was sentenced to 25 years to life for the murder of a 25-year-old sex worker he met

on the street in lower Manhattan. He had strangled her to death. Before concluding the hearing, Rifkin, perhaps realizing the futility of his efforts at maintaining a visage of humanity, stated: “*You all think that I am nothing but a monster...part of me must be*” (Mcquiston, 1996, para. 2). This type of surrender, the moment wherein the offender aligns himself, discursively, with an entity beyond humanity is common. Another example would be Dennis Rader; better known through the acronym BTK (Bind, Torture, Kill). In a jailhouse interview with psychologist Robert Mendoza, Rader explained:

...the Bible says that there’s demons within you that can come into you.  
That’s the only thing I can figure out. Something drove me to do this.  
You know, normal people just don’t do this” (Mangus, 2005).

While common however, the frequency with which these offenders align themselves with non-human entities, with daemons, and with monsters is only reflective of a much deeper inner turmoil; intellectual defeat and of a failure of introspection. Characteristics, interestingly enough, that enabled the continuation of their maladaptive development as will be shown throughout this thesis. The belief that serial killers are somehow so fundamentally distinct from most people, so distinct from ‘normal’ individuals so as to be beyond the scope of our comprehension is a misconception. It is also a position, or an intellectual stance that denies the deeper motives that activate all people such as fear, the need for freedom, the desire to connect, and autonomy. Yet, there is no moving forward for these men without at least attempting to explain themselves.

Despite the general reluctance to accept their own explanations as causative, all of the men in this study were able to offer some explanation or excuse as to how and why they developed the way that they did. Interestingly, despite the fact the men in this study offered several broad explanations for their development, ranging from the supernatural to a biological or genetic irregularity, all but two of the men eventually put forward an explanation that directed

the cause of their homicidal behaviour to a source of developmental disruption which began in early childhood. To critically assess the validity of the arguments regarding developmental disruptions in early childhood as a precipitating factor in the lives of serial killers, we first need to cultivate a foundation for understanding human development. This foundation will be set in the section that follows and will be built upon as the thesis progresses.

### *A Frame for Understanding Human Development*

Until recently, human development was referred to as a period between childhood and adolescence – or roughly the first 20 years of one’s life. This view was largely influenced by early developmental psychologists and theorists, including Jean Piaget and Sigmund Freud, both of whom only applied the term ‘development’ to changes that reflected qualitative growth and the development of new capacities (White, Livesey, & Hayes, 2012). More recently, however, there has been growing recognition that human development is a complex process involving ongoing interactions and influences across time. Human development is dynamic, continuous, and complex. Additionally, scholars have become increasingly aware that human development is influenced by biology, society, and psychology, not only after birth but whilst *in utero* as well. Knowledge of the influence of the prenatal environment on long-term health and psychological outcomes is a relatively new discovery.

For example, interest in the prenatal period as a critical time of human development originated from studies conducted in the 1960s. Prior to this time the prevailing wisdom was based on the idea of the “placental barrier” theory; a theory which essentially argued that the human fetus was protected and even invulnerable (Lester, Andreozzi, & Appiah, 2004). Throughout the 1960s and 1970s however, a number of significant public health events occurred

all of which raised public awareness about the vulnerability of the developing fetus and overturned the placental barrier theory.

The first of these events was the use of thalidomide in 1958. Thalidomide was widely prescribed and used as both a sedative and as a treatment for nausea in early pregnancy. Unfortunately, by the early 1960s, doctors had begun to notice a rare set of deformities among children whose mothers took the drug while pregnant. These deformities, mostly limb malformations, were later found to be caused by the drug and left thousands of children affected (Archer, 1979). The second, was a synthetic hormone, diethylstilbestrol (DES). Throughout the 1940s and 1950s, DES was prescribed to pregnant women as a means to prevent miscarriage (Reed & Fenton, 2013; Lester, Andreozzi, & Appiah, 2004). By the 1970s it was noted that the daughters of mothers who had taken this drug while pregnant had developed a rare deformation of the vagina known as an adenocarcinoma (Paczos et al., 2010; Lester, Andreozzi, & Appiah, 2004). These discoveries amplified public sentiment about the need for protecting the fetus from a variety of environmental risks.

For example, following the thalidomide and DES scares of the 1950s and 1960s, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) began to sponsor research and program development which specifically addressed female drug users and addicts (Chavkin, 1990). Prior to this time, attitudes toward drinking and pregnancy were fairly liberal. In fact, in 1964, a team of obstetricians lead by Fritz Fuchs introduced a high-dose alcohol procedure delivered intravenously for patients who were at risk for preterm delivery (Fuchs, Fuchs, Poblete, & Risk 1967; Warren, 2015). In their examinations of the prenatal effects of drug use on developing children, the NIAAA recommended that no alcohol be used during pregnancy- citing Fetal Alcohol Syndrome (FAS) as a motivating factor (Warren, 2015). Since that time, it is now

accepted that prenatal substance abuse is a teratogenic agent and the primary causative factor of many cognitive and neurodevelopmental disorders (Thompson, Levitt, & Stanwood, 2009). Fetal protection from drug use, both licit and illicit, has been an important public health initiative ever since this time.

While most offenders tend to direct the cause of their behaviour to an external source that originated in childhood, research over the past last few decades had shown that the foundations of human development - our physical capacities, mental capacities, and psychiatric outcomes - start at conception. From the moment of conception, we are each shaped by our own unique biological makeup and sculpted by early environmental influences which unfold in a carefully orchestrated series of events, all of which interact in complex, dynamic, non-linear ways which ultimately culminate in our developmental story. Thus, it is here, at the prenatal period of development where we begin.

## **Part 2: Prenatal Development**

*It is in the balance between individual and collection, part and whole, that the organismic model derives its metaphor. By examining embryological development in detail, it is possible to see how a wholistic emphasis is necessary to understand living systems.*

Arnold Sameroff, American Developmental Psychologist  
(1983, p. 252).

### **Prenatal Toxin Exposure**

Analyses of the prenatal environment that the serial killers in this study were exposed to revealed that 37% (n=26) were born to at least one parent with a substance use disorder. 30% (n=21) were born to addicted fathers, 7% (n=5) were born to addicted mothers, and 16% (n=11) were born to parents who both battled substance abuse disorders. Also, at least 17% (n=12) of



the individuals whose parents did not satisfy the clinical criteria for substance use disorders were nonetheless exposed to intoxicating substances, prenatally. Substances included either cigarettes, alcohol, psychiatric or non-psychiatric prescription medications, or illicit recreational drugs such as cocaine or cannabis. While the level of exposure may have differed among the subjects of this study, combined 54% (n=38) of the men in this study endured prenatal exposure to toxic substances.

Empirical studies have demonstrated prenatal alcohol exposure to be associated with hyperreactivity, cognitive delays, internalizing psychopathology such as depression and anxiety, and difficulties with social skills (Rasmussen et al., 2011; Testa, Quigley, & Eiden, 2003). In a recent study, Roos et al. (2017) found that adolescents who had been exposed to both alcohol and drugs prenatally had neurological deficits in the occipital lobe; an area broadly associated with sensory processing. Deficits were also found in the right ventrolateral prefrontal cortex and left inferior parietal cortex; brain regions which are particularly critical for inhibitory control. It is not just alcohol that is known to exert adverse developmental outcomes. Research also indicates that drug use during pregnancy can lead to a host of developmental and psychosocial issues. For example, maternal cocaine use has been found to be linked to low birth weight and adverse birth outcomes such as preterm delivery (National Survey on Drug Use and Health, 2006). Moreover, cocaine has been found to significantly suppresses maternal appetite, which contributes to poor maternal and fetal malnutrition. It is well established that malnutrition has adverse effects on fetal development, inducing twofold increases in risks for poor psychosocial functioning, schizophrenia, and dysregulations in the body's stress-response system, the hypothalamic-pituitary-adrenal (HPA) axis (Kudielka & Kirschbaum, 2005; Susser, Hoek, & Brown, 1998; Susser, St. Clair, & He, 2008).

Prenatal drug and alcohol exposure have also been found to contribute to dysregulation of key chemical neurotransmitters such as dopamine (DA) and serotonin (5-HT) (Derauf et al., 2012; Minnes, Lang, & Singer, 2011). Both DA and 5-HT serve important functions in the coordination of the human brain and behaviour. For example, diminished levels of 5-HT promote depression, impulsivity, and predispose individuals to impulsive aggression, while high levels of DA produce strong levels of both physical and psychological arousal (Seo, Patrick, & Kennealy, 2008). Dysfunctional interactions between 5-HT and DA systems in the prefrontal cortex have been associated with impulsive aggression and other comorbid disorders, such as addiction and antisocial personality disorder (ASPD) (Coccaro et al., 1989; Linnoila & Virkkunen, 1992; Seo, Patrick, & Kennealy, 2008).

While this thesis was not causal and was looking primarily for patterns in adverse developmental exposures and the perceptions thereof, the rate of prenatal toxin exposure among these men is concerning. As described, these exposures have serious consequences for child health and behavioural/psychosocial development. And while not all men were equally exposed, or even exposed at all, for some of the men in this study, from the very beginning of their conception they were exposed to experiences that can fundamentally affect the quality of brain architecture and, therefore, the foundation for all of the learning, health, and behavior.

#### Prenatal Stress Exposure: Maternal Stress

This thesis found that 5% (n=4) of the men were born to mothers who experienced Intimate Partner Violence (IPV) during their pregnancy. This 5% (n=4) represented mothers whose domestic victimization was reported to police. When including mothers whose domestic victimization was recorded by family members or self-disclosed, but never reported to police, the

rates of domestic victimization rises to 27% (n=19). This number is higher than national averages which suggest the prevalence of IPV among pregnant women to range from 1 - 20% (Campbell, Poland, & Waller, 1992; Campbell, 2002; Gazmararian, Lazorick, & Spitz, 1996; Shoffner, 2008).

The stress response is a highly adaptive survival system involving a complex array of physiologic and behavioural responses intended to re-establish homeostasis (Kirschbaum & Hellhammer, 1994). The key components of the stress response system are the HPA-axis and the sympathetic nervous system (SNS). The relative actions of these key regulatory centers and their respective hormones are influenced by a myriad of genetic, environmental and developmental factors; all of which allow the individual to adapt, physiologically, to the challenging demand of dealing with stress (Heim, Meinlschmidt, & Nemeroff, 2003). Stress responses are extremely adaptive because they shift biological resources towards physiological functions that promote escape and/or survival, thus promoting adaptation through allostasis (McEwen & Gianaros, 2010). While adaptive, the stress response system is designed to be of a limited duration only (Weinstock, 2005). For example, according to the stress-diathesis model, when stress is of a chronic nature, prolonged activation of the HPA and SNS may occur (Ingram & Luxton, 2005). Prolonged activation of these systems can exact a cost (i.e. allostatic load) which, in extreme cases, can result in a number of long-term negative health outcomes such as diabetes, hypertension, cancer, and cardiovascular disease (McEwen & Stellar, 1993; McEwen, 2004).

While the implications of chronic stress on individuals are well-known, mounting evidence now suggests that chronic gestational stress can directly influence fetal brain development and programming of the HPA-axis (Cottrell & Seckl, 2009; Monk, Spicer, & Champagne, 2012). For example, O'Connor et al. (2005) concluded that anxiety in pregnancy

predicted elevations in offspring cortisol more than 10 years later. This effect was maintained after controlling for postnatal anxiety, depression, obstetric, and sociodemographic risk. In a study of the long-term effects of domestic violence on fetal development, Radtke et al. (2011) concluded that prenatal psychological stress, stemming directly from intimate partner violence, resulted in sustained HPA-axis alterations 10-19 years after birth (Radtke et al., 2011). Sandman et al. (2011) found that fetal exposure to stress peptides and hormones exert profound programming influences on the nervous system and increase the risk for emotional and cognitive impairment, including decreased brain volume in areas associated with learning and memory. Sandman et al. (2011) also found these effects to be capable of persisting throughout one's lifetime (Sandman et al., 2011). Additionally, Monk, Spicer, and Champagne (2012), found heightened prenatal HPA responses accounted for the increased risk of psychopathology and poorer emotional regulation among people with a history of abuse. Relating prenatal stress exposure to violence, empirical research has found prenatal stress to be predictive of serious and violent behaviour. For example, O'Conner et al. (2002) found that mothers who experienced severe anxiety during the late stages of pregnancy were twice as likely to have children with behavioural and/or emotional problems by age four years. Thus, again, just as is the case with prenatal toxin exposure, though not all men in this study were equally exposed or even exposed at all, these findings give us a more complete picture of the early developmental profile of these offenders. That picture is one of increased susceptibility to violence, neurobiological dysregulation, atypical stress responses, and psychosocial disorders.

Interestingly, while the majority of research on prenatal stress exposure focuses almost exclusively on the mother, recent evidence suggests a role for early paternal stress on the developing fetus as well. For example, investigations have found that paternal experiences of

chronic stress either throughout puberty or in adulthood can induce germ cell epigenetic reprogramming which may contribute HPA-axis dysregulation<sup>11</sup>, specifically blunted stress reactivity, in their offspring (Bale, 2014; Rodgers et al., 2013). Blunted stress reactivity has been implicated in externalizing forms of psychopathology, such as aggression and ASPD. It is also associated with cortical immaturity, low levels of arousal, and need for stimulus seeking; a behaviour which may lead to addiction-like tendencies to achieve a higher and more pleasant level of arousal (van Goozen et al., 2000). These findings are particularly relevant given that 25% (n=18) of the offenders in this study were born to a father who had served either in the military or law enforcement. Studies examining the prevalence of stress among men in the military have shown that more than one-quarter report suffering from significant work stress and a significant number of these individuals suffered serious emotional distress (Pflanz & Sonnek, 2002). Therefore, it is possible that the early developmental profile of these offenders was shaped, via epigenetic programming which, in turn, brought about changes in neural architecture.

While on the topic of epigenetic programming it is also important to note that studies on paternal risk factors have identified paternal preconception alcohol exposure as having deleterious effects on human offspring, including reduced birth weight, impaired cognitive functioning, and blunted HPA-axis responsivity (Knezovich & Ramsay, 2012; Rompala et al., 2016). While it's not yet known precisely at what point in their development - from germ cell to maturation - that sperm cells are most sensitive to environmental factors, the genetic contribution that a man delivers at fertilization has a marked effect on his offspring's epigenetic programming (Schmidt, 2018). These findings are especially important given that a quarter of

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<sup>11</sup> Epigenetics are heritable alterations in gene expression that do not involve changes in the germline DNA sequence.

the men in this study were born to a father who served in either the military and law enforcement; careers, which owing to their particularity stressful nature, put these men at increased risk for alcohol abuse, depression, increased suicide risk, sleep disturbance, relationship problems, and excessively aggressive conduct (Davey, Obst, & Sheehan, 2000; Hem, Berg, & Ekberg, 2001; Kapusta et al., 2010; Neylan et al., 2002; Richmond, Wodak, Kehoe, & Heather, 1998).

### Birth Complications

Perhaps related to toxic environmental exposures in utero, nine of the men (13%) suffered a medical complication at birth. Two were born premature, two were born anoxic, one was born with a blood disorder, two were born with injuries to the head or skull, and three required forceps delivery which, for two of the men, resulted in head injury. As children, these men also suffered from a litany of childhood medical illnesses. Of the 62 men for whom information could be found, 13% (n=8) suffered extreme migraines as children. 8% (n=5) suffered from seizure disorders, such as epilepsy and mild convulsions. Additionally, 7% (n=5) of the men were, as children, diagnosed with speech or communicative disorders such as a stutter or selective mutism. Given that poor language development is one of the most frequently reported characteristics of children with maternal substance abuse, it is possible that the language deficits of the men in this study were impacted by maternal substance abuse (Cohen & Taharally, 1992; Sparks, 2000).

Two (3%) were born with cardiac issues. Two (3%) suffered from Tourette's disorder. And two (3%) were diagnosed with fainting syndromes and would occasionally slip into fainting spells without warning. Again, each of these health impairments can be affected by prenatal

alcohol and drug use. Furthermore, six (8%) of the men were born into families where at least one blood relative had been convicted of murder. Most commonly, the relative was a brother, uncle, or a grandparent. Two (3%) of the individuals in this study were born to families where multiple members had been charged and convicted of murder. Six (8%) of the individuals in this study were born to a mother who had been incarcerated at least one time in her life, and seven (10%) were born to a father who had been incarcerated at least one time in his life. Of the seven fathers who had previously been incarcerated, five (71%) had been imprisoned for a violent offence such as sexual assault, domestic violence, or homicide. Studies examining the etiology of violence have consistently shown that approximately 50% of the variance in antisocial phenotypes is the result of genetic factors (Mason & Frick, 1994; Miles & Carey, 1997; Moffitt, 2005). Research has also shown that paternal antisocial personality, absenteeism, and emotional rejection are highly correlated to externalizing problems in male children (Cowan, Cohn, Cowan & Pearson, 1996; Phares & Compas, 1993). Thus, it can be concluded that some of these men had a developmental profile which placed them at a greater genetic risk for antisocial behaviour.

Not all men in this study were equally exposed to prenatal toxins, abuse, or came from families with either criminal or mental health conditions. However, each serial killer in this study was exposed to at least one of these adverse developmental factors. Given their prenatal exposures, from birth, many of these men would have been at a statistically higher risk for impulse control disorders, dysregulation of important neurotransmitters for learning and reward, dysregulations to the body's stress-response system, increased risk for poor cognitive and psychosocial functioning, as well as a higher risk for adult psychopathology including depression, PTSD, anxiety, and externalizing disorders, such as ASPD. These early

predispositions, though far from predeterminations, are the foundation upon which we can begin to formulate the developmental picture of serial homicide.

### **Part 3: Growing Up (Early Childhood [3-8])**

*In order to develop normally, a child requires progressively more complex joint activity with one or more adults who have an irrational emotional relationship with the child. Somebody's got to be crazy about that kid. That's number one. First, last, and always.*

Urie Bronfenbrenner, Developmental Psychologist  
(National Scientific Council on the Developing Child, 2004b, p. 1).

Of all the mammals, humans have the least mature brain at birth. The retention of the embryonic growth rate for the brain is due, in part, to evolutionary pressures. For example, it would be nearly impossible for a skull housing a 2-year-old human brain to pass through the birth canal (Bjorklun, 1997). The result of this is that human infants are born physically, motorically, and perceptually more immature even than their primate counterparts. However, unlike other mammals, human infants experience an explosion of neural growth and reorganization outside the womb. In fact, from birth to teenage years, there is a fourfold increase in the volume of the human brain, with total brain volume increasing 101% in the first year and reaching approximately 90% of adult volume by age six (Brown & Jernigan, 2012; Courchesne et al., 2000; Knickmeyer et al., 2008). Postnatal development is characterized by dendritic and axonal growth, synapse production, neuronal and synaptic pruning, and changes in neurotransmitter sensitivity (Webb, Monk, & Nelson, 2001).

The rapid growth and development of the postnatal human brain gives us a far higher potential for learning and adaptability than is granted to other mammals. Greater reward, however, demands greater risk. Outside the environment of the womb, our developing brains are



highly vulnerable to potentially adverse circumstances. Child abuse, neglect, exposure to domestic violence, or events as benign as living with a parent who is insensitive to one's emotional needs are some of the possible experiences which can exert adverse outcomes on a child's developing brain.

One process by which adversity can affect the early developing brain is called synaptic pruning. To understand how this happens, we need to understand a bit about how the brain works. Within the brain there are billions of neurons, or nerve cells, which send messages to each other across synapses. Synapses serve as the point of contact between each of the brain's neurons and allow the neuron to pass an electrical or chemical signal to another cell. The more a synapse is activated, the stronger the neural circuit it is attached to becomes (Chechik, Meilijson, & Ruppin, 1999). Together, neurons and synapses and the pathways they form make up the "wiring" of the brain and enable various parts of the brain to communicate and function together in a coordinated way. Humans are born with an estimated 100 billion neurons and an astounding 1,000 trillion synapses (Hawley & Gunner, 2000). This creates many more connections than is necessary. Development thus proceeds as an ongoing process of wiring and re-wiring the connections among neurons. The brain keeps the synapses that are constantly activated and prunes away those which are under-activated by way of programmed cell death. By adulthood, the number of synaptic connections and neurons in the human brain is reduced by approximately 40% (Huttenlocher & de Courten, 1987; Chechik et al., 1999).

Synaptic pruning is an experience dependent process that adheres to the "use it or lose it" rule (Hawley & Gunner, 2000). For example, children who receive parenting characterized by warmth, responsiveness, and positive unconditional regard are able to develop secure relationships with adults and cultivate important emotional skills, such as the capacity for emotional regulation

and coping, which will protect them from the stresses they will face as they grow. If, however children are raised in an early environment characterized by deprivation, trauma, or abuse, they will lack experiences that promote healthy growth, which may lead to the under-specification and miswiring of important brain circuits (Tierney & Nelson, 2009). Dr. Rhawn Joseph, a scientist at the Brain Research Laboratory in San Jose, California, explains it this way:

[An] abnormal or impoverished rearing environment can decrease a thousand-fold the number of synapses per axon... retard growth and eliminate billions if not trillions of synapses per brain and result in the preservation of abnormal interconnections which are normally discarded over the course of development (in Mate, 2009, p. 187).

The emotional experiences of children are tied to the social and emotional characteristics of the environments in which they live (National Scientific Council on the Developing Child, 2004b). Through a series of neural developmental processes, as young children, the interactions they have with parents or caregivers literally become embedded in the architecture of their brains. Consequently, deprivation early in childhood is a significant risk factor for problems with emotional attachment, vulnerability to stressors, and enduring changes in HPA-axis function in later life (Agid et al., 1999; Furukawa et al., 1999; Ziabreva et al., 2003). Owing to the essential nature of the family for establishing important emotional and neural foundations for development, this study now turns its attention to the serial killer's early developmental environment.

## Early Developmental Environment

### *Economics and Family Mental Health*

Socioeconomic status (SES) is an indirect measure of wellbeing. Those with higher incomes have access to opportunities that include more leisure time, better housing and social

conditions, more access to material goods such as books and adequate clothing, as well as access to better nutrition and healthcare (Pampel & Rogers, 2004; Pampel, Krueger, & Denney, 2010). Higher SES is also linked to child wellbeing and a wide array of beneficial health, cognitive, and socioemotional outcomes in children (Bradley & Corwyn, 2002). Looking at the early socioeconomic status of the men in this study it was found that 38% (n=27) were born or raised in families of lower socioeconomic backgrounds. These backgrounds included both chronic and extreme poverty as well as chronic financial insecurity. Employment figures showed that while 73% (n=51) had a father with stable employment, 7% (n=5) had fathers who supported the family through the proceeds of crime while in other instances, the father was either unemployed, deceased, or had abandoned the child and was thus not a financial contributor to the family. Examining the employment figures of the mothers, it appears that 38% (n=27) of the men were raised by mothers who were employed outside the home, 34% (n=24) were raised by mothers whose primary occupation was a homemaker, and three (4%) were raised by a mother who made a living primarily, through sex work. In all other instances, the mother was either unemployed, deceased, or had abandoned the child and, thus, was not a financial contributor.

Most of the men in this study were not raised in low-income homes. For example, 54% (n=38) were born or raised in families from middle class backgrounds and 7% (n=5) were born or raised in families with high incomes. Nonetheless, the rate of poverty and financial insecurity among this group is much higher than national averages. For example, according to US census data, the average percentage of families below the poverty level between 1959 and 2016 is 11.2%. Even the highest rates of poverty, which were in 1959, reached a maximum of 18.5% (United States Census Bureau, 2017). Given the high rates of childhood poverty among the men in this study, it is important to understand how poverty may have shaped their development.

The effects of poverty on child health and development can be broken into both proximal and distal factors. Proximal factors are those that directly act on the body, while distal factors occur further back and impact development by way of other causes along a causal chain (World Health Organization, 2002). For children living in poverty, conditions of economic hardship often lead to elevated stress hormone levels. For example, Ted Bundy described struggling with feelings of inferiority due to his parent's low economic status:

I felt inferior, in part because of the money thing. My family didn't have money problems per se, but I was always envious of the kids who lived in all those brick houses where the executives and doctors lived. I felt kind of deprived, at a disadvantage to those people who had the money, the successful parents, all the goodies (Michaud & Aynesworth, 2000, p. 25).

Overcrowding, noise, substandard housing, separation from parent(s), and exposure to family or neighbourhood violence also all impact the brain's stress-response systems (National Scientific Council on the Developing Child, 2014a). Not only do these distal factors affect the child's stress-response systems but other areas of the brain as well. For example, one study examined a cross-sectional sample of 389 children aged 4 to 22 years and found that children in families in poverty had reduced gray matter volumes in the frontal and temporal cortex and the hippocampus (Blair & Raver, 2016). Reductions of grey matter in these areas can lead to deviations from normal development, including lower neurocognitive performance (Gogtay & Thompson, 2010). Another study, a longitudinal analysis of 77 children, found that those in low-income families had significantly reduced total gray matter volumes particularly in the frontal and parietal regions of the brain (Hanson et al., 2013). These regions are associated with functions such as long-term planning, impulse control, and sensory processing and integration. What these studies demonstrate is that many important aspects of a child's cognitive development are substantially impacted by experiences of financial impoverishment.

Children who develop in the context of poverty experience a markedly diminished quality of life than their middle-class counterparts. Children from low socioeconomic backgrounds are more likely to experience stressors in their daily environment such as overcrowding, exposure to violence, maternal depression and detrimental parental separation. They have also been found to experience more than twice the rate of psychiatric disorders (31.6% versus 13.8%), poor school performance (29.7% versus 13.3%), social impairment (11.9% versus 3.5%), and almost twice the rate of chronic health problems (30.1% versus 17.6%) than their middle-class peers (Offord & Lipman, 1999). Again, while none of these factors lead to predetermined outcomes, they contribute to shaping the child's overall development.

#### *Parental Mental Health and Child Outcomes*

Examining the proximal factors of poverty, a large body of evidence suggests that a child's mental health is often exacerbated when low-income mothers experience symptoms of depression. Several studies have documented that women who live in poverty with young children are more likely to be depressed than non-low-income women (Liaw & Brooks-Gunn, 1994; Brooks-Gunn, Duncan, Aber, 1997; Radloff, 1975; Hall, Williams, & Greenberg, 1985). Due to the co-occurrence of maternal depression and low income, the current study examined the rate of mental health issues among the families of the men in the study. Out of 65 men for whom information could be found, 27 or 41% were born to parents who had a family history of mental illness. Six of these men (9%) were born to parents who both had a family history of mental illness. Ten (15%) were born into families where mental illness was confined to the mother's side and 11 (17%) were born into families where mental illness was confined to the father's side. The most frequent types of mental health issues found along the matriline were depression,

suicidality, and substance abuse disorders, while the disorders most common along the patriline were substance abuse, ASPD, and paraphilias, including sadism and pedophilia.

The role of parental mental illness is important for understanding child development not only because it confers a genetic or biological risk, but also because parental mental illness fosters an environment that may have negative impacts on the development of the child. For example, research has shown that mothers with depression often have difficulties providing their children with positive and responsive parenting (Gelfand & Teti, 1990; Saint George, Penner, & Burt, 2017). The emotional difficulties experienced by depressed mothers tend to outweigh the immediate needs, whether physical or emotional, of their children. Depression has thus been found to be significantly associated with more hostile, negative parenting, and with more disengaged or withdrawn parenting styles (National Research Council [US] and Institute of Medicine [US] Committee on Depression, 2009), all of which can leave the child feeling neglected or emotionally rejected.

An interesting consequence of negative and hostile parenting are disruptions in a child's ability to self-regulate. Emotional regulation processes such as impulse control and the delay of gratification have been positively linked to parental self-regulation (Jaramillo et al., 2017; Karreman et al., 2006). Unfortunately, because depressed mothers tend to be less attuned to their own emotional needs or those of their children, they are unable to provide the learning environments or emotional support opportunities needed by children when learning to self-regulate. Perhaps owing to a lack of parental responsiveness, rather than engaging with their mother or other caretakers, children of depressed mothers tend to employ internally directed strategies of self-soothing to regulate tension (Manian & Bornstein, 2009). This finding will

become important when understanding the role of fantasy as it emerges, in serial killers, during adolescence.

Furthermore, of special interest is the impact maternal depression has on developing males. Studies that examining the sex differences of children exposed to maternal depression have found that males are uniquely sensitive to maternal depression. In comparison to females, males are more likely to be vulnerable to impaired cognitive abilities and to struggle more with maintaining emotional regulation (Murray & Cooper, 1996; Sharp et al., 1995; Weinberg et al., 2006). While the explanatory pathways for this finding have yet to be adequately described, this initial result raises important questions about the extent to which the men in this study may have been impacted by maternal depression and just how big a role these experiences played on the development of the psychopathology that followed.

Maternal depression results in profound psychological distress for children, the research is clear on this. However, to add more clarity to an otherwise abstract concept consider the case of Michael Bruce Ross. Ross was an American serial killer who killed at least eight people between 1981 and 1984. Ross's mother was afflicted by a mental illness which resulted in sharp changes in mood; she was also prone to depression. To accommodate her mood swings, Ross had what he and his siblings called: Mom drills. According to Ross:

The first person up in the morning would go downstairs while the rest of us kids would wait and be real quiet and listen to what type of reception we'd get from our mother. And, if we got one kind of reception, we'd know how to act... See, one day my sister, Tina, was setting the table, and, uh, there was six of us in the family, you know. So, she opened up the dishwasher to get six glasses, three in each hand. You know how you do it. You know, the glasses clink together. My mother went off. She was screaming and yelling', so we knew that was a bad day coming (Berry-Dee, 2007, p. 73).

What is clear from Ross' reflection is the anguish that arises from the unpredictability of his mother's mood swings. Mom drills, as Ross describes them represent an attempt to establish

some form of structure an otherwise unpredictable and hostile environment. Empirical research shows that children benefit from structure, routine, and predictability (National Scientific Council on the Developing Child, 2004b). While some change in children's lives is normal, if not, anticipated, sudden and dramatic disruptions, such as those described by Ross, can be extremely disruptive to a child's development. In particular, these experiences can promote feelings of insecurity, lead to disrupted attachment styles, internalizing problems, and can result in the disruption of the child's stress-response system (Ashman et al., 2002; Brennan et al., 2008).

#### *Family Structure and Child Development*

Looking at family structure, the men in this study were found to be raised primarily by both biological parents 64% (n=32). 21% (n=15) were raised in a single parent household wherein the parent had never been married and 33% (n=23) were raised in a household where the parents divorced. For children whose parents divorced parental separation occurred in the early years of their development. The most common age of the child at the time divorce was age 8 (n=1). Parental separation in childhood is a major risk factor for depression, bipolar mood disorder, low self-esteem, and alcohol use disorder in later life (Bohman et al., 2017; Palosaari & Aro, 1995). The effects of parental separation are particularly exasperated in conditions of poverty. For example, when examined together, poverty and single parent status have been shown to have negative impacts on child development, including disruptions to the HPA axis, problems with psychosocial functioning, and poor educational achievement (Amato, Patterson, & Beattie, 2015; Offord & Lipman, 1999; Zalewski et al., 2012).



### *Abandonment and Fathers*

Given the high rate of divorce among the parents of the men in this study the frequency of parental abandonment and absenteeism was examined. Both absenteeism and abandonment were a common finding. For example, among the men in this study, 52% (n=37) were abandoned by at least one parental figure early in their childhood. Three (4%) of the men were abandoned as children due to the fact that a parent had been incarcerated, five (7%) had been abandoned as an outcome of divorce, and four (6%) had experienced a parental death. In all other instances, the parent(s), left the child willingly and without a compelling external reason. Furthermore, four (6%) of the men in this study spent at least one year of their childhood in an orphanage while 11 (16%) were raised in foster families.

This thesis also found that fathers were more than twice as likely to abandon their children (n=31) than mothers (n=17). Father involvement is a determinant of health and it plays an important part in child's psychosocial development (Ball, Moselle, & Pendersen, 2007). For example, lower levels of empathy have been observed in children who perceived their fathers as more neglectful than their mothers (Arzeen, Riaz, & Hassan, 2012). Additionally, according to Rohner, Khaleque, and Cournoyer (2005), who introduced the Parental-Acceptance-Rejection Theory (PAR), rejected children tend to be more hostile, more aggressive, and tend to have a greater impairment to their self-esteem and sense of self-adequacy than their non-rejected peers. They are also more likely to hold more negative world views. Other studies have concluded that paternal rejection is a significant predictor of child specific outcomes including personality and psychological adjustment problems (Barnett et al. 1992), conduct and delinquency problems (Kroupa, 1988), and substance abuse disorders (Brook et al., 1981). Boyce et al. (2006) concluded low father involvement to be a risk factor for mental health symptoms such as

depression. Additionally, emotional rejection by fathers has been found to directly affect a child's self-esteem and lead to experiences of social or emotional withdrawal (de la Vega, 2011).

Furthermore, in a summary examination of the literature on father absenteeism, McLanahan, Tach, and Schneider (2014), found strong evidence to suggest that father absence negatively affects children's social-emotional development. Specifically, the absence of a father figure increased the child's risk for later externalizing behaviour, such as conduct disorder. According to McLanahan et al. (2014), increased behavioural issues and socio-emotional impacts are more pronounced if father absence occurs during early childhood rather than during middle childhood. McLanahan et al. (2014) also concluded that these impacts are more pronounced for boys than for girls. Unfortunately for the men in this study, the most common age at which they were abandoned by a father was within their first 12 months of life (n=8), followed by the ages of 4 - 6 (n=6). Five men had fathers who abandoned the family during their early adolescence.

Regardless of whether some of the men in this study were physically abandoned, many of the individuals described having felt emotionally abandoned by their fathers. For example, many of the men perceived their fathers as emotionally absent and described being made to feel as though they were to be seen and not heard. Take for example, this statement made by Arthur Shawcross. When reflecting on his relationship with his father he states: "*Myself and my father never talked personally. He wouldn't talk to us kids*" (Fezzani, 2015, p. 48). According to Shawcross, children were beneath his father and unworthy of being indulged in conversation. Shawcross was far from the only individual in this study to feel this way. Like Shawcross' father, Joel Rifkin's father took a stand-offish approach to his adoptive son. According to Rifkin:

Dad was the type that as soon as he got home he went straight to the mail. I'd be like, 'Dad, I did this at school today!' and he'd just be mumbling something, 'Huh huh' (Fezzani, 2015, p. 151).

The potential influence of perceived emotional absenteeism on Rifkin's overall socioemotional development is made all the more powerful when considering that he was raised by an adoptive family. Rifkin was abandoned by his birth mother and adopted at three weeks of age. Longitudinal research has found that adoptees are at an increased risk for various behavioral, psychological, and academic problems when compared with nonadopted individuals (Brodzinsky, 1993). Thus, in Rifkin's case it is likely that the psychological impact of adoption was compounded by the perceived rejection he felt from his father.

Ted Bundy also endured emotional sidelining by his step-father, stating: "*My dad never played baseball or basketball or football with me...So I was all on my own*" (Michaud & Aynesworth, 2000, p. 22). In fact, Bundy and his step-father were widely reported to have had a poor relationship throughout much of Bundy's childhood. As stated by Bundy: "*the primary contact with my father was him directing and telling me things I should be doing. I was much closer to my mother*" (Carlisle, 2017, Chapter 6, para. 16). Ted never knew who his biological father was, and, in fact, spent a great deal of time thinking that his mother was actually his sister.

Overwhelmingly the men in this study described feeling emotionally alienated by their fathers. Of those for whom additional qualitative analysis was conducted, 85% (n=17) indicated that they had been given social cues that they were unwanted or unloved. For example, some of the individuals felt that their fathers had placed a greater emphasis on other siblings or other family members. As explained by Edmund Kemper: "*He [his father] didn't want me around, because I upset his second wife...He cared more for his second family than he did us*" (von Beroldingen, 1974, para. 68). In comparison to the other members of his family, Kemper

perceived his presence as both unwanted and burdensome. These sentiments are echoed by Keith Hunter Jepserson who stated: “*I was the only child who had to pay room and board*” (Fezzani, 2015, p. 88). Jepserson believed that his father demonstrated favoritism toward his other siblings.

Westley Allan Dodd also described feeling emotionally alienated by his father, stating:

I was up on the fence and I fell off...The next thing I knew I was lying on my back up by the back porch. Apparently one of the neighbor kids had dragged me up there after I fell off the fence and passed out. So I went inside and told dad. I was scared, thought I was gonna die or something. I had never passed out before. Instead of hearing what I wanted to hear, which was, ‘Are you going to be okay? You’re not going to die,’ I was sent to my room and punished for being up on the fence. Dad didn’t care that I was hurt. All he cared about was that I’d broken a rule (King, 2011, Chapter 15, para. 7).

What is most salient about this statement are the feelings of fear and panic that accompanied Dodd’s injury. Whilst from an objective lens, the injury itself may have been relatively benign, taken from the perspective of a child the novelty of the injury and the uncertainty about the seriousness of it would likely have been terrifying. Yet, as described by Dodd, there was no supportive emotional response. Instead, his fear and insecurity were met with rapprochement. Ridiculing or dismissing children’s emotional needs can result in what’s called insecure and avoidant attachment. This is an attachment style that is associated with low levels of self-esteem; avoidant children think themselves unworthy and unacceptable and experienced increased risk for developing adjustment problems, depression, and anxiety (Benoit, 2004; Larose, & Bernier, 2001). Additionally, children whose caregivers consistently respond to distress in insensitive or ‘rejecting’ ways learn to develop coping strategies that minimize displays of negative emotion in the presence of the caregiver. This is because these children learn that expressing distress or the need for comfort will ultimately evoke rejection from a caregiver. Based on their experiences, avoidant children often come to view others as untrustworthy

(Pascuzzo, Moss, & Cyr, 2015). They may also come to develop positive but unrealistic self-perceptions (Pascuzzo, Moss, & Cyr, 2015)

For some of the men in this study, the difficult relationships they had with their fathers provoked feelings of inadequacy, disappointment, low self-worth, and feelings of emasculation. For example, when reflecting on the messages that his father instilled in him as a child, Joel Rifkin stated:

‘No kid of mine can’t do math! No kid of mine can’t do sports!’ I was left-handed, he was right-handed. We’d go to pick up something simple, and I’d be on one side, he’d be on the other side, and I’d get yelled at: ‘Work like a man, you’re supposed to help a guy out, not try to mess him up.’ It was constant... (Fezzani, 2015, p. 151).

The depth of Rifkin’s disappointment in himself is reflected in his recollections. He was never good enough; not in his father eyes. He was never ‘man enough.’ There was always something about him that was lacking, weak, or in need of improvement. The message of unconditional positive regard – a condition of warm acceptance - was not one that Rifkin experiences as a child.



**Image 4.** Joel Rifkin being held by his adoptive parents as an infant.  
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<https://skcentral.tumblr.com/post/26280557609/little-baby-joel-rifkin#post-notes>

Similarly, when reflecting on his father, John Wayne Gacy stated:

I was a disappointment to my dad because I was weak and he was strong. He hated the weak person. Even in emotions (Cahill, 2014, Chapter 3, para. 44).

Gacy had an especially difficult time achieving the standard of masculinity his father demanded. In fact, as a gay man, John Gacy had to keep the truth of his sexual orientation a secret throughout his childhood. His father (John Gacy Sr), a war veteran and mechanic, would not accept John as a gay man. In fact, in the one instance in which his father became aware of John's sexual activities with a man, John Gacy Sr whipped him with a leather strap as punishment (Clark Prosecutor, 2019). Despite the fact that John was molested by a male adult some time later, he would never go on to tell his father; fearful of being blamed and once again punished. Finally, according to Westley Allan Dodd, an American serial killer who sexually abused and killed three children in 1989:

Dad took great pleasure in thoroughly humiliating me, teasing me about not knowing the difference between men and women (Carlisle & Carlisle, 2015, p. 134).

Clearly, the father-son relationships of the men in this study left them feeling emasculated, belittled, and valueless. Despite viewing their fathers as emotionally distant and abusive, however, the reflections of many of the men in this study revealed a longing for paternal acceptance. For example, Keith Hunter Jespersen, who always felt as though his father favoured his siblings lamented: "*I tried to please my father at every turn and it only caused me problems...*" (Hunter, 2012, p. 69). While reflecting on his adoptive father's suicide, Joel Rifkin stated, bitterly:

To this day I think he timed that cocktail knowing that the test was coming. He didn't want to see the...the failure. And I didn't get the chance to see to show him that it wasn't a failure (Serial Killer Documentaries, 2013).

The depth of Rifkin's despair is palpable in the sense that he believes his father timed his suicide perfectly. To his father, Joel would always be a failure. He would never have the opportunity to be acknowledged as successful. He would never be appreciated in the eyes of a man he revered. Even John Wayne Gacy, who described his father as a violent alcoholic, stated: "*I never swung at my dad, because I loved him for what he stood for*" (Harrington, 2012, para. 52). In spite of the violence and abuse these men experienced at the hands of their fathers, the desire to be loved and respected by their fathers endures.

### *Mothers: A Complex Relationship*

What of the mothers of serial killers? Perhaps unsurprisingly, the serial killer's emotional connection and early experiences with their mothers are extremely complex. Unlike fathers, the mothers of the men in this study were more often present in the lives of their children. For better or for worse, the mothers of these men were the primary caretakers of their families and while not always domineering or received as the head of the household, the mothers were described as having a powerful impact on the men during their early years.

### *Mother as Ornamental*

38% (n=8) of the men described their mothers in passing, as though they were an afterthought. For example, Robert Pickton, Keith Hunter Jespersen, Dennis Rader, Joel Rifkin, John Wayne Gacy, Peter Woodcock, and Clifford Olson perceived their mothers as active participants in the family but framed their mother's contribution as mild. These men tended to describe their mothers in a fact-based manner, refraining from emotionally laden language or

descriptions. Take for example this description offered by Joel Rifkin. When asked to describe his mother, Rifkin stated:

She was the gardener of the family. She was always playing in the mud, planting stuff as far back as I can remember. So she got me interested in gardening, design, and plants. She was also a still photographer (Fezzani, 2015, p. 150).

Like the others who perceived their mothers ornamentally Rifkin's description is primarily fact-based and almost neutral. Similarly, when asked how his relationship was with his mother, Keith Hunter Jespersen kept his answer short and sweet, replying: "*Good. My mother always defended me*" (Fezzani, 2015, p. 98). Again, though positively framed, Jespersen offers very little else about his relationship to his mother; choosing to focus instead on his negative relationship with his father. What little evidence these men do share about their mothers tends to be positive but absent in their recollections is elaboration. In such cases, these men offer little insight into the dynamics of their relationship with maternal figures.

### *Mother as Paragon*

One individual described his mother in a very positive light. Ted Bundy held his mother up as a paragon. She was seen as the source of all the good that filtered into his life. She was held as a symbol of virtue and kindness. As described by Bundy:

My mother taught me the English language... She gave me great verbal skills... And I attribute that to my mother... There's no question that I was more influenced by my mom than by my dad (Michaud & Aynesworth, 2000, p. 18).

Similar to those in the group above, Bundy tends to typify his mother in a positive light, but his descriptions are far more emotive and far more elaborative. His mother is not just 'nice,'



or ‘kind’ and his relationship is more than just ‘good.’ He credits her for his scholastic abilities; a trait of which he was exceedingly proud:

All the way through high school and college, I never got below an ‘A’ on a major project. And I attribute that to my mother (Michaud & Aynesworth, 1989, p. 20).

### *Mother as Unloving*

Of the men for whom further qualitative analysis was conducted, 16% (n=3) described feeling as though their relationship with their mother was emotionally insufficient. For example, Westley Allan Dodd, who by all accounts grew up with two loving parents stated: “*my parents didn’t seem to care very much about me...They say they did but I never believed it...*” (Carlisle, 2015, p. 113). Fuelled in part by jealousy toward his younger siblings, Dodd explained:

All I can say is I grew up in a house that only had roommates... People ask me about my mother and I can’t tell them anything about her because I don’t know her (Kroll, 1993, para. 10).

While Dodd does not explicitly describe any negative relations between himself and his mother, he describes having experienced a deep emotional distance. Similarly, Lawrence Bittaker, who was adopted by an older couple while he was child, explained: “*my family life was like I was a boarder...My whole life I had no woman who loved me...*” (Schram, 2007 para. 2). Also, Richard Cottingham, an American serial killer who killed at least six women between 1967 and 1980, described feeling: “*unwanted, unsolicited, unappreciated, and unloved,*” throughout his childhood (Fezzani, 2015, Chapter 6, para. 38). By all accounts, Cottingham grew up with a loving and devoted, if not doting, mother and so his description of his mother is quite interesting. In fact, the noted discrepancies between objective and perceived realities that characterize the reflections of these men helps to illustrate the need to incorporate a more phenomenological

approach of the study of these individuals. If using quantitative data, we would miss out entirely on the richness and complexity of the early experiences of these men.

Regardless of whether their perceptions matched reality, individuals who perceived their mothers as unloving tended to view themselves as part of a family but at the periphery of parental love. Research shows that children who experience emotional denial by a parent are at a statistically increased risk of internalizing psychopathology and emotional impairment (de la Vega et al., 2011).

### *Mother as Villain*

Lastly, 35% (n=7) of the men from whom additional qualitative analysis was carried out described their mother as an extremely authoritative, domineering, and controlling figure. In the reflections of those who perceived their mothers as authoritative, domineering, and controlling, the mother was made to assume the archetype of a villain; her actions were described as punitive and cruel. Examining the reflections of the men who perceived their mother as a villain, their discussion tended to center around the pain the mother caused, the humiliation she inflicted, and the overall pettiness of her behaviour. Those who were exposed to maternal abuse, or described their mothers as abusive, tended to describe a sense of having been belittled, humiliated, emasculated, and feeling psychologically small. These feelings parallel those which have been observed in children who experience psychological abuse. For example, studies have shown a relationship between psychological abuse and low mood, isolation, hopelessness and low self-esteem (Brown, Cohen, Johnson, & Smailes, 1999; Kaufman, 1991).

Each of the men who described their mothers as abusive tended to reflect upon their abuse as though they were tools or pawns. They described themselves as having been

stripped of personal agency. Some of them, like Edmund Kemper, explicitly compare themselves to pieces on a board game. Others described themselves as reluctantly servile. For example, whilst reflecting on his mother's abuse, Henry Lee Lucas said:

She wanted me to do what she said, and that's it. That is, make sure the wood is in, the water's in, make sure the fires are kept up; the dishes when you got through eatin', I'd have to wash 'em. Work. That's it. And I'd have to stand and watch her have sexual acts with a man (Cuba & Norris, 1985, para. 39).

From a very young age, these men perceived themselves as 'things' to control and as psychologically impotent. To accommodate the hyperinflated and dominant personalities of their mothers, these men tended to make themselves small and assumed an identity which is best described as meek. Such responses are in line with the literature that suggests anxious children employ passive surrender as a form of defence (Smith & Danielsson, 1982).

### *Desire for A Relationship*

Despite differences in how they viewed their mothers, most of the men in this study (80% or n=16) described having desperately longed for an authentic emotional relationship with them. For example, Ted Bundy, who was the one individual who perceived his mother as a paragon, stated:

I don't resent it, but I don't know why this is. There's something in her background that prevents her from opening up...my mother and I...didn't talk a lot about real personal matters (Michaud & Aynesworth, 2009, p. 19).

While Bundy described his relationship with his mother as overwhelmingly positive, he described feeling that his mother could have done more to open up emotionally. Reflecting on his childhood Bundy felt as though there were many intellectual aspects and areas of life and of relationships that he was denied access to. Despite his intellectual curiosity, in the name of polite

conversational certain important topics were not discussed. This inaccessibility of knowledge will become more relevant when describing the origin of Bundy's violence and voyeurism.

Aside from Bundy, who was an outlier in his description of his mother, most of the men in this study held similar desires; a desire for an emotional relationship with their mother. For example, Edmund Kemper, who, despite having had an abrasive relationship with his mother stated:

My mother was uhh, a sick, angry, hungry, and very sad woman. I hated her, but I wanted to love my mother (Horvath, 1984).

Regardless of whether the men were abused as children or not, the desire to be accepted and to have an emotional connection with their mothers was a common theme throughout their narratives. Studies show that as much as 26% of the variation in children's psychological adjustment can be accounted for by the degree to which they perceived themselves as accepted or rejected by parents (Rohner, Khaleque, & Cournoyer, 2005). This finding holds true regardless of culture, ethnicity, or geographic location (Rohner et al., 2005). When reflecting upon the early experiences of the men in this study, it appears that parental rejection marks a great deal of their experience. Perceived emotional absenteeism by both fathers and mothers, in combination with active rejection by fathers who viewed their children as weak and mothers who exposed their children to humiliating and degrading forms of abuse facilitated a painful longing for acceptance and a lingering desire to be seen, loved, and appreciated. It also led to the development of feelings such as inadequacy, insecurity, anger, and powerlessness.

### *Exposure to Violence and Abuse*

Exposure to violence and/or abuse was another common feature among the men in this study. Out of the 67 men for whom information could be found, 64% (n=45) described having

been the victim of child abuse. The most frequent form of abuse reported was psychological abuse (n=32). Take for example Henry Lee Lucas. Lucas was an American drifter and serial killer who was convicted of 11 murders committed between 1960 and 1983. Not only was Lucas raised in extreme poverty with a mother who suffered from alcoholism and who made her living as a sex worker, he was also forced to endure a childhood marked by humiliation. According to Lucas:

When I first grew up and can remember, I was dressed as a girl by my mother. I had hair like a girl. And I stayed that way for two or three years. And after that I was treated like what I call the dog of the family (Norris, 1988, p. 109).

Lucas was often sent to school dressed as a girl and was made fun of by other students. In addition to the psychological impact of having been repeatedly humiliated by his mother, Lucas was also heavily impacted by his mother's cruelty toward the things that he loved. For example, in response to the question of whether he owned any pets as a child, Lucas stated:

No. Well, everything I had was destroyed. My mother, if I had a pony, she'd a killed it. If I had a goat or anything like that, she killed it. She wouldn't allow me to love nothin' (Cuba & Norris, 1985, para. 40).

The psychological impact of the loss of something loved at the hands of someone feared would have been a very heavy burden for a child to bear. Additionally, though his story is somewhat different from Lucas, Edmund Kemper, the so-called co-ed killer who murdered 10 people between 1964 and 1973, including his paternal grandparents and mother, described his mother as "*an alcoholic*" who "*constantly bitched and screamed at me...*" (von Beroldingen, 1974, para. 63). Kemper's mother was a constant topic of his post-conviction interviews and while there were many peculiarities to their relationship, one thing for certain was that Kemper, though he wanted to love his mother and at times described feeling fond of her, viewed her as an

impossibly difficult woman who subjected him to psychological abuse. Of the 32 men who recalled instances of psychological abuse, 53% (n=17) were abused primarily by their mothers.

Physical abuse was the second most prevalent. 46% (n=32) of the men in this study described having been physically abused as a child; however, unlike the psychological abuse they experienced, fathers were described as the primary perpetrators (67%). Neglect followed. 30% (n=21) of the individuals in this study described childhood experiences of neglect. Sexual abuse was less common among the men in this study with only 24% (n=16) individuals disclosing the fact that they had suffered sexual abuse at the hands of a parent or guardian. One individual who recalled being sexually abused as a child was Arthur Shawcross. Also known as the Genesee River Killer, Shawcross was an American serial killer who killed at least 14 people between 1972 and 1989. When describing his early home environment, Shawcross stated:

What went on in the home I grew up in is better left unsaid, but I cannot do it! I, as a child, had no control on who my sex partner was! (Berry-Dee, 2007, p. 69).

According to Shawcross, he was repeatedly forced to engage his mother, sister, and other female cousins in incestuous sexual acts as a child. Six (9%) of the individuals in this study recounted poly-victimization; the experience of having experienced more than one type of abuse.

In addition to their own experiences of abuse, 22 (31%) of the individuals in this study were exposed to intimate partner violence (IPV). This is not surprising given that domestic violence and child abuse are known to be highly correlated (Chemtob & Carlson, 2004). For example, John Wayne Gacy, who sexually assaulted and murdered at least 33 teenage boys and young men between 1972 and 1978, explained: “*My dad drank a lot, and when he drank a lot, he was abusive to my mother and to me*” (Harrington, 2012, para. 51). Arthur Shawcross recalled the relationship between his mother and father as one of domination, control, and emotional abuse. He was ashamed of his father’s inability to stand up to his mother and stated: “*I always*

*made the statement that I would never let a woman do that to me”* (Kraus, 1995, p. 15).

Similarly, Henry Lee Lucas lived in a home wherein his mother brutalized his father both physically and mentally. Lucas’ father, who was paralyzed from the waist down, was constantly subjected to a barrage of verbal insults and was made to watch his wife engage in sexual relations with other men. Lucas, whose father died of hypothermia when Lucas was still a child blamed the death on his mother. Lucas explained:

He went out and lay in the snow to get away from his wife having sex with another man...That’s what made him die. He laid down in the snow and caught pneumonia and he was drunk, and he just died (Berry-Dee, 2007, p. 256).

Over half of the men for whom further qualitative analysis was conducted (n=11) witnessed multiple types of abuse in their early childhood home including physical violence (n=16), sexual violence (n=2), and emotional/psychological violence (n=17). While there were 5 instances in which there was mutual abuse between partners, husbands or male partners were most frequently the abusers within relationships (72%). According to Bandura’s (1977) Social Learning Theory, children develop beliefs and behaviour patterns from observing and interacting with others, particularly their parents. Having two parents who engage in IPV, rather than one, can be conceptualized as providing children with double the opportunity to observe and learn aggression (McDonald et al., 2009). Additionally, families in which the parents engage in both IPV and aggression toward children would also offer children additional opportunities for learning aggressive behaviour patterns (McDonald et al., 2009).

Early negative experiences such as child maltreatment or witnessing IPV can profoundly affect the development of the brain. Psychological abuse, which is the most prevalent form of abuse experienced by children, is significantly associated with child adjustment problems including internalizing and externalizing problems such as depression, self-destructive

behaviour, eating disorders, attention deficit disorders, drug and alcohol problems, sexual promiscuity, and delinquency (de la Vega et al., 2011; Hawley & Gunner, 2000). At this juncture, however, it is important that we not assume that a child who experiences trauma, violence, or abuse is incapable of healthy functioning in adulthood (Hawley & Gunner, 2000).

In fact, while stressful experiences in early childhood confer risk, by no means are deterministic. According to the National Scientific Council on the Developing Child (2004c): *“there is no credible scientific evidence that young children who have been exposed to violence will invariably grow up to be violent adults themselves”* (p.3). Exposure to risk factors within one’s lifetime is always moderated by factors such as genetics, a capacity for resilience, social and familial supports, cognitive skills, and intelligence (DeBellis et al., 1999; National Scientific Council on the Developing Child, 2005/2014). Instead of one-to-one causal explanations such as ‘violence genes,’ ‘psychopathy genes,’ ‘addiction genes,’ explanations that demonstrate only our preference for simple and quickly understood explanations, not reality, maladaptive development is more frequently the outcome of cumulative risk. Cumulative risk comprises the total number of risks factors a person is exposed to over his or her lifetime<sup>12</sup> (Sameroff et al., 1987). Multiple risk factor exposures overlap over time and, with repeated exposure, in the absence of protective factors, can negatively affect an individual’s overall development (Kraemer, Lowe, & Kupfer, 2005). As stated by James Garbarino (2017): *“childhood adversity is common and prominent among individuals who kill people...”* (p. s32).

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<sup>12</sup> Risk factors include environmental risk (prenatal substance exposures, head trauma, social isolation or rejection); familial risk (inadequate parenting, parental marital discord, child maltreatment or abuse, family dysfunction, low social class); genetic risk (family history of mental illness or violence); and gene–environment risk (the influence of genes working through the environment), among others (Plomin, DeFries, & Loehlin, 1977; Scarr & McCartney, 1983).



The men in this study are evidence of this. For example, the average number of early developmental risk factors each of these men were exposed to was 7.22, with the number of risk factors ranging from 3 to 13. These risk factors included parental substance abuse, family histories of mental illness, childhood abuse, and witnessing IPV. Some were born into poverty, some were emotionally rejected and/or abandoned by their parents, and as will be described below, many were bullied or rejected and failed to establish positive peer relationships throughout their early life. Together, the confluence of these experiences produces a snowball effect of risk factors which build and accumulate over time. For now, it is sufficient to understand that child abuse and exposure to domestic violence are not predeterminate risk factors for violence in adulthood. Clearly, however, the costs of human suffering leave an indelible mark on the child, hampering healthy development.

#### **Part 4: Growing Up (Middle Childhood and Early Adolescence [9-15])**

*Relationships are the ‘active ingredients’ of the environment’s influence on healthy human development.*

Center on the Developing Child at Harvard University (2015).

Humans are deeply social creatures. From the moment of birth, we are shaped by the quality of our social experiences and relationships to others. While social relationships begin in the family unit, they extend outward away from family as we age (Elias et al., 1985; Lynch & Cicchetti, 1997). By the time we reach middle childhood, a period between the ages of 9 and 11, relationships are less adult-focused and more peer focused. Additionally, due to increased neurocognitive development at this time, friendships with same age peers begin to take on a more meaningful role. Friendships, at this age, provide a context that supports numerous aspects of a child’s development, including empathy, self-confidence, impulse control, morality,

emotional self-regulation, and even the ability to engage in non-violent conflict resolution (Cassidy & Asher, 1992; Bukowski, Newcomb, & Hartup, 1996; Rubin, Fredstrom, & Bowker, 2008; Hartup & Sancilio, 1986). The greater emotional significance of friendships at this age is due, in part, to the development of an important cognitive skill: Theory of Mind (ToM).

ToM is the ability to attribute different mental states to distinct individuals (Astington, 1993; Wellman, 1990). It is a cognitive skill that advances through several stages of development. For example, first-order ToM, which involves thinking about what someone else is thinking or feeling, develops between 4 and 5 years of age (Westby & Robinson, 2014). Second-order ToM, which involves thinking about what someone is thinking or feeling about what someone else is thinking or feeling, emerges shortly after first order; or by age 7 years (Westby & Robinson, 2014). Lastly, higher order cognitive and affective ToM, such as recognizing lies, sarcasm, figurative language, and idioms typically develops between 8 and 12 years of age (Westby & Robinson, 2014).

Because very young children, such as those under the age of twelve, are still neurodevelopmentally immature and lack ToM, they cannot fully appreciate or possess a mature understanding of the feelings, intentions, and perspectives of others (Selman, 1980). The cognitive abilities necessary for ToM expression, such as impulse control, selective attention, and even executive functioning, begin to sharpen around the time of middle childhood (Bradford, Jentsch, & Gomez). These new cognitive abilities allow children to begin appreciating the point of views of others more authentically. Consequently, peer relationships at this age take on a much more meaningful emotional significance. So too does the experience of social rejection. In fact, the absence of positive peer relationships during adolescence had been associated with increases in an individual's risk for a range of antisocial behaviours, negative emotional

developmental outcomes, and as well as poor scholastic outcomes (Fuller-Thomson, Hamelin, & Granger, 2013; Heinrich & Gullone, 2006; Lasgaard, Nielsen, Eriksen, & Goossens, 2010).

In addition to their important role in helping to foster social, emotional, and cognitive development, peer relationships in childhood support childhood resilience to stress and adversity and often serve to moderate the impact of stressful childhood events such as bullying and parental maltreatment (van Harmelen et al., 2017). A large body of research also indicates that friendships can moderate the relationship between early childhood adversity and later child emotional maladjustment such as the experience of anxiety and depression (Laursen et al., 2007; Rubin et al., 2004; St. Onge, Stephenson, & Kumar, 2016). In addition, Patterson et al. (1989) discovered that among school-age children of low-warmth mothers, those who were accepted by their peers had fewer behaviour problems than did rejected children. In other words, strong peer relationships among school aged children have significant developmental benefits that extend beyond stress reduction. They help children build emotional resilience and it reduces later risk for both internalizing and externalizing psychopathology. This moderating effect is believed to be due, in part, to the fact that social play allows children to successfully work through fears and other emotional issues (Parker & Gottman, 1989; Rubin, Fein, & Vandenberg, 1983; Sawyer, 1997). Through play, children can learn to visualize and anticipate future emotional struggles and they can use fantasy and improvisation as a means through which to explore the most effective means for coping and for addressing emotional stress. As described by the American Academy of Pediatrics:

Play allows children to create and explore a world they can master, conquering their fears while practicing adult roles, sometimes in conjunction with other children or adult caregivers (Ginsburg et al., 2007, p. 183).

Given the importance of positive peer relationships on human development, this thesis now directs its attention to middle childhood, a period of social development characterized by a proliferation of peer networks and more sophisticated cognitive, social, emotional development.

### *Loners*

While friendships appear to have an important role on healthy child development, the childhoods of the men in this study were, unfortunately, characterized by friendlessness. Examinations of the school aged peer relationships among the men in this study found that 71% (n=50) were classified as loners. The classification of loner was assigned to any individual who, between the ages of 6 – 16, was described by others as: *having no friends, as being reclusive, or as being unable to form lasting relationships with same-aged peers* (see Appendix B). Take for example serial killer Ian Brady. Ian Brad killed five children in and around Manchester, England between 1963 and 1965. As an adult he was frequently described as a ‘monster.’ As a child, however, Ian was described by his peers as different, secretive, and an outsider. He had few friends and didn’t always get along with the other boys at his school. Instead he preferred solitary play or play with one close friend. Ian Brady, given the descriptions his peers and his former teachers offered of him, would have been classified in this study as a loner. The men in this study were also classified as loners if they themselves disclosed this information, like Richard Cottingham. When reflecting on his early school days with journalist, Nadia Fezzani, Richard Cottingham stated:

No one was that close to me...inside I always felt I was a loner, apart from the crowd... (Fezzani, 2015, p. 190).

Of the 50 individuals who were classified as loners, five (10%) described having had the capacity to form prosocial relationships but described feeling unfulfilled, disinterested, or bored

with others. For example, in response to the question of whether he was ever lonely as a child, Westley Allan Dodd stated, simply:

No, I had my toys and I was comfortable playing with them by myself. And there were always cousins around and I had a few friends in my neighbourhood (Carlisle, 2015, p. 123).

Instances such as these may have been reflective of introversion, whereby the individual selectively chose to live a more isolated life than their extroverted counterparts. In addition, four (8%) of the 50 individuals who were classified as loners described belonging to small peer groups of roughly one or two friends. These friends however were also very often described as social outcasts and were thus perceived equally as undesirable, existing at the far social margins apart from their same age peers.

Examining why such a high percentage of the men in this study were identified as loners, a number of possible explanations emerge. The first explanation is that these men, as children, failed to develop secure attachments with their caregivers. Returning to their early developmental experiences, many of these men developed in environments where they felt emotionally neglected. Some were abandoned, others were abused, and many others were raised in situations of financial impoverishment which contributed to chronic early life stress. These early environments do not promote secure positive attachments. In fact, these home environments are more likely to result in insecure or dysfunctional attachment styles whereby children come to perceive and expect interactions with others to be unpredictable, unstable or even hostile. As a result, many of these men may have experienced lasting difficulties in developing and/or maintaining positive relationships.

This is a theory that is currently supported by empirical research. For example, empirical research indicates that a child's ability to succeed in novel social environments is due, in part, to

having developed secure positive attachments with early caregivers (Franco & Levitt, 1998; Sterrett Jones, McKee, & Kincaid, 2011). Children who fail to develop secure attachments experience an impeded ability to communicate, manage, and/or develop positive relationships with peers (National Research Council and Institute of Medicine, 2000; Parlakian, 2003; Sroufe, 2005). In fact, research consistently demonstrates that the probability of rejection by peers is greater for children who have been subjected to relatively high levels of both chronic and acute stresses at home. Consequently, stress in the family have negative impacts on a child's peer relationships by limiting their levels of social competence and emotional adjustment (Coie et al., 1990; Garner, Jones, & Miner, 1994; Ladd, Herald, & Andrews, 2006). As described by Westley Allan Dodd:

I stayed away from the other kids as much as I could. I became a loner. I felt bad because I wasn't part of my family and I didn't fit in with the other kids at school... I was a loner, never talked to anybody about anything. I never talked about my feelings... (Carlisle, 2015, p. 133; Ostrom & Broom, 1993).

Another possible reason why so many of these men were identified as loners may be due to their high rate of frequent residential mobility. For example, among the men in this study, 57% (n=40) moved from their primary residence at least twice during childhood. These moves were often described by the men as disruptive, unwanted, and destabilizing. As described by Westley Allan Dodd: "*I was unhappy at the prospect of moving again*" (King, 2011, Chapter 12, para. 31). Research indicates that young children benefit, socially and emotionally, from stability in their relationships and in the environmental settings in which they spend a great deal of time, such as their neighborhoods and schools (Murphey, Bandy, & Moore, 2012). Frequent residential mobility destabilizes both friendships and the social environments in which children interact. It can intensify existing problems in the children and family nucleus, create challenges in acquiring friendships and building social skills, create feelings of loss, fears of the unknown,

and lower parental attention, all of which may lead to emotional and behavioural problems (Hundleby & Mercer, 1987; Lix et al., 2006; Simpson & Fowler, 1994; Wood et al., 1993). To test the associations between residential mobility and being characterized as a loner, this study conducted a chi-square test for association and a Fisher's Exact test. There was a statistically significant association between being frequent moving as a child and being classified as a loner in middle childhood ( $p=.003$ ) (see: Appendix C).

One additional explanation as to why so many of the men in this study were identified as loners may be due to their intellectual abilities. When examining the intelligence quotients (IQ) of the men in this study, 16% ( $n=11$ ) were identified during their school aged years as having a low intelligence quotient (IQ); scoring under 85. Low averages ranged from 68 – 84. Available evidence indicates that a majority of young children with intellectual delays exhibit special difficulties in forming and developing friendships than children without intellectual delays (Bellanti, Bierman, & Conduct Problems Prevention Research Group, 2000; Guralnick, 2006; Kopp, Baker, & Brown, 1992). The impacts of social rejection on children with intellectual delays are also likely to be far greater than the impacts experienced by those without such challenges. The greater challenges faced by intellectually disabled children comes from the fact that these children already experience considerable developmental delays in domains such as socialization of aggression, the development of prosocial behaviours, emotional-regulation strategies, and the formation of self-concepts (Miller-Johnson et al., 2002; Bates, 1975). To test the associations between low IQ and being characterized as a loner, this study conducted a chi-square test for association and a Fisher's Exact test. There was a statistically significant association between having a low IQ and being classified as a loner in middle childhood ( $p=.041$ ).

Lastly, social isolation can be related to the low-income status of many of the families among this group. Research indicates that children of low-SES families are more isolated than their higher income peers (Odgers, 2015; Plenty, Mood, & Money, 2016). Financial hardship may limit children's access to social activities, such as sports, and thereby deprive children from opportunities to integrate with their peers. Low socioeconomic status may lead to social ostracism from the wider community and place children at greater risk of becoming socially isolated. For example, as described by Ted Bundy:

I never really got into organized sports...Long, sweaty, dirty practices! And very costly to buy the uniforms. My family didn't always have the money—not comfortably so, anyway (Michaud & Aynesworth, 2000, p. 22).

The high rates of peer rejection among these men poses a particular developmental risk. This is because 64% (n=45) of these men were also exposed to abusive, neglectful, or maladaptive early home environments. Therefore, rather than finding themselves in relationships that would have promoted social and emotional well-being and resilience, peer rejection likely compounded the impacts of early family adversity and were layered on as yet another risk factor for maladjusted development; a type of maladjustment that can be noted in their early play activities.

### *Social Isolation and Solitary Play*

Given the high proportion of men who were identified as loners it is not surprising that social isolation emerged as one of the most common themes when analyzing their reflections of childhood. Ninety percent (n=18) of the men whose qualitative information was examined in this study described feelings of social isolation throughout their childhood. Social isolation is best described as a deprivation of social connectedness with individuals that provides positive



feedback and is meaningful to the individual. It is not a unitary concept. Social isolation has been characterized both as ‘social withdrawal,’ which is defined as low relative frequencies of peer interaction (Gottman, 1977; O’Connor, 1972), as well as low levels of peer acceptance or high levels of peer rejection (Gottman, Gonso, & Rasmussen 1975; Gottman, 1977). Consequently, social isolation is a matter in which both the quantity and quality of social connections are relevant. To compensate for the lack of social relationships in their young lives, some, such as Arthur Shawcross, adopted imaginary friends:

I had to have these [imaginary] friends because I wanted someone to play with. No one else liked me (Martin, 2008).

Others, like Keith Hunter Jespersen, described adopting their family pets as best friends:

Duke was my buddy. He slept on my bed. He followed me everywhere and ate next to me at the dinner table. He thought he was a person. He was closer to me than my brothers (Hunter, 2012, p. 73).

Many others occupied their isolative early years engaged in solitary play. “*Well, lots of times I’d spend in the woods. I’d go out to play in the woods....*” Henry Lee Lucas recalled of his early days (Cuba & Norris, 1985, para. 37). “*I would wander around the woods by myself...I did my own thing,*” Joel Rifkin stated (Fezzani, 2015, Chapter 5, para. 39). “*I kept to myself at home, or just took off on my bike for hours at a time,*” Westley Allan Dodd described (Carlisle, 2015, p. 145). Even Ted Bundy, who was embarrassed to have friends over due to his family’s lower-socioeconomic standing stated:

In my younger years I depended a lot on the radio... I genuinely derived pleasure from listening to people talk at that age (Michaud & Aynesworth, 2000, p. 21; Vronsky, 2004).

Solitary play is when children play alone. It has many positive aspects, such as imagination development, and has been argued to be one of the most important developmental achievements in life (Winnicott, 1958). This type of play, however, is most

commonly seen in young toddlers between the ages of two and three (Katz & Buchholz, 1999). Usually, by the age of four to six children have developed the necessary skills and abilities to engage in more complex social play, such as cooperative play, which is when play becomes organized into groups (Parten, 1932; Whiteside, Busch, & Horner, 1976). By 11 years of age, nearly all children report that the majority of their peer interaction takes place in the context of cliques, which are defined as voluntary and friendship-based groups (Chen, Chang, & He, 2003; Kindermann, McCollom & Gibson, 1995). Therefore, if a child nine years of age rarely or indeed never chooses to engage in social play with others, this may be an indication of shyness, language problems, or a limited social understanding of others (Parten, 1932).

Ted Bundy offers one such example of an individual burdened by a lack of social understanding of others. Bundy had difficulty gauging social dynamics and while able to engage in conversation in formalized settings, such as a classroom, preferred otherwise to be alone:

I've always been that way. In those kinds of settings. It's a formalized setting. And the ground rules are fairly strict. And your performance is measured by different rules than what happens when everybody is peeling off into little cliques down the hallway (Michaud & Aynesworth, 2000, p. 24).

As child, Ted Bundy had a very hard time fitting in with the other boys. This was indicated not only by himself, but also by those close to him. For example, Sandi Holt, the younger sister of one of Ted's childhood friends stated that Ted, as a child:

Had a horrible speech impediment, so he was teased a lot. He just didn't fit in. Even up at Boy Scout camp, he just couldn't quite get the hang of things the other kids were doing. Couldn't tie the knots right, couldn't shoot the gun right, couldn't win the races. He had a temper. He liked to scare people (*Daily Star*, 2019).

Sandi went on to describe how, as a child, Ted liked to set up ‘tiger traps’ in the woods; grass covered holes with sharp stakes placed at the bottom. According to Sandi, one day a little girl fell into one of Ted’s tiger traps and injured her leg quite severely. The stakes in the ground pierced through her legs, slitting it up the side.

Like Bundy, Westley Allan Dodd found it difficult to gauge social dynamics and lacked friends because of it. To shield himself from social ostracism awkwardness, Dodd would hide out in the music room of his school, spending lunches alone. Upon recalling this period of his life Dodd explained:

Wanting to avoid other kids...I went to the band room. Mr. B gave me the key to the band room, warning me not to let anyone else in—no problem!...It kept me away from everyone else (Carlisle, 2015, p. 155).

Henry Lee Lucas also described feeling tense around other people:

When I’m around people, I feel tense, nervous. I guess it’s because I haven’t been around people. Most of the life I’ve lived has been alone. I have troubled talkin’ to them; I always have (Cuba & Norris, 1985, para. 69)

To cope with the fear of social failure and ostracization some retreated into fantasy worlds provided to them by children’s literature:

I could literally put myself into the lead character’s body, like the kid in *The Neverending Story*. It was as if I was actually becoming part of the story. I could almost feel the laser blasts, or the dragon’s breath, or whatever. Mom and Dad had to yell to get my attention when I was reading those books...I didn’t know then, but I guess it was a substitute for not having friends...‘Is that what you wanted?’ [the interviewer asked] I guess so (Carlisle, 2015, p 144).

Poor social relationships with peers, the inability to gauge social situations, in combination with their own physical, economic, or mental limitations, left many of these men feeling inferior to others. For example, recalling his early childhood, Westley Allan Dodd stated:

I felt inferior to the other boys in several ways. They were older and bigger. I was one of the slowest and weakest and most uncoordinated kids in my class and I was painfully aware of it (Carlisle, 2015, p. 132).

Reflecting on his early childhood experiences with peers, Ted Bundy described:

I always felt I was too small. This feeling began to emerge in junior high school...it was a source of some agony (Michaud & Aynesworth, 2000, p. 22).

Finally, Richard Cottingham stated: "... *the cute, good looking, shy kid became gawky and introverted and not with the crowd anymore...*" (Fezzani, 2015, Chapter 6, para. 30).

Cottingham followed this statement by regaling the interviewer with tales of his more positive traits, such as the fact that he was an 'accomplished thief' (Fezzani, 2015). The notion of being viewed as emotionally vulnerable, weak, or inadequate, even in adulthood, was almost too much to bear.

Social isolation during childhood is a major risk factor for emotional maladaptation and psychopathology (Hall-Lande et al., 2007; Matthews et al., 2015; Mushtaq et al., 2014). For example, longitudinal twin studies have found that children who were socially isolated at both primary and secondary school, experienced greater mental health difficulties in later life, such as depression, anxiety, ADHD, and later behavioural problems (Matthews et al., 2015). The resulting psychopathology that emerges can be argued to arise from the absence of healthy emotional outlets. In addition, peer friendships are a major factor that helps protect children against peer victimization or bullying; another strong risk factor for later developmental maladjustment (Hodges, Boivin, Vitaro, & Bukowski, 1999; Hodges, Malone, & Perry, 1997).

## *Bullying*

58% (n=29) of the men who were identified as loners were subjected to prolonged experiences of bullying in their middle childhood through to their late adolescence. Using a chi-square test for association and a Fisher's Exact, this study found a statistically significant association being classified a loner and being bullied ( $p=.033$ ). Take for example, Joel Rifkin. Rifkin vividly recalled his emotional experiences of bullying as a child:

It was in the town library. I used to work there. That was the track team again. They basically covered all of the exits, and every time I tried to go home, they threw eggs and stuff. It didn't help that there was a girl that I was hanging out in the library with too, so they picked their target. No one else could bother me, but they could. I was theirs (Fezzani, 2015, p. 153).

Rifkin was not alone in his experiences of peer aggression. Rifkin's narrative parallels a major theme found in many of these men's recollections of childhood; powerlessness and social defeat. The same sentiments are echoed by Keith Hunter Jespersion, who was originally from Canada but who had moved to the United States as a child. Jespersion also recalled being bullied. One particularly painful moment Jespersion recalls is having been hazed:

There was a tradition of hazing the new kids coming to high school. They called it 'pantsing.' Kids were told to drop their pants to expose underwear. Sort of a power thing. I knew that sooner or later they would come after me with this stupid act. I never imagined it would be my brother Bruce and his friends. Ten of them surrounded me. I refused to go peacefully. Fought them all. Eventually they pulled my pants down to my ankles (Fezzani, 2015, p. 98).

Bullying in childhood is often thought of as a normal 'rite of passage' for many children (Wolke & Lereya, 2015). This belief, however, is a harmful interpretation. Bullying is more correctly defined as intentional aggression by peers which causes harm (Wolke & Lereya, 2015). The harm caused by bullying can extend far beyond mere physical damage, such as cuts and bruises. In fact, bullying is a major risk factor for a variety of poor mental health outcomes including atypical stress responses, anxiety, depression, hypervigilance, and also reductions in

empathy. The long-term psychological impacts of experiencing bullying as a child can also extend into the adult social and economic life of that individual (Wolke & Lereya, 2015). For example, reviews of controlled prospective studies have shown that peer victimization in childhood can lead to adult impairments in important social domains such as forming lasting relationships, integrating into work, and being economically independent (Wolke & Lereya, 2015).

That the effects of bullying extend far beyond the consequences of childhood adversity is also powerfully demonstrated in a recent study by Takizawa, Maughan, and Arseneault (2014). Using data from the British National Child Development Study, Takizawa, Maughan, and Arseneault (2014) conducted a 50-year prospective examination of the midlife outcomes of childhood bullying victimization. The authors conducted ordinal logistic and linear regressions on data from 7,771 participants whose parents reported bullying exposure at ages 7 and 11 years. Follow-up assessments were conducted with the participants at ages 23 and 50 years. The authors findings were revelatory. What they discovered was that the effects of frequent bullying were as detrimental 40 years later. Victims of frequent bullying had increased levels of depression, anxiety, and suicidality than their non victimized peers. Victimization was also associated with a lack of social relationships, economic hardship, and peer perceived quality of life at age 50 (Takizawa, Maughan, & Arseneault, 2014). Childhood bullying has serious effects on an individual's physical and mental health outcomes across the lifespan. These impacts are explained, in part, by the cognitive and neurobiological alterations that may occur in response to bullying exposure in childhood.

### *The Neurobiology of Bullying*

The brain, at birth is neuromorphically immature, weighing about 370 g; which is about a fourth to a third of the weight of the adult brain (Casey, Giedd, & Thomas, 2000; Caviness et al., 1996; Dekaban & Sadowosky, 1978; Johnson, 2001; Lerner, Lamb, & Freund, 2010). Overall brain weight increases rapidly during early childhood, tripling by age 3 years (Lerner, Lamb, & Freund, 2010). By the age of 6 the human brain is the size and of the brain may be close to that of an adult. Despite being similar in size, brain development is a protracted process that continues into adulthood (Lerner, Lamb, & Freund, 2010). Major changes continue to take place after the brain has reached the same weight as an adult. One of these changes is known as synaptic pruning.

Synaptic pruning is defined as an experience-dependent removal of excess synaptic contact (Lerner, Lamb, & Freund, 2010). It is a process of fine tuning the brain and its connections that starts postnatally and continues into late adolescence. Synaptic pruning is an experience dependent process and operates according to Darwinian principles of environmental selection wherein synapses that do not prove useful or that are underactivated are eliminated (Lerner, Lamb, & Freund, 2010). As an experience dependent process, synaptic pruning fine tunes the brain to its developmental environment (Caviness et al., 1996). How this relates to bullying is that, owing to the synaptic pruning process, childhood and early adolescence represent periods of plasticity, where the brain is prepared for a great deal of learning from the environment. This is a period of development wherein experience may exert a profound and long-lasting influence on the brain (Knudsen, 2004).

Features of the brain that undergo extensive fine-tuning during middle childhood are regions responsible for cognition, language and social skill development. Healthy development

of these neurons significantly improves a child's ToM, level of intelligence, communication abilities, insight, empathy, altruism and morality (Mah & Ford-Jones, 2012). Unhealthy development during this period, however, can stunt the development of these important skills.

Chronic stress exposure such as peer rejection and aggression can result in synaptic deficits which undermine healthy social and emotional development. In fact, there is emerging evidence that abnormal regulation of brain development during middle childhood is associated with gravely disabling human disorders including stress dysregulation, depression, and morphological alterations in the adolescent prefrontal cortex (Caviness et al., 1996; Kuhlman et al., 2015). Stress induced changes in synaptic density have also been observed in the nucleus accumbens (NaC), a brain region which is part of the reward pathway involved in addiction and has been shown to lead to reduced spine density in the amygdala; a brain region involved in the processing of fear and anxiety (Braddick, Atkinson, & Innocenti, 2011). Beyond the neurobiological impacts to peer aggression, there are also social implications to consider as well.

### *Coping Strategies*

For the men in this study, exposure to what they perceived as emotional trauma may have left them feeling unsafe and distrustful of parents, authorities, and same aged peers. Without a safe space in which they could express themselves emotionally, these men may have turned inward, becoming both emotionally and socially self-reliant. The need for social and emotional self-reliance would be a major psychological burden for a child struggling with the issues so far identified in this study.

The fact that at least some of the men in this study became emotionally self-reliant is demonstrated in their reflections. According to Joel Rifkin, "*I kept trying to just push stuff down*



*and take every day one day at a time...*” (Fezzani, 2015, p. 88). Unable to reach out to parents and perhaps similarly distrustful of other adult authorities such as teachers, he stated: *“I tried to keep everything inside”* (Fezzani, 2015, p. 88). Similarly, Keith Hunter Jespersen stated: *“To protect myself, I closed in on myself”* (Fezzani, 2015, p. 98). For these men, social and emotional self-reliance became a key element of self-preservation.

The power of social connection, positive relationships, and warm and responsive caregiving cannot be overstated. Social relationships and early experiences have enormous consequences on one’s development. These experiences are quite literally built into the brain architecture of the developing child. They form the neural and cognitive foundation upon which the child will perceive and expect to experience the world over the course of their lifetime. Early environments characterized by deprivation, maltreatment, and chronic or repetitive stress exposures are detrimental to human development. Not only are they significantly associated with the emergence of internalizing and externalizing problems over time, as we will soon discuss, but they are associated with severe maladjustments in one’s capacity to cope with stress over time.

Beyond solitary play, escapism was adopted by a majority of these men in early childhood. Escapism is a passive coping tool whereby individuals isolate themselves to escape from stress and/or to avoid the problem (Beasley, Thompson, & Davidson, 2003). For example, the desire or notion of escape was a theme that was expressed in 90% (n=18) of the childhood reflections of given by these men in this study. For example, Henry Lee Lucas, whose early home environment was deeply troubled by abuse and who was badly bullied by his parents’ houseguests, described engaging in delinquent behaviour just to get away from the home. For example, Lucas stated: *“...I’ve started to steal, do anything else I could do to get away from home...”* (Cuba & Norris, 1985, para. 35).

The men in this study told stories of escaping from their homes either by running away with the intent of never returning, or by continually wandering off into the woods for long periods of time. It didn't much matter where they were, so long as they were not at home. The desire to escape from underneath the power of the abusive home or school environment was also described by Arthur Shawcross, who stated:

... when I was fourteen years old... I ran away. I put a sign-- note on my bedroom, on my pillow, I'm going to Syracuse, turned around and went to Canada. I just didn't want to go home... (Martin, 2008).  
Similarly, while reflecting on his early childhood Westley Allan Dodd stated:

I spent more and more time away from home, riding my bike all over town. I knew every street and every park in town. I would ride from 30 to 50 miles a day when I was not in school. I was happier when I was exploring. When I was not at home I felt a freedom to do anything I wanted to (Carlisle, 2015, p. 135).

According to Anne Burgess (1986), most children who express a desire to be away from the home are not 'Tom Sawyer' types looking for adventure but, rather, are running from intolerable domestic situations. For example, in her study of 149 youths between the ages of 12 and 20 Burgess (1986) found that running away was often a symptom of distress such as family conflict and aggression, or a lack of mutual support. According to the literature on children's play activities, running away may be the only outlet emotionally abused children have to express their distress (Raphael-Leff, 2012). Escape is exercised as a form of resistance and retaliation to the abuse they perceive they are being subjected to.

For these men, the notion of being self-reliant, being away from parents and authorities, escaping from the judgement of peers and social expectations, was intimately connected to feelings of regained mastery and control; experiences that they sought desperately to be realized. Yet, despite the great desire to escape from a situation which they perceived as unbearable or

stressful, these men often described being limited in their attempts to achieve freedom by their own powerlessness.

As children these men were incapable of sustaining themselves in the absence of a parent and thus, like a prisoner, were forced to return to their ‘captors’ and ‘tormentors.’ The inability to escape or achieve freedom is a common shared theme in the reflections of their childhood. The accompanying feelings of despair and powerlessness are best captured by Edmund Kemper who stated: “... *It was like being in jail...*” (von Beroldingen, 1974, para. 70). These feelings of powerlessness are echoed even in Kemper’s adult discourse. For example, when describing his relationship with his mother Kemper stated:

...I can’t get away from her. We’re still fighting. She’s still belittling me. She’s still--I’m like a puppet on a string. And I entertain her. She knows all my buttons. And I dance like a puppet, with that pain... (Kaganof, 1994).

#### *Violent Fantasy Development*

Perhaps owing to their physical limitations as children, many of these men began to indulge in fantasy. For example, at times when it was not possible to physically escape the stressful environment, these men, as children, would project themselves into a second reality; that of a richly complex fantasy world. A self-constructed internal safety domain, one wherein they often were the individuals who possessed power, authority, and control. In early adolescence, these fantasies tended to revolve around themes of death and violence. Specifically, violent fantasies such as sadistic murder, mutilation, and the torture of humans or animals emerged.

For example, at 12 years old, Edmund Kemper was playing “*gas chamber*” with his sister; a game in which she was required to tie him to a chair and click an imaginary device that released gas which slowly killed him (Schlesinger, 2000). Kemper was also known to remove the

heads and hands from his sisters Barbie dolls (Schlesinger, 2000). 70% (n = 49) of the men in this study developed violent fantasies during their adolescence. AGAIN, WHAT IS THE BASELINE? Typically, these fantasies began at the age of 13 (65% or n = 46). Many, however, began to engage in violent fantasies much earlier. For example, when asked about his mother Edmund Kemper stated: “...*I’ve wanted to kill my mother since I was eight years old and I’m not proud of that*” (Horvath, 1984). As a child Kemper could never physically escape his mother so, at times, fantasies about killing her and/or her death were satisfying to him; they calmed him.

Interestingly, not only did the majority of these men actively engage in violent fantasy as children, but many also acted on those fantasies in real life. For example, as a boy, Dennis Rader described having: “*drowned a cat or two*” (Ramsland, 2016, p. 40). The reason Rader gave was that: “*they held a secret mystical power, an evil that had to be put down*” (Ramsland, 2016, p. 40). Gary Ridgway was also actively violent. For example, as a youth, Ridgway stabbed a child, almost killing him. According to Ridgway:

[a] boy was playing and I stabbed him inside. Didn’t kill him.... I just took the knife outta my pocket and stabbed him in the ah, side...I wanted to see how to stab somebody (Keppel, 2010, p. 514).

Edmund Kemper testified that as at the age of eight he killed his family’s cat who he perceived to be favoring his younger sister. According to Kemper, he killed the cat in order to “*to make it mine.*” Lastly, in perhaps the most extreme case of violence, at age 15, Edmund Kemper literally killed both his maternal grandparents – shooting them to death. Under police questioning, Kemper admitted that he: “*just wanted to see what it felt like to kill Grandma*” (Schram, 2016, para. 15).

### *Disturbed Conceptualizations of Death*

Diverting from coping strategies for just a moment, it may be noted that the ways in which these individuals process and conceptualize death is particularly disturbed. For example, both normal and disturbed children often think of death, separation and sorrow tending to be the dominant themes (Kastenbaum & Costa, 1977). The men in this study, however, take an approach that is either characterized by an intensely morbid curiosity and a desire to participate actively in the process of death, or by an extreme lack of emotional connection to the finalistic nature of death.

As described by Ottis Toole's psychiatrist:

To him, life itself is so unmeaning, and the distinction between living and dead people so blurred, that killing is no more than swatting an annoying fly.... He trivializes the distinction between living and dead, believing himself to be dead (Berry-Dee, 2007, p. 264).

This quote, while taken long after Toole's conviction, reveals an individual with a vastly underdeveloped concept of death, a concept that is unlikely to have changed much since Toole's early childhood. Evidence suggests that a recognition of death as final, irreversible, and inevitable occurs after about ten years of age or in those at a concrete or formal-operational level of development, as described by Piaget's in his theory of cognitive development (Koocher, 1973; Nagy, 1948). According to Nagy (1948), even the youngest children – those aged three to ten – have a realistic and concrete awareness of death. For these men, however, death is not recognized as finalistic or emotionally upsetting. Rather, death is viewed as a means through which to accomplish personal goals, such as ridding themselves of a negative stimulus, attaining power or possession over a life, or satisfying an intellectual curiosity.

In any case, the use of escapism through violent fantasy during this time is illuminating from a developmental perspective. Taking a psychoanalytic approach, the reliance on escapism

as a coping strategy may be indicative of an unresolved psychological need. For example, in the mind of a child who feels constantly subjected to psychological distress and for whom no alternative route for escape is offered, violent thoughts and fantasies can encourage feelings of power while diminishing feelings of powerlessness. As described by Kastenbaum and Costa (1977) the mastery of the concept of death is related to mastery of the concept of life. In either case, violent fantasies consumed a great deal of time during these men's early adolescence.

### *Sexual Fantasy Development*

The majority of the men in this study (68% or n=48) engaged not only in violent fantasies but also engaged in sexually deviant fantasies as well. For the purpose of this study, sexual fantasy was defined as the act of collecting pornographic pictures of children, incest, keeping secret diaries with sexually violent content, or written plans to sexually offend. It also included fantasies about violent sex or sex where death and/or cannibalism was a feature, also bestiality fantasies, or fantasies where there is torture of a sexual partner. The most frequent age when these fantasies began to develop was between the ages of 11 and 15.

Explaining his early fantasies, Westley Allan Dodd stated:

As I got older, I fantasized about actually being a hero when I wasn't fantasizing about molesting children. I daydreamed about being a member of a mountain search and rescue team, and in those daydreams we were always rescuing children...Me and my team would find a lost or an injured child, and I'd comfort him or her. I would feed the child, hold their hand, and when broken bones were being set, I'd help calm the child. I might be fantasizing about molesting a boy or girl, then a few minutes later I'd be daydreaming about rescuing a child from a cliff face, everyone patting me on the back telling me what a good job I'd done. But then in a few more minutes I'd be thinking about molesting a child again (Carlisle, 2015, p. 166).

Also, as a child, Dennis Rader would wander off alone to an isolated part of his property.

There he'd bind himself in order to experience the feeling of sexual satisfaction:

I would at times, got out to the tank alone, to cool off, bind myself and think sexual thoughts. Sometimes, I would tie my hands and ankles to achieve climax (Ramsland, 2016, p. 39).

From a young age Rader realized that his interests and behaviour were distinct from those of his peers:

The chicken house became our play area, for a fort and a jail for cowboys and Indians. For me it would be the place of dark fantasies (Ramsland, 2016, p. 40).

Like many of the men in this study, Rader's early fantasies and deviant play formed a familiar script that would later be played out with human victims. Within the psychoanalytic literature, the goals and functions of sexual fantasy are not arousal or pleasure, but a defence against injury to one's ego; a narcissistic injury. For example, sexual fantasies allow the individual to assume the illusion of omnipotence and to deny the reality of their own psychological impotence, physical frailty, or weakness of identity (Coen, 1981).

Fantasies about manipulating others, especially by sexual means, may represent the strategic use of fantasy to validate self-representations which are outwardly grandiose, but inwardly, very fragile. In fact, a great deal of work has explored the use of sexual fantasy as a process through which to restore narcissistic injuries and to restore one's ego back to a state of psychological equilibrium. This work has revealed that sexualization serves to confirm of the integrity of the self, ones' gender identity, and enhancement of personal worth (Blum, 1973; Gedo, 1979). That power, agency, and dominance were the primary goals and functions of sexual fantasy is evidenced by Richard Cottingham who stated:

It was mainly psychological. I was able to get almost any woman to do whatever I wanted them to do, psychologically or through the threat or the implied threat of being hurt or being killed sometimes. It was a game to me...The sex was the side part. I mean it was enjoyable, don't get me wrong, but it was mainly the power that I could create a situation that they would do anything in the world to get out of that situation (Fezzani, 2015, Chapter 7).

For those disinclined to accept arguments from a psychoanalytic tradition, sexual fantasy has also been examined from the viewpoint of evolutionary psychology. For example, in their examination of sexual fantasies, Hawley and Hensley (2009) argued that more so than sexual fulfillment, social dominance tends to be at the centre of men's sexual fantasies. The capacity to physically overpower someone can be perceived as highly agentic, especially in men who have suffered from sexual aggression or overpowerment themselves (Briere, Smiljanich, & Henschel, 1994). Again, agency, or a lack thereof, was a major theme of the early reflections of the men in this study. For these men, forceful submission fantasies may be an effective way to cope with and adapt to struggles, failures, and disappointments and to escape from one's mundane or powerless identity (Baumeister, 1989; Weille, 2002). That sexual fantasies may have helped the men in this study cope with early life stressors is demonstrated by the fact that paraphilias (fantasy dependent sexual arousal) were significantly associated with the experience of psychological abuse as children ( $p=.039$ ); this was found through chi-square analysis.

A significant number of children have experienced abuse at the hands of a parent or caregiver and many more have been bullied or felt socially isolated at least once during their early development. For the most part, however, children endure. They are able to adapt or exercise resilience which helps them to overcome these developmental challenges apparently unscathed (Rutter, 1981). The seemingly commonplace nature of experiences such as abuse, bullying, and social isolation prevents us from fully accepting their influence in the pathogenesis of fatal violence with anything other than scepticism. The so-called, "abuse excuse" seems to lack a credible narrative and when employed, especially by the men in this study, it is often met with accusations of evasions of responsibility (see: Dershowitz, 1995; Nourse, 1998). At the core of this skepticism is the fact that it is difficult to conceptualize that a prolonged history of abuse



can explain why some people may kill, without implying that this is tantamount to a (legal or moral) justification (Römkens, 2000).

While it is true that no one single instance of abuse, maltreatment, or deprivation is likely to cause irreparable developmental harm, together, the confluence of these experiences produces a snowball effect of risk factors which build and accumulate over time.

As we have seen this far, the narrative arch of the life of a serial killer is one that begins and unfolds as follows: the child experiences chronic abuse, maltreatment, toxin exposure, and neglect starting prenatally, and is raised in a home wherein, due to disruptions in attachment, they are unable to cultivate relationships that would otherwise serve as a protective factor. As they age, their disrupted attachments prevent these men from cultivating the social/emotional skills required to form strong peer groups which confer resilience and help to shape social/emotional and moral engagement. Juxtaposed against this more complex background, ‘abuse excuse’ can come to be seen less as an excuse and more as an explanation for the behavioural, emotional, and psychological problems that, as will soon be describe, unfold throughout later adolescence.

### **Part 5: Growing up (Late Adolescence [16 -19])**

*One of the hardest things in the world is to convey a meaning accurately from one mind to another.*

Lewis Carroll  
(2008, p. 375).

#### Adolescent Psychopathology

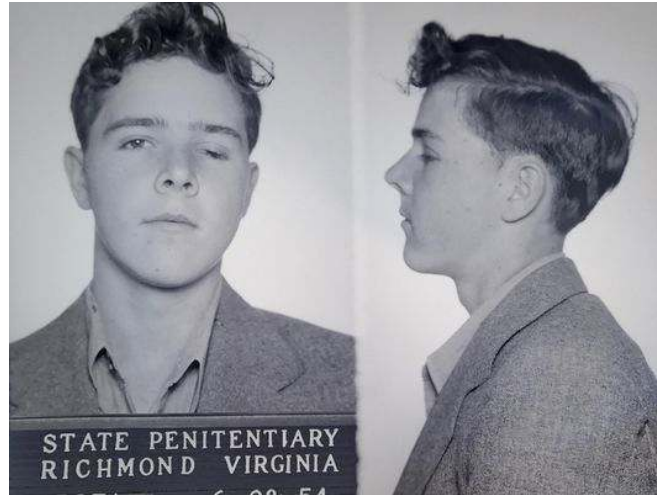
Emotionally immature, cognitively and morally impaired, and struggling to self-sooth, as youth these men graduate into a life of delinquency. These crimes serve the same emotional

propose that the serial killer's earlier fantasy world did. The thrill of evading capture, the power one feels upon looking down at a helpless victim fully at one's mercy, and the adrenaline rush that comes with transgressing the law, what sociologist Jack Katz called, the "seductions of crime," quell the serial killer's emotional need for power, domination, and control.

Examining the prevalence of delinquency among this group, 48% (n=34) of the individuals in this thesis were found to display symptoms of conduct disorder (CD) in their late childhood and early adolescence. CD was defined as a repetitive and persistent pattern of behaviour in which the basic rights of others or major age appropriate societal norms or rules are violated (APA, 2013). Several social-cognitive developmental legs have been identified in those diagnosed with CD. For example, in situations of ambiguous provocation, children with CD display the hostile attribution bias. In other words, they attribute hostile intent in another person when such an intent is not readily justified. Hostile attribution bias may be one behavioural indicator of an overactive HPA-axis in young children. For example, children who are exposed to chronic stress and/or abuse tend to be hypervigilant and hypersensitive to relatively benign social cues and to overreact to minor incidents or perceive benign social cues as threatening (Albert et al., 2015).

Second, conduct disordered youths show distortions or misperceptions regarding the behaviour not only of others but also of themselves. For example, children with CD tend to minimize the physical and emotional impacts of their use of violence (Lochman, 1987). This misperception may be indicative of a lack of empathy or moral disengagement (Cohen & Strayer, 1996; de Wied, Goudena, & Matthys, 2005). Deficits in dispositional affective and cognitive empathy in adolescence are associated with similar deficits in adulthood. Additionally,

research has shown that 40% of children with CD go on to be convicted of three offences by age 17 (Farrington, 1995).



**Image 5.** Henry Lee Lucas. Booked into Richmond’s State Penitentiary for car theft, circa 1945. Lucas would have been 18 at the time. Retrieved from: Brumfield, 2017. <https://www.newsleader.com/story/news/local/history/2017/05/22/serial-killer-briefly-midst-history/102008964/>.

While only 48% of the individuals in this thesis displayed evidence of CD, 41 or 58% of the men in this thesis had a juvenile record by the time they reached the age of 18. Fifteen (21%) had spent time in a juvenile detention facility and 19 (27%) had been sent by a parent, guardian, or a judge to a juvenile reform school. Beyond crimes for which these men had been adjudicated, 36 (51%) had committed at least one criminal offence for which they had never been caught and/or convicted. Individuals escaped punishment for the following four reasons: (1) the cases were dropped because victims refused to testify, (2) the families of both the aggrieved and the victimizer came to a social agreement without the assistance of law enforcement, (3) the crime happened within the family and law enforcement was never called, or (4) the victim was very young and had never told an adult until later in their lives. If combined, 49 or 70% of the men in this thesis were either adjudicated for a criminal offence in their adolescence or were known to

have committed a criminal offence but avoided legal consequences. This finding is particularly relevant because adolescent and childhood violence is one of the best predictors of extreme violence in adulthood (Wright et al., 2009).

Continuing, this thesis examined the presence of the ‘triad.’ The triad is a reified concept developed by Hellman and Blackman (1966), who argued that risk for serious criminal acts during adulthood can be detected by the presence of three combined behaviours; animal cruelty, fire setting, and bedwetting. The current thesis found that 26 individuals (37%) had a history of cruelty to animals prior to the age of 20. Among the men in this thesis, animal cruelty developed primarily between the ages of five and 13 (70%). In regard to fire setting, eight of the individuals (11%) had a history of this offence. For example, Ottis Toole, a pyromaniac, stated:

I been doing fires since I was a little kid. See, the little fires don’t excite me, you know. Only big fires excite me. Just like if an ugly woman don’t look good to you, you don’t get excited. You have to get a pretty woman to get excited. It’s like the same way with fires, you know. The bigger the fires, the more I get excited (Diehl & Donnelly, 2012, Chapter 10, para. 12).

Fire setting began primarily between the ages of eight and 15 (50%). Lastly, nine of the individuals (13%) wet the bed frequently into adolescence. Only 3 of the individuals in this thesis (4%) demonstrated all three behaviours; a finding that is congruent with the current literature as described in the earlier chapters of this thesis.

Given the prevalence of disturbed behavioural and emotional functioning, this thesis examined the rate at which these men came into contact with psychiatric care during their late childhood and adolescence. Twenty-five (35%) of the men received psychiatric treatment or counselling while in their late childhood to late teenage years, with most seeking treatment between the ages of 11 and 16. Common diagnoses included substance abuse (n=4); paranoid thinking or psychosis (n=3); depression (n=2); anxiety (n=2); attachment disorders, including

disrupted and insecure attachment (n=2); extreme emotional issues (n=2); trichotillomania or other impulse control disorders (n= 3); obsessive compulsive disorder (OCD) (n=2); paraphilias (n=1); intermittent explosive disorder (n=1); and inferiority complex (n=1). Additionally, while there was no diagnostic variable under which to classify them, three individuals were identified as having unhealthy, hostile, and dangerous disorders of sexuality. From their reflections, it appears that none of these men found psychiatric care to be helpful.

For example, Joel Rifkin explained:

I was suspicious of the whole thing. I don't think I told them much of anything. They wanted to know all about my day, and I'd be talking about trees or rocks or sports, whatever (Fezzani, 2015, p. 157).

Similarly, Westley Allan Dodd who was referred to a counselor for his inappropriate sexual behaviour toward other children, mainly flashing, describe his skepticism stating:

I'd been teased by the girls, and by the boys in the locker room. Later on a counselor told me I may have been trying to 'prove' I was a man. He also said that these incidents just mentioned were normal childhood experimentation (Diary [online], Westley Allan Dodd, 2017, Chapter 1, para. 11; King, 2011).

Lastly, of the 25 men who received psychiatric care, 25% were acute cases that required careful monitoring and support throughout their childhood and late adolescence.

The above findings only represent clinically diagnosed disorders; the individuals accounted for in the above statistics were those who were compelled either by parents or the court to seek psychiatric care. Recalling the high rate of childhood neglect, however, it is likely that many of these men had experienced psychiatric issues but were never referred for care. In other instances, these men, as children were taken to see a family physician, but were never referred to a psychologist for proper care. For example, at the age of 12, Harvey Glatman was taken by his mother to see a family physician. Apparently, Glatman had been caught attempting to achieve sexual pleasure by placing a rope around his neck and pulling it tightly, until it was

red and swollen. According to the physician, Glatman would “*outgrow it*” (Newton, 1998).  
Glatman never did.

The rate of disordered conduct among these men in adolescence can be interpreted not only as a reaction to combined risk factors throughout childhood, but also as the application of immature defence mechanisms. For example, chronic stressors such as rejection, isolation, and a lack of social and emotional support in childhood are associated with a developmental lag in several areas of psychological functioning. Areas that are impacted include social information processing, ToM, empathy, impulse control, and emotional regulation, among others. In any event, from the time of their adolescence, these individuals begin to follow a life trajectory characterized by a callous pursuit of emotional satisfaction. Violence is a natural progression.

#### **Part 6: Grown Up (Adulthood [20+])**

*If it is irrational and hypocritical to hold a minor to the same standard of behavioural control as a mature adult, it is equally unjust to hold a traumatized and neurologically impaired adult to the same standard as one not so afflicted.*

Martin Teicher, Director, Developmental Biopsychiatry Research Program,  
Associate Professor of Psychiatry, Harvard Medical School  
(Teicher, 2000, para. 59)

As adults, many of these men give the appearance of normalcy. They hold jobs, have families, have friends, and engage socially with others. Many even appear to hold socially acceptable political and moral beliefs. In many instances, these men attempt to better themselves and become productive members of society. Some attempt to get the degree they never had in high school, others try to graduate from college, and others still throw themselves into parental duties, or into jobs they seem to love. For a period of time these attempts appear to be successful and many of the men describe feeling that they have got their lives back on track. Unfortunately,

however, behind this shallow mask of sanity trouble brews. Recent studies suggest there may be a period of dormancy wherein the effects of early childhood stress are not fully expressed behaviourally until much later in life (Bunea, Szentágotai-Tătar, & Andrei, 2017).

Hypersensitive to stress, cognitively and morally immature, lacking healthy coping skills, and hyperreactive to perceived threats, these men struggle greatly in adulthood. Relationships and jobs are often lost, and a sense of personal failure comes to dominate their day-to-day lives. With this failure these men are cast back into old patterns of criminal behaviour and violent fantasy engagement; behaviours which they have used, since childhood, to cope.

### *Relationships*

As adults, the majority of the individuals in this thesis were single or in a relationship but had never been married (n=32), 23 of the men were married and 15 had been divorced at least once. Of those who had been divorced, 12 (80%) had been divorced multiple times. For these men, multiple divorces inspired feelings of resentment, anger, hatred, as well as the re-emergence of uncomfortable feelings from childhood, such as a lack of control, agency, or power. As described by Gary Ridgway: *“I didn’t want another one [divorce] that’s ... label myself as, you know, a loser”* (Keppel, 2010, p. 521). Interestingly, Ridgway described reverting to old coping strategies, such as violent fantasy, to cope with his perceived failure after the divorces. For example, Ridgway considered killing his ex-wife, stating: *“If I would have killed her then it’s possible that it might have changed my life”* (Keppel, 2010, p. 521).

Perhaps repeating the cycle of violence, abuse, and abandonment they witnessed play out in their own childhood homes, at least seven individuals in this thesis engaged in a pattern of chronic, repetitive acts of domestic violence. Of the men who had been in a relationship, either

married or dating, 18 (23%) had engaged in at least one instance of domestic violence. The average age at which the men in this thesis first began to display violence within their relationships was 26.

### *Employment*

Of the individuals in this thesis, 27% (n=19) were previously enrolled in the military. Eight served in the army, five in the navy, four in the air force, two in the marines, and one served as a coast guard. The average age at which the individuals were first enrolled in the military was 19. Aside from the military, most of the men in this thesis were employed in blue collar sectors such as construction or general labor (n=23) or were unemployed and made a living while 'drifting' (n=14). Four worked in law enforcement, while an additional seven had applied to be a cop but were never hired. The high rates of unemployment and blue-collar employment among this group may be examined, in part, by the academic records of these men. For example, 31% (n=21) of the individuals in this study performed well in school, averaging A's and B's. The vast majority of individuals, however, did not perform well academically. Of the 67 men for whom information could be found 69% (n=46) performed poorly averaging C's or failing out. Most (60% or n=28) did poorly due to a lack of application. In these instances, it was not that the individual was unable to do well, but that they chose not to apply themselves either due to a general disinterest or a lack of guidance reinforcing the value of education. Twenty-eight percent (n=13) did poorly due to intellectual disabilities. Four percent (n=2) described experiencing such extreme stress at home that they were unable to concentrate in school. For those remaining (n=3) there was no clear explanation to describe their poor school performance. Ultimately, 35 of the men in this study graduated with a high school diploma; 40, if



including the five individuals who attained their General Equivalency Diploma (GED) while incarcerated. An additional six went on to achieve a bachelor's degree while 26 of the men dropped out of school prior to earning any degree higher than elementary school. Curious as to what may explain the prior academic performances of these men, using a chi-square test for association and a Fisher's Exact, this study found a statistically significant association being classified a loner and dropping out of school ( $p=.007$ ). This finding supports the current literature which suggests that social isolation experienced by any child is also a risk factor for poor school performance (Bester & Budhal, 2001).

### *Mental Health*

Examinations of adult psychiatric records revealed that 30% ( $n=21$ ) of these men sought psychiatric care or treatment either at or after the age of 18. The majority of these individuals sought treatment between the ages 18 to 22 ( $n=11$ ). Of the individuals who reached out for psychiatric treatment or care in adulthood, 57% returned to the doctor or sought additional treatment for multiple years.

Mental health disorders found most commonly among these individuals included substance abuse [drugs and/or alcohol] ( $n=19$ ), antisocial personality disorder ( $n=11$ ), paranoid thinking or psychosis ( $n=9$ ), obsessive compulsive disorder ( $n=8$ ), impulse control disorders ( $n=7$ ), paraphilias ( $n=6$ ). Five were diagnosed as having 'extreme emotional issues,' three were diagnosed with abnormal patterns of sexual behaviour; lastly, two were diagnosed as extremely self-conscious and harboring an inferiority complex. Other diagnoses included depression ( $n=3$ ), disrupted attachment ( $n=2$ ), anxiety ( $n=2$ ), passive aggressive personality disorder ( $n=4$ ), ADHD ( $n=2$ ), suicidal ideation ( $n=2$ ), and "other" personality disorders, not specified ( $n=9$ ).

The rates of psychiatric illnesses experienced by these men during adulthood are higher than the number of psychiatric illnesses these men experienced in their youth (see: Table 5). Specifically, the rates of substance abuse increased by almost five times. The prevalence of OCD and other impulse control disorders is also significantly higher among these men in adulthood than in childhood/adolescence. In addition, paraphilias, which are defined as “intense and persistent sexual interests outside of foreplay and genital stimulation with phenotypically normal, consenting adults” (Barnhill, 2013, p. 329), being to emerge. CD may be diagnosed in adults; however, symptoms of CD usually emerge in childhood or adolescence, and onset is rare after age 16, hence the zero rates of conduct disorder in adulthood. In adulthood, CD can be classified in ASPD. The smaller number of men who have been diagnosed with ASPD in adulthood in comparison to those who were diagnosed with CD in childhood is likely due to the fact that these men are not seeking counselling, therapy, or support.

From these findings, one could infer that as these men age the confluence of early life stressors and the resulting maladjustment are becoming increasingly problematic. In fact, research shows that the long-term negative effects of HPA-hyperactivity and the neurochemical sequela that follows (blunted cortisol) reaches maximum levels in adults, especially in those with a history of childhood maltreatment (Bunea, Szentágotai-Táatar, & Andrei, 2017). This finding is important because it suggests there may be a period of dormancy wherein the effects of early childhood stress are not fully expressed behaviourally until much later in life.

### *Crime*

By the age of 18, 58% (n=41) of the men in this study had a juvenile record. Following the age of 18, 87% (n=61) of the men in this thesis had at least one criminal conviction. Of those with a criminal conviction, 71% (n=43) had more than one previous arrest, 50% (n=31) had at

**Table 5.** Number of Psychiatric Disorders Diagnosed (Pre-Conviction)

Disorder	Childhood/Adolescence	Adulthood
CD	34	0
ASDP	n/a	11
Substance Abuse	4	19
Psychosis/Paranoia	3	9
Depression	2	3
Anxiety	n/a	2
OCD	2	8
Impulse Control Disorder	3	7
Paraphilia	1	6
Abnormal Sexual behaviour	3	3
Extreme Emotional Issues	2	5
Attachment Disorders	2	2

least three arrests, and 48% (n=30) had at least four convictions by the time they reached adulthood. Common charges for the initial arrests included theft or burglary (n=20), physical assault on a woman including a wife or a prostitute (n=7), molestation of a minor (n=5), sexual assault, rape or attempted rape (n=4), among others.

Of the men who had been convicted multiple times (47%), their crimes tended to escalate in severity. For example, five individuals were first arrested for burglary while their second arrests were for assault with a deadly weapon, theft with a weapon, rape, or kidnapping. The crimes of one individual evolved from vandalism to arson. Another escalated from evasion of arrest to interstate motor theft while another still transitioned from assault to attempted murder. The average period of time between an individual's first and second arrest was two years; however, the greatest frequency of individuals (n=7) reoffended within the same year of their first arrest. Despite the fact that 87% (n=61) of the men in this thesis had a criminal conviction by adulthood, only 68% (n=41) served prison or jail time; many were placed on probation.

By the age of 20, 57% (n=40) of the men had a conviction for a sexual offence. Offences included rape, stalking, voyeurism, attempted rape, child molestation, and sodomy. The average

age at which a person was first convicted of a sexual crime was age twenty-four. Additionally, 27% (n=19) of the men in this thesis were registered sex offenders by the age of thirty. The average age of registration was twenty-seven.

Of the men who had a conviction for a sexual offence, 50% (n=20) had at least one additional conviction. The average age at the time of the second conviction was twenty-nine. These numbers reflect actual convictions. Given the low conviction rate of sexual offenders, however, this thesis also examined the rate of undetected sexual offences committed by these men. By examining police reports, interviews with family members, interviews with teachers and school aged peers, this thesis found that 51% (n=38) of the men had committed at least one sexual offence for which they were neither caught nor convicted. Fourteen of the men had committed multiple acts of sexual violence and had no history of arrest or conviction whatsoever.

One of the reasons that so many men may have evaded detection was because so many of them began their history of sexual offending within a close social network. For example, many of the men first began assaulting children from school whom they knew, or members of their own family, such as a sister or a cousin. In these instances, the disclosure of sexual abuse was either taboo and thus the victim did not come forward, or the abuse was occurring within an environment that supported such behaviour. For example, 37% (n=26) of these men lived in highly sexualized homes as children. Homes were labelled as highly sexualized if there was a lack of sexual boundaries between parents and the child. One example of such a child is Fred West. West, an English serial killer who committed at least 12 murders between 1967 and 1987, was raised in a childhood home where incest was accepted as normal.

According to Williams et al. (2016), offenders whose first victim was known to them either as a colleague, friend or family member, are at significantly greater risk for crossing over to offend against a child or person unknown to them. Williams et al. (2016) found that over 80% of those who had committed an offence against a 'known' person crossed over and reoffended against a 'stranger' at a later point. In fact, those who began their crimes against a known individual were four times greater than any other group to reoffend against a stranger. Williams et al. (2016) also concluded that being younger in age at the time of the first sexual offence was also associated with a risk of relationship crossover.

Offences which are never reported or detected are referred to as the 'dark figure of crime' (Wemmers, 1996). These figures are often excluded from police statistics, leading to incomplete data and the underestimation of the actual crime rate. Efforts to estimate the extent of this dark figure began with the first victim surveys which were initially commissioned by the President's Commission on Law Enforcement and Administration of Justice under President Johnson (Wemmers, 1996). Since then results have indicated that there might be ten times as much crime being committed than was being reported to the police (Geis, 1990). If combined with the number of individuals who had a conviction for a sexual offence, it would appear that 77% (n=54) of the men in this thesis had a history of sexual violence prior to being apprehended.

In order to determine the risk factors associated with the perpetration of sexual violence in adulthood, a chi-square analysis was conducted of the association of early developmental risk factors and maladjusted coping on the likelihood of a sexual conviction in adulthood. This analysis found being a loner as a child to be statistically associated with a conviction for a sexual offence ( $\chi^2(1) = 4.258, p = .039$ ). Sexual fantasies in adolescence were also significantly associated with a conviction for a sexual offence ( $\chi^2(1) = 5.657, p = .017$ ). Sexual offence

convictions were also significantly associated with a childhood experience of having been teased or bullied ( $\chi^2(1) = 3.818, p = .050$ ).



**Image 6.** A Young Fred West With His Sisters Daisy and Kitty.  
Retrieved from Bizarrepedia: <https://www.bizarrepedia.com/fred-and-rosemary-west/>

Clearly the psychological and emotional maladjustment that characterized much of these men's youth were exacerbated in adulthood. The long-term negative effects of decades of abuse, isolation, and unaddressed psychological and emotional pain reached maximum levels, at which point the individuals could no longer integrate themselves within the context of the world; the people around them were abusers, authorities were frauds, their entire environment was the antagonist. No longer satisfied with just surviving, no longer capable of living in a world characterized by intimidation, fear, or powerlessness, these individuals sought a way to fight back; to take control and to thereby break free from their troubles. All available evidence tells us that the best indicator of future behaviour is past behaviour, and that the way in which a person responded to a situation in the past is the most likely indication of how they will respond in the future (Roberts, 1997). Given their history of escapism as a defence, it is no surprise that these individuals chose to reconcile their pain the only way they knew how. By withdrawing

completely into the aesthetic of their own fantasies. A fantasy which would be enacted in the face of unmanageable stress or provocation.

**Part 7: The Crimes (30+)**

*The first fact of serial murder is that these crimes exist most clearly in the mind of the serial killer himself.*

Stephen Michaud and Hugh Aynesworth, Journalists  
(2000, p. v)

The average age when the individuals first began their murder series was thirty. Juxtaposed against the backdrop of a longer developmental story (see: Table 6), these crimes appear to be a call for help at the far end of a lengthy continuum of unaddressed psychological and emotional pain. While not all men in this thesis followed this trajectory perfectly, taken together, this thesis shows that the road to serial homicide is not only long, but filled with risk factors for human suffering. Not only are these factors able to be quantifiably measured, but also qualitatively assessed (see: Table 7).

**Table 6.** Average Developmental Trajectory (Quantitative)

Developmental Factor	Age*
Parental Substance Exposure	Prenatal
Abandoned by Father	< 12 Months
Escapism adopted as DM	4
Parents Divorced	8
Peer Rejection	9
Sexual Fantasies Began	11 - 15
Violent Fantasies Began	13
Frequent Substance Use	13
Childhood Psychiatric Care	11 - 16
Juvenile Record	<18
Adult Psychiatric Treatment	18 - 22
Enrolled in The Military	19
First Conviction for a Sexual Crime	24
Display Violence Within Their Relationships	26
Registered Sex Offender	27
Second Sexual Crime Conviction	29
Began Murder Series	30

\* statistical approximation when factor begins

**Table 7.** Average Developmental Trajectory (Qualitative)

Developmental Factor	Age*	Percent**
Emotional Abandonment	4	85%
Need for Escape	4	90%
Feelings of Powerlessness	6	85%
Social Withdrawal	7	80%
Feelings of Inferiority	8	80%
Feeling Unloved	10	60%
Emotional Self-Reliance	10	85%
Social Defeat	13	70%
Failure	25	65%
Compulsive Urges	30	90%

\* statistical approximation when feeling arises

\*\* out of 20 qualitative subjects

As can be seen from Table 7, the feelings that mould serial killer's later psychopathology begin very early in life, mainly between the stages of early childhood and adolescence. Although few other negative feelings appear to emerge past this time, the behavioural and psychopathological implications of this early emotional foundation continue to be expressed well into adulthood. The architecture of the brain has been established.

Perhaps because the adult brain of the men in this thesis were primed to be acutely sensitive to stress, 90% (n=18) were able to recognize some form of external factor, a 'stressor,' that precipitated their crimes. These factors included being kicked out of their home by a spouse, being rejected by family for one's sexual orientation, being fired from a job, being incarcerated, forming close associations with equally antisocial peers, the death of a loved one, the ending of a relationship, and even an event as benign as being ripped off by an acquaintance. For example, Joel Rifkin explained:

...It was probably building for a few months. I was in my early thirties, and I saw everything just falling apart. I broke up with my girlfriend, my father was dead, my closest friend had moved away to Connecticut, my business was failing, I was failing (Fezzani, 2015, p. 153).



Others, like Henry Lee Lucas and Westley Allan Dodd described their murders as the result of external provocation. They described having been pushed, psychologically, to the point of no return. For example, Henry Lee Lucas stated:

She [his mother] done pushed me beyond the limit of really caring. I don't say it's her fault. It's her life. I was just stretched to a point where I wasn't goin' to be pushed no further (Cuba & Norris, 1985, para. 35).

Meanwhile, Dodd explained that the final breaking point for him was when girlfriend left him and took his son with her. Dodd recalls the event as follows:

I was 28 years old at the time—my girlfriend Cassie left me and she took my son with her...I was devastated. I had no job and I had run out of money. I had a strong urge to kill myself. I didn't know what to do...it really hurt to lose my son. So you were depressed and angry, but how did that make you want to kill a child? On the way up to Vancouver I decided that I would molest children again and this time I would make sure that they wouldn't leave me. What do you mean? I would kidnap them and keep them as sex slaves...As I left Yakima I knew I would kill... I was going to kill (Carlisle, 2015, p. 117).

What is most visible in each one of the narrative offered by these men is a feeling of overwhelming hopelessness; the idea that there is nothing else to be lost or gained in life; a depersonalization or detachment from the bonds of rational morality and judgement; as well as a deep feeling of personal failure and loss of agency or control. It is interesting to note that these are many of the similar feelings that were experienced by these men in their youth. Again, feelings of hopelessness, loss of agency, control, autonomy, and feelings of rejection were paramount stressors in childhood that drive these men into coping states that revolved around rich fantasy, which eventually revolved around themes of physical and sexual dominance, rape, and homicide. Therefore, it is not at all a surprise that of those who described enduring these types of stressful precipitating event prior to their series, 70% (n = 14) began to kill within the timeframe of one year.

### *First Victim*

A growing body of research suggests that serial killers demonstrate behavioural consistency in their crimes. For example, Salfati and Bateman (2005) found that offenders demonstrate behavioural consistency regarding the gender (95%), race (85%) and age (65%) of the victim. Thus, the first victim in the series is important for helping us to determine future offence behaviours and perhaps even the psychopathology underlying their series.

The vast majority of victims were female strangers (78%). This finding is consistent with a large body of research indicating that serial homicide offenders are more likely to kill victims with whom they were unacquainted (80% vs. 21%) and that they are more likely to display sexual motives than single-homicide offenders (41% vs. 3%) (Harbort & Mokros, 2001). Seven of the men killed two or more people during their first instance of homicide and two individuals began their series by committing a mass murder, which is defined as the killing of three or more people at one time and in one location (Holmes & Holmes, 2001).

Strangulation tended to be the most common methodology. For example, 54% of the first murders were committed by strangulation/asphyxiation/or suffocation. When asked why they chose strangulation, most of the men explained that it was a more intimate method of killing. For example, in response to the question of why he strangled his victims, Joel Rifkin stated:

It's quiet, clean, simple, and sensory. You feel it through your fingers. It's personal, face-to-face, eye-to-eye. It's primal: the big cats strangle their prey. There is no other method of causing death like it (Fezzani, 2015, p. 171).

According to the literature, the choice of murder weapon in sexual homicides tend to be associated with the offender's sadistic personality (Beauregard & Proulx, 2002; Beauregard, Proulx, & St-Yves, 2007; Healey, Beauregard, Beech, & Vettor, 2016; Myers, Chan, Vo, & Lazarou, 2010). Examined through a qualitative lens, the use of strangulation tended to be

perceived as more personal and more rewarding. At least, that's how Gary Ridgway saw it. Women tended to be killed most often by strangulation, while, male victims were most likely to die as a result of stab wounds, as were children. 48% (n=34) of the men in this thesis employed multiple methods to kill their victims, the most common combination being stabbing, strangulation, and bludgeoning.

Looking at the demographic features of the victims, the men in this thesis tended to choose victims who either did not present a great physical threat to them or victims who they believed would be compliant. For example, as described by Westley Allan Dodd, whose victims were exclusively children: "*I was looking for children that seemed to be kind of quiet, withdrawn, maybe a little shy... Possibly a little bit small for their age*" (Ostrom & Brown, 1993, para. 15). Many of the victims were children or teenagers. Some of the children were playing outside at the time of their abduction or murder. For example, recalling his second victim, Arthur Shawcross stated:

She comes sliding down the embankment, and I'm thinking she's about my age and my sister Jeannie's age [when we were having oral sex]. I grabbed hold of the girl, and I raped her. After seeing what I did, I killed her... (Fezzani, 2015, p. 65).

Some teenagers were on dates when they were last seen or were in locations that serve as transitory spaces, such as mall parking or bus stations. Some of the victims were hitchhiking home, others were walking home after a day of work. Some victims were college students (n=6). Additionally, many of the victims were female sex trade workers and/or people who battled with addiction (n=10). As described by Gary Ridgway, whose victim profile was almost exclusively sex trade workers:

I picked out prostitutes as my victims because I hate most prostitutes and I did not want to pay them for sex. I also picked prostitutes as victims because they were easy to pick up without being noticed. I knew they would not be reported missing right away and might never be reported missing. I picked prostitutes because I

thought I could kill as many of them as I wanted without ever getting caught (Vrides, 2003, para. 24).

Others were individuals who were known to the killer (n=5), such as neighbors, girlfriends, or family members. The selection processes the men used to identify their victims ranged from opportunistic to careful selection. Dennis Rader chose to select his victims very carefully. For example, when asked how he selected his victims, Rader stated:

They were different people in town that I followed, watched... Uh, with the library, I'd look up their names, address, cross-reference and call them a couple of times. Drove by there whenever I could... You lay – Basically you're looking for a victim at that time, and that can either be trolling for months or years. But once you lock in on a certain person then you become stalking, and that might be several of them, but you really hone in on that person (Philbin & Philbin, 2009, p. 282).

Westley Allan Dodd also described the painstaking detail he put into planning the crimes.

For example, Dodd stated:

...I explored the park and I sketched a thorough diagram of it, including directions of the trails, distances from one trail to another and from one location to another. I marked where I would park my car and I put an x at the best strategic location where I could sit and observe the movements of the children coming into the park (Carlisle, 2015, p. 200).

Other individuals, like Richard Cottingham preferred an opportunistic method. When asked how he selected his victims Richard Cottingham explained:

There were so many; there's no particular one...Some were just, you know, opportunity. In fact, a lot of them were just at the wrong place at the wrong time. If I would have went down another block or if I wouldn't have went out that night, or I didn't go into that particular bar, it wouldn't have happened (Fezzani, 2015, p. 102).

Many of the men used psychological tactics to lure their victims in. Some, like Ted Bundy and Richard Cottingham, pretended to be injured and/or in need of assistance. According

to the recollections of Ted Bundy when describing the events of the murder of Georgann

Hawkins:

I was again using a pair of crutches and a boot bag, a boot tree, and she offered to help me with it, and we walked from that location to the parking lot...I handcuffed her and put her in the drivers , I mean, passengers side of the car and drove away (Keppel, 2010, p. 403).

Meanwhile, Richard Cottingham stated:

There were certain cases where I would create the situation where a girl or a lady would come out, and there would be a flat tire, and I'd help her fix her flat tire. And then when she thanked me, I would just push my way into the car (Fezzani, 2015, Chapter 6).

Others calmed their victims by portraying themselves as non-threatening, average citizens. For example, Gary Ridgway stated:

I look like an ordinary person...I ah, acted in a way with the...with the prostitutes to make 'em feel more comfortable...and, um, got on, ah,...got in their comfort zone, got into the...ah, here's a guy he's not really muscle bound, he's not, ah, look like a fighter, just an ordinary john, and that was their downfall is...is they...my appearance was different from what I really was" (Rosencrance & Lee, 2008, p. 260).

Others, still, lured children with the promise of toys or money. For example, according to Westley Allan Dodd:

I went up to the little boy and asked him if he wanted to 'have some fun and make some money.' He seemed unsure, but not scared. I said, 'Come on—this will be fun,' and reached out my hand. He took it and walked to the end of the building with me—we got out of sight of the other kid's unseen (Parkaman Magazine, 2017, para. 36).

While only 45% (n=32) of the men in this thesis raped their first victims, 63 (90%) of the men in this thesis eventually committed rape while in the act of their homicide. The other seven men could not perform sexually with their victims. For example, Edmund Kemper stated: "*I would loved to have raped them, but not having any experience at all... [he trailed off]...*"(von Beroldigen, 1974, para. 7). Instead, Kemper engaged in necrophilia. In fact, 24% (n = 17) of the

men in this thesis engaged in post-mortem sex with the victim. As described by Gary Ridgway: “*having sex with someone who is dead [is great] because you wouldn’t get caught...* (Reichert, 2004, p. 274).

Others used the murder as a form of erotica which they then used to achieve sexual gratification. For example, Dennis Rader explained to a judge:

After I strangled her with the belt, I took the belt off and retied that with pantyhose real tight. Uh removed the handcuffs and tied those with uh, with pantyhose. I can’t remember the colors right now. I think I maybe retied her feet if they hadn’t already—they were probably already tied. Her feet were. And at that time, I masturbated, sir (Ramsland, 2016, p. 161).

Similarly, Michael Bruce Ross stated:

I used to fantasize over the crimes every day and every night. I would masturbate to the point of, um, actually having raw spots on myself from the masturbation. I would bleed. It’s weird. I get a lot of pleasure from it. It is really a pleasurable experience (Berry-Dee, 2007, p. 100).

16 of the victims (23%) were killed in their homes while ten (14%) were killed in the home of the murderer. 18 (25%) of the victims were killed in an outdoor area such as a park, a hiking trail, or a forest. Four (5%) of the victims were killed while in a vehicle with their murderer, while two (3%) were killed in the area in and around a nightclub. Some of the men in this thesis killed their victims in an outdoor location and then brought the victims to their place of residence. For example, emboldened by his ability to evade police, Edmund Kemper stated:

I started flaunting that invisibility, severing a human head, two of them, at night in front of my mother’s residence with her at home, my neighbors at home upstairs, their kitchen window open, the curtains open. Eleven o’clock at night, the lights were on, all they have to do is walk by, look out and I’ve had it (Holmes & Holmes, 1998, p. 96).

When describing what was going through their minds during the first murder, the men in this thesis had varied responses. Some describe a lack of insight and have difficulty remembering

exactly how they felt. For example, when asked what was going through his mind during the first murder, Joel Rifkin stated:

I don't really remember. From my point of view, I couldn't hit her hard enough or enough times. But I don't remember much else of what I was thinking (Fezzani, 2015, p. 163).

Others remember the first murder very well and described it as having caused an overwhelmingly pleasurable feeling. For example, when describing what he felt during his first murder, Westley Allan Dodd explained:

This was the first time I had ever used physical force... I couldn't believe I had allowed myself to lose control like that...BUT... during that struggle, during my first use of force, I experienced the strongest climax I had ever had—it was also the fastest. The struggle was very stimulating... and so powerful, that was all I could think of... and I knew I would try to again reach that level (Carlisle, 2015, p. 173).

Like Rifkin, however, Dodd also admitted to having lost some sense of memory during the event: *“I realized that, during the assault, I had become completely oblivious to my surroundings”* (Carlisle, 2015, p. 173). Others, like Keith Hunter Jespersen, Ted Bundy, Michael Bruce Ross, and Edmund Kemper described committing their murders in a “mindless” state which was then followed by feelings of terror, panic, and confusion. For example, when asked what had been going through his mind during his killings, Michael Bruce Ross stated:

Nothin...that's what's so weird about this thing...There was nothing going through my mind until they were already dead. And then it was like stepping through a doorway. And, uh, I remember the very first feeling I had, was my heart beating. I mean really pounding. The second feeling I had was that my hands hurt where I always strangled them with my hands. And, the third feeling was, I guess, fear, and the kind of reality set in that there was this dead body in front of me. And, again, I don't want to mislead you because I knew what was going on, but it was like a different level. I mean it was like watching it. And, after it was all over, you know, it kinds of sets in, an' that's when I would get frightened and stuff (Berry-Dee, 2007, p. 102).

According to Keith Hunter Jespersen, after his first murder he froze:

I studied the bloody mess I had caused. Her face was red and swollen, unrecognizable from the pretty woman I had been kissing moments before. Teeth protruded through her lip. Blood was everywhere. I felt her head, and everything moved. Her skull was fractured, and her eye sockets destroyed. How had I gotten so angry? It came from somewhere. From Roberta leaving me? My dealings with women in general? My divorce from Rose? Somewhere I had come up with the anger to destroy this beautiful woman I had just met (Fezzani, 2015, p. 92).

Recalling his crimes, Ted Bundy explained: “...*there would be an immediate onslaught of self-recrimination, fear and apprehension over being detected*” (Michaud & Aynesworth, 2000, p. 102). Lastly, Edmund Kemper stated:

It was a shock that first time horrified me.... I couldn't believe that it was that way, and I'm walking back bewildered. I got to kill her, I can't let her go. She's going to tell on me. Everybody's going to get me...I did everything stupid. Everything wrong. If I were trying to get away with it, it was just really, really dumb...and I'm just saying, 'oh god, I did it. I did it. I did it. Shit. I done it. Now I gotta kill the other one” (Horvath, 1984).

Notice how this group is less effected by the actual murder and more panicked about the possibility of apprehension. Lastly, others, like Arthur Shawcross, Ottis Toole, Kenneth Bianci, and Lawrence Bittaker recalled their crimes matter-of-factly. For example, when asked whether he remembered the first time he killed, Toole stated:

You'd never tell. Just like (snaps fingers) ...I said, just like (popping) your fingers or something...what you get into...ain't nothing to it, just like...um... drinking a cup of coffee, smoking cigarettes... (Toole, 1993).

Kenneth Bianchi stated:

She was a hooker. Angelo went out and picked her up. I was waiting on the street. He drove round to where I was. I got in the car. We got on the freeway. I fucked her and killed her. We dumped the body off and that was it. Nothin' to it (Berry-Dee, 2007. p. 413).

Lawrence Bittaker, on the other hand explained:

...Technically, it was rape; they were snatched off the street and tied up. But we treated them well. We partied with them. Gave them food, smoked marijuana and drank. Given the circumstances, it was the most friendly rape situation. I'm the local friendly rapist (Berry-Dee, 2007. p. 411).



Meanwhile Shawcross explained:

Yeah, I killed him, okay. I told him to go home, and he wouldn't. An' then I got kinda mad at him. Yeah, I killed him, an' I buried his body under the dirt, and went fishin'. It was his fault he died. It ain't got nuthin' to do with me ... I'm sorry (Berry-Dee, 2007. p. 59).

Unlike Toole, Bittaker, and Lawrence whose recollections are devoid of remorse, Shawcross was not only reluctant to talk about his first murder victim, ten-year-old Jack Owen Blake, but his voice audibly shook while giving this description. It was, perhaps, the only murder he truly felt remorseful for.

After their first murder, 64% of the men disposed of their victims in an outdoor area such as a park, a ravine, a canyon, a mountain, or a forest. For example, Ottis Toole stated:

We threw [the clothes] out all over the side of the road. We threw different parts of the body all out, out of the window, out of the car all up and down the road (Harris, 2016).

In four of these cases (8%), the outdoor area was close to the home of the individual who had committed the crime or was located in an area the killer was familiar and comfortable with.

For example, Ridgway explained:

...downhill where I could put a woman...a bunch of women...it was, hey, fantastic...it was uh, woody, secluded, and uh, it was a, a site that I figured nobody would find her at, and uh, if they did it would be a couple of years later. Wouldn't be anything, you know, no nothing left of her... (State of Washington v Gary Leon Ridgway, p. 51).

In 11 cases (15%), the body of the victim was found in their own home or apartment, such as the Otero family who were killed by Dennis Rader. In very few instances did the killer dispose of the body in his own home. Only 7% disposed of the body in their home or on their property. One example would be John Wayne Gacy who buried his victims in the crawlspace under his home. The remainder of the victims were found in hotels, restaurants, and city back alleys. 8% of the individuals reoffended within a matter of days, less than a week. 20%

reoffended within the span of a couple of weeks. 11% reoffended one month later. 33% reoffended within 2-11 months. 20% reoffended at least one year later. And 8% reoffended one year later.

### **Part 8: In the Shadow of ‘the Bad Man’ (The Explanation)**

*The darkest souls are not those which chose to exist within the hell of the abyss, but those which chose to break free from the abyss and move silently among us.*

John Carpenter, Director, Producer, and Writer  
(*Halloween*, 1978)

#### The Urge

The repetitive nature of the homicides carried out by these men was described as having been driven or compelled by a ‘force’ that lingered inside of them. For example, Joel Rifkin stated: *“the body starts to want this and need and demand it”* (Fezzani, 2015, p. 170). Henry Lee Lucas explained: *“I just thought there’s no way I could kill somebody, so it’s not that. Something pushes me into doin’ it”* (Cuba & Norris, 1985, para 68). Some compared their homicides to a form of addiction, like drugs or alcohol. For example, when asked why he killed the women, Edmund Kemper stated:

I began picking people up and I’m picking up young women and I’m going a little bit farther each time. It’s a daring kind of a thing...We go to a vulnerable place where there aren’t people watching, where I can act out, and I say no, I can’t...And this craving, this awful raging, eating feeling inside. I could feel it consuming my insides, this fantastic passion. Uh, it was overwhelming me. It was like drugs...I knew I had no control over it. I had just minimal controls, but mainly, I could not stop it. It [homicide] was gonna happen again (Ramsland, 2010).

Similarly, Michael Bruce Ross explained:

... I watched myself do those things and I couldn’t stop it. It was like an invisible barrier was between us. I didn’t want to kill her...I guess it’s like getting high. You know I’ve never used drugs, but you can get high, then you come down and

crash. That's almost how it is. It's just not any easy thing to live with" (Berry-Dee, 2007, p. 93).

Keith Hunter Jespersen also viewed his crimes as a product of a type of addiction, as he explained: "*At the end, I would kill over nothing. I was like a drug addict. I saw myself as a compulsive killer*" (Fezzani, 2015, p. 103). Others described their murders as having been compelled by overwhelming urges and desires. For example, Ted Bundy, who often spoke of his crimes in the third person stated:

... on one particular evening...he saw a woman leaving the bar and walk up a fairly dark side street...something seemed to seize him!...the urge to do something to that person seized him... And it seized him strongly. And to the point where, uh, without giving a great deal of thought, he searched around for some instrumentality to uh, uh, attack this woman with... (Michaud & Aynesworth, 2000, p. 77).

Examinations of the urges experienced by the men in this thesis resulted in the thematic identification of the 'bad man.' For example, Arthur Shawcross stated:

There's always a bad man in me, I never can get rid of it, he's behind a door somewhere, I'm trying to keep him there... (Martin, 2008).

The 'bad man' is essentially the notion that the individual lives a dyadic self-existence wherein they are caught between two distinct lifeworld's. In one world, the 'good man' works and participates successfully in the greater society. He arouses no suspicion and is, for the most part, a contributing member within his communities. The 'good man' is the face that is visible, practiced, and made known to outsiders. In the second of the two worlds lives the 'bad man.' The 'bad man' is the face that is visible and known only to the individual and to his victims. It is the face of the individual who appears only in rare instances of dyscontrol, fear, and emotional turbulence. For these men, the 'bad man' is both an extension of the individuals' maladaptive socio-emotional regulatory processes and the embodiment of their faulty coping strategies, all of which began in childhood and were honed and crafted over decades in the context of violent and

sexual fantasy. The ‘bad man’ emerged from a place of self-protectionism and, when provoked, is “responsible” for the killings. It is the ‘bad man’ who seeks out victims. It is the ‘bad man’ who kills.

To the men in this thesis, both selves (the ‘good man’ and the ‘bad man’) exist and both selves are authentic. The ‘bad man’ is not reflective of a mental illness, like Dissociative Identity Disorder (DID). Rather, it is a recognized and conscious aspect of the individual’s personality.

As described by Ted Bundy:

...the kind of identity that I’d created or was created, and I’m not talking about multiple personalities, but identity that was related to what happened to Julie Cunningham [a victim] more or less thrived on a kind of secrecy that formed the identity and to give us that secrecy was a kind of ... it felt like a kind of death... It became a part of my character, of my facade...I became expert at projecting something very different... a huge part of my life was hidden from everyone (Michaud & Aynesworth, 2000, p. 75).

Yet, while the ‘bad man’ is not a separate personality per se, the individuals in this thesis describe the ‘bad man’ as an aspect of their personality that is not entirely under their own control. As explained by Dennis Rader, “*I can’t stop it... it just, it controls me, you know, it’s like it’s in the driver’s seat*” (Dateline NBC, 2005).

It is something that lives inside them. And it is something that, when provoked, is difficult to contain. From the reflections, it appears as though individuals view themselves as the physical body and view the ‘bad man’ as the conscious mind and ultimate decision-maker. This is especially true when the individual is confronted with overwhelming and discomfoting feelings, thoughts, and emotions. For example, as explained by Shawcross:

I am like a predator, able to hunt and to wantonly destroy at any given time or moment... I have been pushed and threatened... (Berry-Dee, 2007, p. 68).

This notion of ‘the bad man’ as an agent of self-protectionism also resonates with Keith Hunter Jespersen, who stated:

This man that rides along with me carries out the evil deeds. I try to keep him under control but at times he protects me the only way he knows how (Olsen, 2003, p. 328).

### *Restorative Psychology*

The knowledge that the men in this thesis all tended to describe their homicides as acts that were carried out whilst under the spell of some force or compulsion led to the development of a new concept termed, restorative psychology. Restorative psychology is a term to describe the peaceful Zen-like calm that overcomes the offenders just prior to and after the homicides. It is an entirely immersive restful state that is experienced by these men in times that precede their homicidal violence. For them, it is a feeling that enables these men to heal psychologically and emotionally from overpowering feelings of stress and emotional dyscontrol similar to events experienced as children.

For the men in this study the victim assumes the role of a punching bag. The victim is nothing more than an object upon which the offender could purge discomfiting and overwhelmingly feelings; feelings that they were unable to properly manage or control on their own due to their poorly developed emotional regulatory abilities. The suggestion that the murders provided these men with a sense of psychological calm and emotional restoration is reflected in the descriptions of their thought processes and reflections on the feelings the murders inspired. These processes will be described in detail below.

### *Origins of Restorative Psychology*

When reflecting on what motivated them to kill in the first place, these individuals identified their motivations as stemming from discomfiting feelings, thoughts, and emotions that were precisely linked back to childhood experiences of insecurity, emasculation, a lack of

power, lack of control, and a lack of agency. The following section traces the narrative arch and explanations behind the motivations of these offenders.

### Edmund Kemper

My frustration, my inability to communicate socially, sexually; I wasn't impotent but emotionally I was impotent. I was scared to death of failing in male/female relationships (Horvath, 1984).

The above quote is the response Kemper gave when asked why he killed several women. Since childhood, Kemper had a tumultuous relationship with both his parents. He felt emotionally rejected by both his father and his mother and sought desperately to possess the affections of anyone around him. As early as eight years old, he had rationalized that death was perhaps the only method through which to permanently possess one's love. In Kemper's imagination, the act of killing allowed him to achieve full possession of the affections of the object; one that he desired it from. For example, Kemper testified that he had killed his family's cat because he perceived it to be favoring his younger sister. He had killed the cat, apparently, in order to *'to make it mine; to secure its affections'* (von Beroldingen, 1984, para 23). Even as an adult, Kemper described his victims as: *spirit wives*. *"They were like spirit wives...I still had their spirits. I still have them"* (Gilks, 2014). The co-mingling of possession and death is a theme that was present throughout much of Kemper's life; from childhood through to adulthood. Kemper killed in order to build relationships or attain affection that, in real life, he could never have. Recalling his motivations, Kemper stated:

Alive, they [his victims] were distant, not sharing with me. I was trying to establish a relationship and there was no relationship there... When they were being killed, there wasn't anything going on in my mind except that they were going to be mine ... That was the only way they could be mine (Philbin, 2011, p. 129 - 130).

Kemper's victims were essentially surrogates, however, for the one person he wanted to kill but whom he felt powerless to act on that desire; his mother. Kemper's perception of his mother's abuse fed into his motivations for killing. This is demonstrated in many of his reflections. For example, when recalling one of his early murders, Kemper stated:

I had that folding knife, and I pulled it out...and locked it into place it clicked. And she said, 'What's that?' That's a quote. 'What's that?' and she was kinda like a naggy kind of thing. "What's that?" And I couldn't figure out why she said that. Like, it's not that big an impact. That little clicking sound behind her. You know, amongst what's going on, and it hadn't been murderous up to that point. It had been an aggravation, and I was, I had her tied up—or, handcuffed.... I stabbed her all over her back...I stabbed her in the side and the stomach once...I stabbed her in the belly...I didn't do it to make it hurt, I was trying to shut her up (Horvath, 1984).

Kemper's emphasis on the 'naggy' tone of his victim and on wanting not so much to hurt her but to shut her up is reminiscent of his early feelings toward his mother. The fear of failing in relationships, combined with the anger and distorted love he felt toward his mother, culminated in a lengthy series of murders, which ended only with the murder of his mother. Kemper's connection between death and possession is truly exemplified in his final and most significant murder; that of his mother. In regard to this final murder, Kemper stated:

I cut off her head...I knelt next to her...and put my head where hers would have been and felt closer to her than I ever had before. I loved her then truly as much as she always demanded. Loved her as if she had entered me, possessed me to the extent that I was continuous with her... (Serial Killer Documentaries, 2013).

For Kemper, killing was the ultimate expression of control, of mastery, and of possession. It was, an emotional anesthetic. One which served to ease his psychological discomfort; a discomfort that built up in times of fear, stress, distress, and frustration. Not only was the act capable of freeing him from an overwhelming state of psychological discomfort, but it served to heighten his feeling of having the power to acquire something he had always felt

powerless to achieve – affection. And, in fact, as stated by Kemper: *I found myself doing things [murder] in an attempt to make things fit together inside*” (Bartholomew, 2019, para 18). The theme of restorative psychology is clearly evident in this narrative. As a means to address some form of trauma or narcissistic injury, Kemper engages his fantasy world in a real-world venue.

### Arthur Shawcross

She hit me so I strangled her a bit...we're even...the prostitutes I am accused of killing were the enemy to me in their own fashion, because they can kill with social diseases and AIDS and get away with it! (Berry-Dee, 2007, p. 68).

Another example of an individual whose motivations connected back to childhood feelings of insecurity, emasculation, a lack of power, lack of control, and a lack of agency is Arthur Shawcross. Shawcross recalled multiple instances of sexual abuse by his mother throughout his childhood. Shawcross also described instances of sexual abuse by his two sisters throughout his life. For Shawcross, this abuse was not only humiliating, but led to strong feelings of hopelessness, a lack of agency, autonomy, control, and a lack of power over his own physical body. Describing one of his earlier murders, 8-year-old Karen Hill, Shawcross explained:

She comes sliding down the embankment, and I'm thinking she's about my age and my sister Jeannie's age [when we were having oral sex]. I grabbed hold of the girl, and I raped her. After seeing what I did, I killed her (Fezzani, 2015, p. 65).

Karen was later found raped and suffocated, with grass stuffed in her nose and mouth. While nothing can justify Shawcross' violence, one can begin to form an understanding of why he may have reacted as violently as he did. While Karen herself was an innocent eight-year-old girl who had never had any contact with Shawcross other than her murder, the image of her was triggering. To Shawcross, she was not an innocent eight-year-old girl; rather, she was the embodiment of the sexual and psychological pain to which he had been subjected throughout the



entirety of his life. She was a threat to be neutralized. So too were all other women who tried to emasculate him, lied to him, or attempted to steal from him.

Like Kemper, the theme of restorative psychology is clearly evident in Shawcross' narrative. His explanation link directly to his early childhood. For example, Shawcross viewed his mother as a destructive force; one who annihilated his sense of freedom, control, and sexual agency. Shawcross described having never been taken seriously about the abuse he was experiencing at home. The way he viewed it, his mother was 'killing' him, destroying his life and getting away with it. It is not too far a leap to suggest that Shawcross' victim choice and rationale paralleled the resentments he felt toward his mother and society for having let the abuse endure. In fact, when asked of his mindset after the homicide Shawcross explained: "*I was in a fog (inaudible)...I was in a dazed for a few days*" (Morton, 2008).

The notion that the murders left the men feeling soothed and calm is indicated throughout their reflections on the murders. For example, when asked to describe his mindset leading up to the murders, Richard Cottingham stated:

Immediately before, I would go into another zone. I was no longer there. If I could best describe it, it would be like going into 'the white light' that everyone talks about seeing when they are dying or trying to pass over...Maybe it was self-hypnosis. Or a Zen state... the calmness was soothing (Fezzani, 2015, p. 197).

### Ted Bundy

The idealized woman. What else can I say?... they wouldn't be stereotypes, necessarily. But they would be the reasonable facsimile to women—as a class. A class not of women per se but a class that has almost been created through the mythology of women and how they are used as object (Michaud & Aynesworth, 2000, p. 84).

Ted Bundy is another example of an individual who projected an image of his own constructed reality onto his victims. That image was one of idealized femininity. To Bundy, women “*represented not a person, but again the image, or something desirable*” (Michaud & Aynesworth, 2000, p. 92). What he desired was unadulterated, candid openness. As described earlier, Bundy grew up believing, for some time, that his mother was actually his sister. The truth of his parentage only came out later during his childhood; an event which may have prompted him to loathe concealment. Throughout his life, although he describes loving his mother, he laments having never had the opportunity to speak with his mother about ‘*real personal matters.*’ He describes his mother having a “log-jam” that prevented her from opening up. As a result, Bundy was never able to discuss many of his feelings openly and ended up “depending a lot on the radio” where he could listen to people “speaking their minds.” Ted’s early habit of eavesdropping no doubt contributed to his later voyeuristic activities. Ted regularly engaged in voyeurism throughout his late childhood and early adolescence, by peeping in windows and watching women undress. As described by Bundy, “*I wanted to see a real live woman in the flesh!*” (Michaud & Aynesworth, 2000, p. 42).

One could argue that Bundy’s voyeuristic tendencies originated from the psychological and emotional distress of being confronted with the truth of his real parentage; combined with his mother’s lack of open communication about important personal matters, Bundy grievously longed for unrestrained disclosure. His voyeuristic activities may have enabled him to experience the type of unrestrained disclosure he so desperately craved. Fueled by pornography and sexual fantasy which he had been “toying” with since early adolescence, his voyeuristic fantasies graduated to violence and eventually murder. As explained by Bundy:

I don’t know, uh, uh... Let’s say that as a result of his voyeuristic activities where he had frequently watched women undress... let’s say he had a preference to

watch the victims undress...There would be a sexual assault and then... (Michaud & Aynesworth, 2000, p. 101).

While Bundy never does say it, the insinuation is there, *murder*. According to Martin Heidegger, the authentic human entity emerges only when confronted with death. It is only in the human beings' authentic understanding of and relation to death that the human subject is individuated and becomes its "authentic" or "genuine" self. Death is, in this sense, the ultimate disclosure. The understanding of death as the inescapable, unavoidable, certain future, demands the full authenticity of existence (Heidegger, 1962).

Additionally, Ted Bundy spent a great deal of time fantasizing about his crimes prior to having ever directly harmed another human being. For example, speaking again in the third person Bundy described the first instance where he actively put a fantasy into planned action:

He found a piece of two-by-four in a lot somewhere and proceeded to follow and track this girl. And the situation's novel because while he may have toyed around with fantasies before and made several abortive attempts to, uh, act out a fantasy, it never reached the point where actually he was, uh, confronted with harming another individual, or taking possession or abducting or whatever—which really is ultimate, I suppose; one of the ultimate antisocial acts, as it were. And so, it reached a point where he... he'd gotten ahead of this quarry, this girl, and was lying in wait for her, as they say. But, uh, before she reached the point where he was concealed, she turned and went into her house! (Michaud & Aynesworth, 2000, p. 78).

Again, through Bundy's description, the role of power and control, features which he felt he painfully lacked as a child, are central. In each of these instances it is clear that he had spent a great deal of time thinking about and ruminating on the act. Factors such as how the victim would react, their compliance, lack of intrusion, the type of weapon used, where the crime would occur; all of these variables were deeply considered, or more so fantasized about, prior to the crimes themselves. When asked if there was ever a struggle not to engage in murder, Ted Bundy, again in the third person, responded:

I mean... we can see that this kind of person, because one of the primary reasons he did this... uh, committed the murders... was a search for a release of stress or feelings of low esteem or anger, hostility, resentment, whatever. It was channeled for some reason toward women. Young women—and in a particular way (Michaud & Aynesworth, 2000, p. 193).

Keith Hunter Jespersen

It was no longer a matter of right or wrong. I asked this question at the time of my first murder. And the murders that came later seemed like solutions to the problems I was having... (Brass, 2017, para. 13).

The quote above was offered by Jespersen when asked why he continued to kill women even though he knew it was wrong. Keith Hunter Jespersen also possessed motivations for murder, the origins of which can be traced back to his childhood. Throughout his early childhood, Jespersen lamented having never been believed; he was the scapegoat for everything, despite his protestations. He was constantly getting in trouble with authorities, including his parents, for the bad behavior of others. He was made to feel weak, emasculated, hopeless and, owing to his perceived inability to find help outside of himself, withdrew into himself for emotional support and protection. Jespersen encountered similar instances of blame as an adult, however, in his adult life the blame was cast only him not because he was a “*Canadian immigrant*,” as was the case when he was a child but, rather, because he was a man.

For example, in his adulthood prior to his murders, Keith was arrested for allegedly assaulting a woman [Dawn] who had offered him sexual services. Although he was never convicted, this experience stayed with him. Recalling one of his crimes, Jespersen stated:

When she [a sex worker] was inside we undressed and had sex for a couple of hours...I knew it was a matter of time before she was going to try to ‘play me’ and get me to pay her more than I was willing to give her...The memory of what Dawn had done to me came rushing back. My words against a lying woman pleading for help or mine, who will he believe? The woman’s word of course because the American legal system has double standards when it comes to gender.

My word would carry little to no weight with this story and I knew that (Hunter, 2012, p. 22).

According to Jesperson:

In my mind she was already dead. Even if I paid her it wasn't worth taking a chance at letting her go, I grabbed her hand and pulled her in to the sleeper. I talked to her as I pressed my fist in to her throat until she passed out and died later (Hunter, 2012, p. 22).

Keith Hunter Jesperson, who throughout his early childhood and adolescence felt as though he was the scapegoat for everything bad that happened, described feeling an urge to punish others who made him feel belittled, humiliated, and unimportant. For example, in response to sexual rejection, Jesperson stated: "*I felt an urge to punish her for her words*" (Fezzani, 2015, p. 92). Jesperson followed this urge and beat to death the women who had rejected him.

Instances such as those already described are not the exception to the rule. They are the rule. Confrontations, unbearable stress, provocations, and the re-experiencing of unbearable distress in adulthood creates the conditions for the appearance of the 'bad man' the serial killers coping strategies come to life. In the presence of the 'bad man,' the individual is able to gain control over himself and the more compromised aspects of their own psychology; it is the aspect of the self that confers the type of emotional self-protectionism that was required by the men in their youth. The problem, however, is that feelings of powerlessness, lack of control, the absence of agency, inferiority, and emasculation are often deeply embedded and internalized by these individuals from a very young age. Thus, no matter how powerful one instance of homicide leaves these men feeling, the troubled psychology that leads to the emergence of the 'bad man' will always return. As explained by Ted Bundy, again in the third person:

You have that period where he swore to himself that he'd never do it again...As a consequence of that new attitude, the individual would... try to indulge himself in

normal activities. Almost as if he was welcoming himself back to a life-style, a state of mind, that was without the fear, the terror, and the harm...But slowly, the pressures, tensions, dissatisfactions which, in the very early stages, fueled this thing, had an effect...It sort of reached a point where this condition would generate its own needs, wouldn't need that reservoir of tension (or) stress that it seemed to thrive on before. Gradually... it would reemerge (Michaud & Aynesworth, 2000, p. 97).

For these men, as time passes the emphasis changes from: “*Don't ever do it again [to] Don't get caught*” (Michaud & Aynesworth, 2000, p. 96).

### Control

The men in this thesis described feeling helpless against the overwhelming urges, forces, and addiction-like processes that guided their murders. At the same time, the notion of powerlessness is inconsistent with their descriptions of the murders. For example, most of the men in this thesis described feeling an overwhelming sense of power and control at the time they were committing their murders. For example, Westley Allan Dodd stated: “*Being able to kill at will gave me absolute control*” (Carlisle, 2015, p. 218). When reflecting upon the motivations for his murders, Richard Cottingham stated:

It felt great. It's hard to describe to somebody that's probably never experienced it. I mean it's godlike almost. You're in complete control of somebody's destiny (Fezzani, 2015, p. 198).

When describing his mindset prior to his murder Dennis Rader stated:

I got this fantasy. I started working out this fantasy in my mind. And once I potenti—that person become a fantasy, I could just loop, loop it over. I could lay in bed at night. Thinking about this person. The events, and how it's gonna happen. And it become a real—almost like a picture show. You know, I want to go ahead and produce it. And direct it. And go through with it. No matter what the costs were. And y'know, the consequences. It was gonna happen one way or another (Douglas, & Dodd, 2008, p. 307).

Note how Rader achieves a sense of control through his constructed fantasy. By equating himself to a 'director' Rader is able to achieve the dual aims of projecting himself into the role of an authority and also achieves the capacity to dehumanize and/or depersonalize the act of homicide; casting aside the momentous legal weight and moral gravity of his actions. Lastly, when talking to a forensic psychologist, Gary Ridgway explained:

She ...was my property, my...uh, possession. Some'n only I knew and, I missed when they were found or wh-where I lost 'em (Keppel, 2010, p. 507).

That Ridgway assumed some semblance of control while in possession of the bodies he was accumulating is further evidenced by a conversation he had with a psychiatrist for the defense counsel. In this conversation, Ridgway was describing a repetitive dream that he had been having about being unable to recall the location of one of 'his' bodies. and thereby losing control of her, he stated:

I had control of her when I killed her and I had control her over if she hasn't already been found, I'd have control over her where she was still in my possession (State of Washington vs. Gary Leon Ridgway, p. 29).

Why then this incongruence? Perhaps Ted Bundy explained it best. He stated:

Uh, with respect to the idea of possession. I think that with this kind of person, control and mastery is what we see here...In other words, I think we could read about the Marquis de Sade and other people who take their victims in one form or another out of a desire to possess and would torture, humiliate, and terrorize them elaborately—something that would give them a more powerful impression that they were in control (Michaud & Aynesworth, 2000 p. 127).

The key word here is 'impression.' While most of the men in this thesis described achieving a state of control over their victims, their day-to-day lives, from childhood well into adulthood, were characterized by feelings of disempowerment, lack of agency and control. For these individuals, the reclamation of power and control over oneself and others was a desire the nature which spanned back to childhood. Not only did these feelings emerge due to abusive,

neglectful, or maladaptive home environments but were then exacerbated by peer rejection and bullying and nurtured, to an extreme, in the self-protective fantasy worlds created by these individuals in their late childhoods and early adolescence. In the face of what is perceived as insurmountable and unmanageable stress in adulthood, stressors that can typically be traced back to their early childhood, these individuals experience a type of cognitive splitting. They sever themselves, psychologically, cognitively, and emotionally from the rest of the world. It is an extreme form of escapism. Unable to escape the physical reality of their day-to-day lives these individuals hand control over to ‘the bad man,’ an aspect of the self that developed, early in their childhood fantasies, but is acted out, behaviourally in adulthood.

#### **Part 10: Post-Crime Findings [Post-Arrest]**

*We are not determined by our experiences, but are self-determined by the meaning we give to them; and when we take particular experiences as the basis for our future life, we are almost certain to be misguided to some degree. Meanings are not determined by situations. We determine ourselves by the meanings we ascribe to situations.*

Alfred Adler (1931)

While 18% (n=13) of the men were strongly suspected of the murders prior to their arrest, so much so that they had been interviewed by police, in no instance did these interviews lead to the arrest of the individual. The average number of years between their first interview with the police and their eventual arrest was six years. The average number of years between the first and last murder was also six years.

The majority of the men 43% (n=30) were captured due to forensic links such as DNA, shoeprints, or hair that had been left at the scene. Another 25% (n=18) of the men were captured because they had been arrested for another offence which then led investigators to realize that the



individual was also responsible for murder. 13% (n=9) of the men were caught in the act. 11% (n=8) voluntarily confessed to the police. And 9% (n=5) had been caught because a victim had escaped and informed law enforcement.

### Psychiatric Findings

The majority of the men in this thesis were diagnosed with ASPD/Psychopathy (n=57); followed by paraphilia (n=53), the greatest frequency of which included sadism (n=44), followed by pedophilia (n=17), and necrophilia (n=10); substance abuse (n=25); and psychosis or paranoid thinking (n=17). Six were diagnosed with borderline personality disorder. Five were diagnosed with narcissistic personality disorder. Four were diagnosed with depression. Four were diagnosed with bipolar personality disorder, and 10 were found to have had attempted suicide at least once in their lives (see: Table 8).

**Table 8:** Number of Psychiatric Disorders Diagnosed (Post-Conviction)

Disorder	Childhood/Adolescence	Adulthood	Post-Conviction
CD	34	n/a	n/a
ASDP/Psychopathy	n/a	11	57
Substance Abuse	4	19	25
Psychosis/Paranoia	3	9	17
Depression	2	3	4
Anxiety	n/a	2	n/a
OCD	2	8	2
Impulse Control Disorder	3	7	n/a
Paraphilia	1	6	53
Abnormal Sexual behaviour	3	3	n/a
Extreme Emotional Issues	2	5	n/a
Attachment Disorders	2	2	n/a
Borderline Personality Disorder	n/a	n/a	6
Schizotypal Personality Disorder	n/a	n/a	4

Again, these findings reveal a lengthy developmental history of social, emotional, behavioural, and psychological maladjustment; a history of which spans back to the individuals early formative years. Unfortunately, by the time they are arrested these men have inflicted an

extraordinary amount of social damage; the human cost can never be recovered. While convicted of a total of 459 murders, the 70 men in this thesis have been implicated in the murder of 1097 homicides. But the suffering does not end at just 1097 human lives. Add to that the pain and suffering of the victims' families; the parents, grandparents, sisters, brothers, aunts, cousins, husbands, wives, and children who will never see their loved one again and who may spend a lifetime wondering what happened to them and why. Add to that the pain and suffering of the family members of those who committed these crimes: the innocent children of serial killers who, for their fathers' sins, experience social ostracism and unwanted intrusions into their young lives. The brothers and sisters of these offenders whose last names are held hostage to the memory of violence and infamy and who must fight to protect their own identities lest they encounter misguided attempts at retribution. Add to that the pain of the community, the officers who attend these scenes marked by heinous brutality; the wives and partners who console their loved ones while simultaneously fearing for their safety; or the unsuspecting jogger, hiker, or community member who happens upon the scene before the police. Add those, and the number of people affected by these crimes comes to an extraordinary number.

Serial homicide is a heinous crime, one that demands to be understood. And yet, to understand this crime, we must endeavor first to do what seems impossible. To see beyond the horror. To see beyond the individuals at their worst. To understand this crime, we must be willing to embrace these individuals at all points of development, from conception to death. Only with this perspective will we be able to fully appreciate the complexity of the development of serial killers. There is no value to assigning a label of 'monster' to an individual who is clearly human, but whose behaviour is both atypical and extreme. The need to embrace these individuals

beyond their worst moment, beyond the visual of them as a monster was best described by Michael Bruce Ross at the beginning of this thesis. Ross stated:

I wish that I could plug you into my head. I wish that I could plug every person who wishes to see me executed into my head. Then you all could see what I see. Then you would know what I know. Then you would see it as I do... that it is not me (Ross, 2005, para. 1).

There is, however, no external device that would allow us to ‘plug in’ to the lives of these people. Only through compassion, understanding, suspended judgement, and the refutation of simplistic cognitive biases, we can begin to “*to see and know the monster...*” as they do, and, more importantly, to understand its origin and functional nature in the life of these individuals (Ross, 2005, para. 1).

## Chapter 5

### CONCLUSION

The purpose of this thesis was to build upon the pioneering work of Burgess et al. (1986) who first alluded to the critical importance of understanding the perception of killers in order to understand their motivations and psychopathology. To accomplish this, my thesis embraced a multi-level and multi-factorial methodology that examined the life experiences and psychological processes of serial killers as well as the ways in which these processes were shaped, expressed, and experienced throughout the life course. Finally, my thesis merged the findings of each methodology, concluding with a developmental model of serial homicide as described through the words and experiences of offenders themselves.

#### Summary of Findings

There have been few studies that have examined the serial killers' experiences and their subjective experiences of those events. Those which have examined the serial killer's life course have done so on the basis of observable events. For example, the presence or absence of child abuse. Without studies of the serial killers subjective understanding of those events it is difficult to evaluate when, where, how, and why their disturbed psychopathology began. This study did just that; albeit without a control group, which is the next step in this research endeavor. And while a control group enables one to provide more assertive conclusions I share these tentative findings.

What was found was that serial killers don't begin as 'monsters' but adopt a mindset of hopelessness as they experience repeated social, emotional, and personal failures early on in their development. Unable to develop meaningful relationships or identify individuals who can meet

their social and emotional needs, serial killers learn to turn inward for emotional and social reassurance. This emotional regulatory strategy takes the form of escapism and later evolves into a complex fantasy of sex and violence. It is a world built around themes of power, dominance, control. Serial killers engage with these themes through fantasy because their external worlds are marked by a deep lack of power, control, and personal autonomy. These fantasy worlds allow serial killers, as children, to inhabit spaces that evolve solely around them, their needs, and their desires. Obsessive and perpetual re-entry into their fantasy worlds throughout their childhood and early adolescence dulls the soothing effect it once provided. Like an addict who builds tolerance to a drug, so too do serial killers build a tolerance to the emotionally calming effects of their fantasy worlds.

Emotionally immature and hyperreactive to feelings of stress and other emotional discomforts, serial killers graduate into a life of delinquency. Burglary, robbery, and voyeurism are common activities of the serial killer during adolescence. These crimes are not an attempt to acquire financial capital or material possessions but, rather, serve the same emotional purpose that the serial killer's earlier fantasy world did. The thrill of evading capture, the power one feels upon looking down at a helpless victim fully at one's mercy, and the adrenaline rush that comes with transgressing the law, what sociologist Jack Katz called, the "seductions of crime," quell the serial killers emotional need for power, domination, and control. From the time of their adolescence, serial killers are individuals who, instead of following the law or other social mores, choose their own options and live a life according to their own desires; their desire being an intense pursuit of emotional satisfaction and one which can only be achieved selfishly and impulsively without thought or compunction to the effects their crimes have on their victims.

For the serial killer who, by adolescence, has adopted a life of selfish pursuits and who finds the infliction of terror upon others emotionally satisfying, violence is a natural progression. Perhaps having learned what actions or behaviours are most likely to arouse suspicion or attract law enforcement attention, serial killers adopt several evasive strategies through which to engage potential victims. These include fraud, seduction, flattery, and other forms of deception. Additionally, having learned which actions and behaviours arouse suspicion, serial killers also learn to disguise themselves. By adulthood they are experts at impression management and arouse no suspicion among those with whom they interact on a daily basis. They are, for the most part, ‘average-Joes.’ They hold jobs, have families, have friends, and engage socially with others, and appear to hold acceptable social and moral beliefs.

Yet behind this façade, this ‘mask of sanity,’ these individuals have severed bonds with human emotion and connection. To quell their emotional pain, they live a parallel life, one which is run by ‘the bad man.’ The ‘bad man’ is a part of the self that emerged early in childhood as a result of the need for self-protection. The ‘bad man’ is not reflective of a mental illness, like Dissociative Identity Disorder (DID). Rather, it is a recognized and conscious aspect of the individuals’ personality. It is, however, an aspect of their personality that is not entirely under their own control. In times of stress, ‘bad man’ assumes control, helping the individual to achieve a reclaimed sense of mastery over one’s self and the more fragile elements of their own psychology. Not only does the ‘bad man’ restore the individual to a psychological state of calm but allows them to heal from early psychological traumas.

For these individuals, the reclamation of power and control over oneself and others was a desire spanned back to childhood. Not only did these feelings emerge due to abusive, neglectful, or maladaptive home environments, but were then exacerbated by peer rejection and bullying

and nurtured, to an extreme, in the self-protective fantasy worlds created by these individuals in their late childhoods and early adolescence. Recall, in the mind of a child who feels constantly subjected to psychological distress and where no alternative route for escape is offered, thoughts and fantasies of death or the infliction of pain – either to oneself or another – diminish feelings of powerlessness.

These findings are consistent with previous research in serial homicide. For example, these trajectories are shown in varying degrees both in Burgess' et al. (1986) Motivational Model and Eric Hickey's (1997) Trauma Control Model. The unique contribution of this current research however is to elaborate on those models by showing the psychic or psychological pathways that facilitate the pathologies that underly the serial killers' motivations. Appreciating the origin of the thought patterns and worldviews that underlie serial killer's decision provide us the advantage of more wholly understanding these offenders.

In addition to the consistency these findings share with previous serial homicide literature, these findings are also reminiscent of the findings put forward by O'Neal and Robbins (1958). In their long-term follow up study of deviant children O'Neal and Robbins (1958) concluded that there is a high incidence between childhood problems and adult psychiatric diagnosis. Specifically, O'Neal and Robbins (1958) concluded that:

The juvenile delinquent often matures into the sociopathic personality; the incorrigible runaway or truant may end as a schizophrenic. In the virtual absence of any attempts at therapy with these children, it is not possible to say whether the course of their disease could have been altered... (p. 967).

This failure to seek appropriate assistance was a noted feature among the serial killers in this thesis. Although many of these individuals had contact with a psychologist and/or the courts while in childhood, the attempts at therapy were limited. These men, as children, were often not brought back to the psychologist after the first

visit. Parents of the men in the current study were given psychological advice by non-psychologists, such as family physicians. Most did not receive therapeutic treatment while incarcerated. Others, despite a very visible need for psychiatric intervention, for example those who had been juvenile delinquents, never once made contact with or sought help from an appropriate therapeutic authority. They were left on their own.

Throughout their early lives these offenders were presented with numerous opportunities to potentially alter the course of their development. And yet, these avenues of potential change were never fully explored. Again, it is not possible to say that the individual's course of development would have been altered had these avenues been explored. But the question lingers: could it have been?

#### Future Directions

Perhaps the next step in this research would be to look for windows of vulnerability. Moments in time wherein an individual may be given access to appropriate risk assessment and intervention. Leading scholars in the field of criminology such as Rolf Loeber, David Farrington, and James Garbarino, have dedicated their lives to identifying pathways of childhood aggression to adult violence. Another leading scholar among them is psychologist Robert Zagar. In 2010 Zagar and Grove created an at-risk actuarial model which improved the accuracy of existing models for predicting abuse, violence, and homicide.<sup>13</sup> This model is called the Standard Predictor (SP).

The SP uses prior risk factors to predict whether the individual will later commit homicide. These risk factors include: (1) No court contact (2) Neglect (3) Dependency (4) Abuse

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<sup>13</sup> For access to the model please visit: <http://standardpredictor.com/take-the-test/>



(physical, sexual) (5) Minor in need of supervision (6) Truancy (7) Disorderly conduct, solicitation, phone harassment, forgery (8) Violating court order (9) Drug possession/sales (10) Property damage (11) Auto theft (12) Theft (13) Burglary (14) Robbery (15) Unlawful weapon possession [firearm(s)] (16) Arson (17) Assault/battery (18) Molestation (aggravated criminal sexual assault to minor) (19) Rape (aggravated criminal sexual assault to adult) (20) Homicide.

The SP is the most powerful, easy-to-use, reliable and valid test of abuse and violence potential to date. With an error rate of only 3% the model can accurately identify 97% of those who end up as killers. As stated by Garbarino (2015), the accuracy of this model is significant. This is because most other models attempting to predict recidivism or violence have accuracy rates around 69 – 76%. Zagar's SP has the best sensitivity and specificity of any instrument measuring violence potential. The importance of increased accuracy in risk appraisal cannot be overstated. Predicting and preventing violence and homicide, not only serial homicide, but violence and homicide in schools and urban high-risk areas, are important social and economic concerns today (Zagar & Grove, 2010).

This is not to say that serial killers can be predicted. Zagar's model focuses on non-serial homicide offenders and to date there is not tool or model that can predict *serial* homicide. However, serial killers have a high rate of psychiatric and/or court contact as children and adolescence. Therefore, the application of such a powerful risk assessment tool at these vulnerable ages may enable us to implement cost-effective interventions which, in turn, may help to reduce future violence, dangerousness, and homicide among potential serial killers.

Going forward I also believe it is possible for future research to adopt similar methodologies to diverse groups of offenders or individuals suffering from psychopathology which puts them, or others, at risk. Such attempts may help us to better understand the root

causes of certain behaviours, or at the very least, help us to make sense of them in ways that are functionally meaningful and useful to people. Additionally, serial homicide is at the far end of a continuum built over decades of accumulative, unaddressed risk factors; therefore, the addition of qualitative insights to developmental theories may also be helpful for capturing a wider range of information which can be used to identify moments of particular risk in developing youths. Identifying these particular moments of risk and why/how they emerge may offer us better opportunities for early intervention. Future studies may also consider extending requests for interviews with offenders beyond those whose crimes are ‘media worthy.’ Beyond media value, the qualitative insights gleaned from interviews with serial homicide offenders give us not only a more complete picture of an individual, but also a more complex understanding of who they are beyond the crimes. Such information is invaluable for helping investigators to understand the motivations of those who are currently active.

## Reflection

The deeply uncritical synonymizing of serial killers with such supernatural creatures as “monsters,” and proclamations that align the nature of these offenders with equally unfounded constructs such as “evil,” are examples of our failure to suspend moral outrage. When confronted with tales of an individual who engages in repetitive acts of murder, most of which are manifested with exceptional depravity, it becomes all too easy to assume a reactionary approach. Compassion is deferred, and objective critical thought rises to the level of impossibility. It is in that place of impossibility wherein myths about the nature and motivations of serial killers are brought to life. Reactionary outrage and the denunciation of the humanity of serial killers represent a very human attempt to placate the deep emotional wounds caused by their crimes. In

our collective attempt to heal and to make sense of tragedy, we accept myth in place of true understanding.

We label serial killers as monsters, rather than the wounded. We decry their murders as malicious rather than see them as a maladaptive defense. We condemn these individuals as evil but fail to remember that each of these individuals was born like the rest of us. Unintelligently and without critical thought, we denounce the inhumanity of these individuals and yet refuse to acknowledge the human suffering, despair, fear, and anxiety that form the foundation of their motivations. In the words of Wanda Kaczynski, the mother of the UniBomber, Ted Kaczynski:

Don't ever forget that the person we're delivering to you is a family member, someone we love. It's the little baby that came out of my womb fifty-some years ago, the child and man I've worried about ever since...don't forget for a moment that there is a human dimension to this tragedy (Kaczynski, 2016, Preface, para. 22).

Dismissing serial homicide as a crime perpetrated by monsters or labeling those who commit such acts as 'evil' comfortably hides the functionality and purposefulness of the behaviour in the life of the serial killer. It is impossible to understand serial homicide without asking what relief the serial killer finds, or hopes to find, in murder. And because no society can hope to understand itself without looking at its shadow side, we must be willing to take an approach of radical openness, compassion, and understanding when we ask ourselves: What is serial homicide? What are the causes of serial homicide? What is the nature of the personality of a serial killer? What happens physiologically in the brains of serial killers? What is the nature of the serial killer's compulsion? And, what are some of the paths for redeeming those whose personality structure reveals similar risks to those who become serial killers?

By tracing the developmental processes by which serial killers arrive at a life of repeat violence, I have come to understand homicide as the serial killers coping strategy gone awry. It is

an expression of deep maladjusted psychopathology that began early in childhood. It is the overt expression of unmanageable psychological distress. It is the final action at the end of a deeply isolative and lonely life story that must be understood. I have come to view serial homicide as an extreme developmental outcome. Far from being born evil, the mechanisms that come together to shape the criminal trajectory and lives of serial killers are deeply complex and can be traced to painful experience; hurt is at the center of their behaviour. Thus, far from accepted convention, serial killers are not 'evil.' They are only men and women mired at the extreme end of a developmental trajectory the components of which comprise the perfect storm.

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*heare the same.* At London: Printed [by R. Ward?] for Edward Venge, and are to be solds  
in Fleet-street at the signe of the Vine. Retrieved from: [http://tei.it.ox.ac.uk/tcp/Texts-  
HTML/free/A13/A13085.html](http://tei.it.ox.ac.uk/tcp/Texts-HTML/free/A13/A13085.html)

**Appendix A**  
Names of Serial Killers Examined

Total Sample of Serial Killers used for Quantitative (N = 70) and Qualitative Analysis (N = 20)

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1. Albright, Charles Frederick	36. Gore, David Alan
2. Alcala, Rodney James	37. Hatcher, Charles Ray
3. Atkins, Benjamin	38. Heirens, William
4. Barone, Cesar	39. Jespersion, Keith Hunter *
5. Bell, Larry Gene	40. Kemper, Edmund *
6. Bernardo, Paul *	41. Kirkland, Anthony
7. Bianchi, Kenneth A. *	42. Kohlhepp, Todd
8. Bittaker, Lawrence *	43. Kraft, Randy Steven
9. Black, Robert	44. Krebs, Rex Allan
10. Bonin, William	45. Lucas, Henry Lee *
11. Brady, Ian *	46. Milat, Ivan
12. Brudos, Jerome Henry *	47. Mulcahy, David
13. Bundy, Theodore *	48. Nilsen, Dennis *
14. Buono, Angelo	49. Norris, Roy Lewis
15. Carpenter, David Joseph	50. Olson, Clifford Robert
16. Clark, Douglas Daniel	51. Pickton, Robert (Willie) *
17. Cole, Carroll Edward	52. Putt, George Howard
18. Conde, Rory Enrique	53. Rader, Dennis *
19. Cottingham, Richard Francis *	54. Ramirez, Richard
20. Davis, Cecil Emile	55. Reldan, Robert R.
21. Dodd, Westley Allan *	56. Ridgway, Gary *
22. Duffy, John	57. Rifkin, Joel *
23. Dugan, Brian James *	58. Rissell, Montie Ralph
24. Duncan, Joseph Edward	59. Robinson, Harvey Miguel
25. Erskine, Kenneth	60. Rolling, Danny Harold
26. Eyler, Larry	61. Russell, George Waterfield
27. Fourniret, Michel	62. Sells, Tommy Lynn
28. Franklin, Lonnie David	63. Shawcross, Arthur John *
29. Fraser, Leonard John	64. Shore, Anthony Allen
30. Fred, West	65. Sowell, Anthony
31. Gacy, John Wayne *	66. Toole, Ottis
32. Gaskins, Donald	67. Unterweger, Jack
33. Georges, Guy	68. Watts, Carl Eugene
34. Gillis, Sean Vincent	69. Woodcock, Peter
35. Glatman, Harvey Murray	70. Wright, Steven Gerald James

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*Note.* Serial killers are sorted by last name. Asterisks indicate the subset of participants (n = 20) who were utilized for qualitative analysis.

## Appendix B CODEBOOK

### A. INDICTOR

Do not fill this out

### B. Name of The Serial Killer

This category provides the name of the serial killer.

### C. Compulsive Criminal Homicide (CCH)

This category describes whether the serial killer meets the criteria for CCH as laid out in Reid (2017) (see below).

0. No

1. Yes

Compulsive criminal homicide (CCH).

---

The goal-based and ritualized murder and/or attempted murder of human beings where:

- (A) The total achieved murders numbers 3+ OR the total achieved murders numbers 2 *and* there was at least one more attempted murder<sup>a</sup>
- (B) The combination of total achieved *and/or* attempted murders can be linked forensically and/or upheld judicially<sup>b</sup>
- (C) The primary goal of the perpetrator is intrinsic and based in psychological motivations of personal gratification
- (D) The murder is not carried out at the behest of another or in response to a personal attack on oneself or a loved one<sup>c</sup>
- (E) The offender exercises independent conscious deliberation, purposeful control, planned forethought, and intentional action in the acquisition, constraint, handling and/or eventual elimination of the victim<sup>d</sup>
- (F) Each event of murder occurs as a discreet event which occurs at different intervals of time and which are interrupted by a break or dormant period between homicides wherein the offender returns to their usual way of life<sup>e</sup>
- (G) Subsequent killings meet corollaries A–G

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Note A: All corollaries (A–G) must be met in order to secure the title of CCH.

Note B: Those who commit a spree killing as defined by Douglas, Burgess, Burgess, and Ressler (2006) will be excluded from the label of CCH if their murders were limited to that one instance of spree killing. If spree murders were committed at some point during the series *in addition* to the murders of at least 3 others and if the murders fit the criteria set forth in corollaries A–G then the individual will then meet the criteria for CCH. Ted Bundy was one such individual who demonstrated spree-like murders near the end of his series.

*ritualized* is defined as behaviorally similar (though not necessarily identical) actions engaged in during the commission of the crime. Examples include but are not limited to: (1) engaging in specific pre- and post-mortem sexual acts (e.g. foreign object insertion); (2) the infliction of extreme humiliation and shame during the process of killing (e.g. filling mouth with dirt); (3) excessive violence and beating (e.g. infliction of 150 stab wounds); and (4) power, control, and domination including behavior that allows the offender to exercise unlimited control over victims (e.g. binding).

<sup>a</sup> When the total number of achieved murders is only 2, there *must* also be at least one attempted murder as well. Attempted murder is not necessary in cases where the total number of achieved murders is 3+.

<sup>b</sup> All cases must be upheld judicially. However, because forensic analysis is not always possible in every situation (i.e. the body is never found or there is not enough physical evidence) the forensic aspect of this corollary is only recommended.

<sup>c</sup> The following exclusions would thus apply: murders carried out on behalf of criminal enterprise, mercenaries, revenge, loyalty, terroristic homicides, organized crime (including gangs), or contract murder, as well as on behalf of war or self-preservation.

<sup>d</sup> Those experiencing an acute catathymic crisis and/or those who are actively psychotic during both the planning and commission of their homicidal offences are excluded from this nosology. Multiple murderer and cannibal, Hadden Clark, is an example of one who would be excluded from this nosology. Those who are intoxicated are not excluded.

<sup>e</sup> Restrictive temporal distinctions have limited the utility of serial murder definitions (Yaksic, 2015). Thus, no assumptions are to be made regarding the space between the crimes. So long as there is a break period wherein the serial murderer returns to their usual way of life, the criteria holds. Mass murder and spree murder would be excluded.

### D. Suspected

This category acknowledges that while the serial killer may not meet CCH criteria, if the killer had not been caught so early in their series or had been convicted in court, they may well have been labelled CCH as outlined in Reid (2017).

0. No

1. Yes

### E. FBI Serial Killer

This category is asking whether the serial killer adheres to the FBI's definition of serial homicide i.e. "two or more murders by the same offenders over a period of time..." (FBI, 2005).

0. No

1. Yes

### F. Mass Murder

This category is asking whether the serial committed an act of mass murder at some point during their crime series (i.e. four or more kills in a single location, Douglas, 2013).

0. No

1. Yes

**G. Spree Killer**

This category is asking whether the serial committed an act of spree murder at some point during their crime series (i.e. **the** killing of three or more people within a 30-day period in different locations, accompanied by the commission of another felony, Fox & Levin, 2005).

0. No

1. Yes

**H. Killer is a Male**

This column indicates the killers' biological gender at birth.

0. Female

1. Male

**Killers Race**

This column indicates the serial killer race.

**I. Caucasian**

0. No

1. Yes

**J. Black**

0. No

1. Yes

**K. Hispanic**

0. No

1. Yes

**L. Asian**

0. No

1. Yes

**M. Native American**

0. No

1. Yes

**N. Prenatal Exposure to Drugs/Chemicals**

This category indicates whether the killer had been exposed to drugs (recreational or medical) or any other form of chemical teratogen during their prenatal development (i.e. the time between conception to birth)

0. No

1. Yes

**O. Was Killer's Mother Abused When She Was Pregnant?**

This category will indicate whether the killer's mother was abused (physically sexually, or emotionally) during the time that she was pregnant with the serial killer.

0. No

1. Yes

**P. Birth Year**

This category indicates the serial killer's year of birth.

**Q. Age of The Killer's Mother When They Were Born**

This category states the age of the serial killer's mother when the serial killer was born.

**R. Did the Serial Killer Have a Medical Complication at Birth?**

This category indicates that the killer had a medical complication at birth. Medical complications included are listed

below in columns: S – AC.

- 0. No
- 1. Yes

**Type of Medical Complication**

**S. C-Section**

The serial killer was born via a C-section birth.

- 0. No
- 1. Yes

**T. Premature Birth**

The serial killer was born premature.

- 0. No
- 1. Yes

**U. Anoxia**

The serial killer was born with anoxia, or suffered from it at the time of the birth event.

- 0. No
- 1. Yes

**V. Blood Disorder**

The serial killer was born with a blood disorder including but not limited to anemia, hemophilia, blood clots, and blood cancers such as leukemia, lymphoma, and myeloma.

- 0. No
- 1. Yes

**W. Unspecified but Documented**

There is evidence (from medical or psychiatric reports) that the serial killer had a documented medical complication but it is unknown or otherwise not recorded in the literature.

- 0. No
- 1. Yes

**X. Jaundice**

The serial killer experienced jaundice as a child or was born jaundiced.

- 0. No
- 1. Yes

**Y. Spinal Cord Encephalitis**

The killer was born with spinal cord encephalitis.

- 0. No
- 1. Yes

**Z. Rh Negative**

The serial killers blood type was Rh-Negative

- 0. No
- 1. Yes

**AA. Abnormal Heart**

The killer was born with an abnormal heart or a heart condition

- 0. No
- 1. Yes

**AB. Multiple Complications**

The serial killer was born with multiple complications at birth.

- 0. No
- 1. Yes

**AC. Breech Birth**

The serial killer was delivered by breech birth (i.e. bottom instead of head first).

- 0. No
- 1. Yes

**AD. Did the Killer Have a Brain Abnormality?**

This category indicates whether the serial killer suffered from some form of brain abnormality including microcephaly, edema etc.

- 0. No
- 1. Yes

**AE. Did the Killer have a Head Injury?**

This category indicated if the killer had ever experienced a head injury. Head injuries can be defined as any trauma to the brain/skull/scalp. They can be either open or closed. Open injuries occur when an object hits the skull and has broken and entered the brain, usually high impact type situations. Closed injuries occur from a blow to the head from an object. Examples include: concussion, with loss of consciousness or post-traumatic amnesia, neurologic signs of brain injury or skull fractures.

- 0. No
- 1. Yes

**AF. Age of First Head Injury**

This category states the age of the serial killer at the time of their first head injury recorded in their numerical age ex age 13 = 13.

**AG. Converted Age of First Head Injury**

This category states the converted age of the serial killer at the time of their first head injury. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20

**AH. Age of Second Head Injury**

This category states the age of the serial killer at the time of their second head injury in their numerical age ex age 13 = 13.

**AI. Converted Age of Second Head Injury**

This category states the converted age of the serial killer at the time of their second head injury. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20

**AJ. Total Number of Head Injuries Before 16**

This category describes the total number of head injuries the serial killer had sustained before the age of 16.

**Ak. Killer Had A Physical Deformity**

This category will state if the killer had a physical deformity.

- 0. No
- 1. Yes

**AL. Killer Had XYY Syndrome**

This category will state if the killer had XYY syndrome.

- 0. No
- 1. Yes

**Types of Mental Impairment**

**AM. Low IQ (<85)**

This category will state if the killer had a low IQ (<85)

- 0. No
- 1. Yes

**AN. Dyslexia**

This category will state if the killer has/had Dyslexia.

- 0. No
- 1. Yes

**AO. Autism**

This category will state if the killer was born with autism or any form of autism spectrum disorder.

- 0. No
- 1. Yes

**AP. Brain Damaged unspecified**

This category will state if the killer was had sustained brain damage in their youth, but that the actual type of brain damage is either unknown or not recorded in the literature.

- 0. No
- 1. Yes

**AQ. Serial Killer Has Physical Damage Including Neurological Damage**

This category will state if the killer had any physical damage including neurological damage.

- 0. No
- 1. Yes

**Type of Physical/ Neurological Damage**

**AR. Epilepsy/ Seizure/ Convulsion**

This category will state if the killer had a Epilepsy/ Seizure/ Convulsion condition.

- 0. No
- 1. Yes

**AS. Cardiac Issues**

This category will state if the killer had cardiac issues.

- 0. No
- 1. Yes

**AT. Measles, Mumps, Dropsy, Influenza etc.**

This category will state if the killer had measles, mumps, dropsy, influenza etc.

- 0. No
- 1. Yes

**AU. Meningitis, Migraines**

This category will state if the killer had meningitis, migraines.

- 0. No
- 1. Yes

**AV. Chronic Sore Throat or Glands**

This category will state if the killer had chronic sore throat or glands.

- 0. No

1. Yes

**AW. Tourette's, Impulse Control, Twitches**

This category will state if the killer had Tourette's, impulse control, twitches.

0. No

1. Yes

**AX. Anoxia**

This category will state if the killer had anoxia.

0. No

1. Yes

**AY. Syncope**

This category will state if the killer had syncope.

0. No

1. Yes

**AZ. Speech Communicative Disorder**

This category will state if the killer had a speech communicative disorder, such as stuttering or selective mutism.

0. No

1. Yes

**BA. Fetal Alcohol Syndrome**

This category will state if the killer had Fetal Alcohol Syndrome.

0. No

1. Yes

**BB. Hypoglycemia**

This category will state if the killer had hypoglycemia

0. No

1. Yes

**BC. Asthma**

This category will state if the killer had asthma.

0. No

1. Yes

**BD. Hyperthyroidism**

This category will state if the killer had hyperthyroidism.

0. No

1. Yes

**BE. Deaf**

This category will state if the killer was deaf.

0. No

1. Yes

**BF. Fainting Spells**

This category will state if the killer had fainting spells.

0. No

1. Yes

**BG. Disrupted Attachment**

This category will state if the killer had a disrupted attachment.

0. No



1. Yes

**BH. Tonsillitis**

This category will state if the killer had tonsillitis.

0. No

1. Yes

**BI. Unspecified Neuropsychological Damage**

This category will state if the killer had unspecified neuropsychological damage.

0. No

1. Yes

**BI. Other Damage**

This category will state if the killer had any other type of physical/neurological damage.

0. No

1. Yes

**BK. Hernia**

This category will state if the killer had a hernia.

0. No

1. Yes

**BL. Age When Diagnosed**

This category will state the age the killer was diagnosed with physical or neurological damage. The age will be written in full numerical values ex age 13 = 13.

**Killer's Parents Marital Status**

**BM. Single**

This category will state whether the killer's biological parents were single.

0. No

1. Yes

**BN. Married**

This category will state whether the killer's biological parents were married.

0. No

1. Yes

**BO. Separated**

This category will state whether the killer's biological parents were separated.

0. No

1. Yes

**BP. Divorced**

This category will state whether the killer's biological parents were divorced.

0. No

1. Yes

**BQ. Age at Parents' Divorce**

This category will state the age when killer's parents got divorced. This will be recorded in number, ex age 15 = 15.

**BS. Widowed**

This category will state whether the killer's biological parents were widowed.

0. No

1. Yes

**BT. Common Law**

This category will state whether the killer's biological parents were in a common law relationship but have never been married.

- 0. No
- 1. Yes

**BU. Did Dad Have A Stable Job**

This category will state if the killer's father has a stable, gainful employment.

- 0. No
- 1. Yes

**BV. Was Dad A Criminal**

This category will state if the killer's father was a criminal.

- 0. No
- 1. Yes

**BW. Did Mom Have A Stable Job**

This category will state if the killer's mother had a stable, gainful employment.

- 0. No
- 1. Yes

**BX. Was Mom A Housewife?**

This category will state if the killer's mother was a housewife?

- 0. No
- 1. Yes

**BY. Did Dad Have Substance Abuse Problem?**

This category will state if the killers father has a substance abuse problem (i.e. drugs or alcohol)

- 0. No
- 1. Yes

**BZ. Did Mom Have Substance Abuse Problem?**

This category will state if the killer's mother had a substance abuse problem (i.e. drugs or alcohol)

- 0. No
- 1. Yes

**CA. Was The Killer Ever Orphaned?**

This category will indicate whether the killer had ever been orphaned by his/her biological parents or not.

- 0. No
- 1. Yes

**CB. Was The Killer Ever Abandoned By Parental Figure?**

This category will indicate whether the killer was ever abandoned by parental figure. Abandonment would be considered if the child's parent has died or is unavailable to exercise his or her custodial rights over the child and has not made adequate provision for the child's care and custody, or the child is in a residential placement and the parent refuses or is unable or unwilling to resume the child's care and custody.

- 0. No
- 1. Yes

**Parent Who Abandoned Child**

**CC. Parent Incarcerated**

This category will indicate whether the killer's parents were absent because they were in prison.

- 0. No
- 1. Yes

**Cd. Removed Due To Divorce**

This category will indicate whether the killer's parent was absent by divorce.

- 0. No
- 1. Yes

**CE. Mother**

This category will indicate whether the killer's mother abandoned child.

- 0. No
- 1. Yes

**CF. Father**

This category will indicate whether the killer's father abandoned child.

- 0. No
- 1. Yes

**CG. Both**

This category will indicate whether both of the killer's parents abandoned him/her as a child.

- 0. No
- 1. Yes.

**Age When Parent Left**

**CH. Age When Mom Left**

This category will state the age at which the killer's mom left in actual numerical age ex 13. If nothing to code than 0=No will be present.

**CI. Converted Age When Mom Left**

This category will state the converted age at which the killer's mom. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20

**CJ. Age When Dad Left**

This category will state the age at which the killer's dad left in actual numerical age ex 13. If nothing to code than 0=No will be present.

**CK. Converted Age When Dad Left**

This category will state the age at which the killer's dad left. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20

**Parent Who Died**

**CL. Mother/Mother Figure**

This category will indicate whether the killers mother / mother figure passed away.

- 0. No
- 1. Yes

**CM. Father/ Father Figure**

This category will indicate whether the killers father / father figure passed away.

- 0. No
- 1. Yes

**CN. Both Biological**

This category will indicate whether both the killer's parents passed away

- 0. No
- 1. Yes

**CO. Age When Parents Died**

This category will indicate the age at which the killer's parents passed away, record in actual numerical age ex 19. If no age is present 0=No will be coded.

**CP. Converted Age When Parents Died**

This category will state the age in which the parent passed away, record in number ex 19. If no age is present (0 = no) will be coded. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20

**Who Was The Killer Raised By?**

**CQ. Both Parents**

This category will indicate whether the killer was raised by both parents.

- 0. No
- 1. Yes

**CR. Single Mom**

This category will indicate whether the killer was raised by single mom.

- 0. No
- 1. Yes

**CS. Single Dad**

This category will indicate whether the killer was raised by single dad.

- 0. No
- 1. Yes

**CT. Foster Parents**

This category will indicate whether the killer was raised by foster parents.

- 0. No
- 1. Yes

**CU. Step Parent + Biological Parent**

This category will indicate whether the killer was raised by stepparent and biological parent.

- 0. No
- 1. Yes

**CV. Orphanage**

This category will indicate whether the killer was raised in an orphanage.

- 0. No
- 1. Yes

**CW. Relatives**

This category will indicate whether the killer was raised by relatives.

- 0. No
- 1. Yes

**CX. Aunt/Uncle**

This category will state if the killer was raised by aunt/uncle.

- 0. No
- 1. Yes

**CY. Grandparents**

This category will state if the killer was raised by grandparents.

- 0. No
- 1. Yes

**CZ. Sibling**

This category will state if the killer was raised by sibling.

- 0. No
- 1. Yes

**DA. Passed Along**

This category will indicate whether the killer was passed along to be raised.

- 0. No
- 1. Yes

**DB. Did the Killer Witness Spousal Abuse as A Child?**

This category will state if the killer had witnessed spousal abuse as a child.

- 0. No
- 1. Yes

**Type of Spousal Abuse**

**DC. Physical**

This category will indicate that the type of spousal abuses the killer observed as a child was physical abuse.

- 0. No
- 1. Yes

**DD. Sexual**

This category will indicate that the type of spousal abuses the killer observed as a child was sexual abuse.

- 0. No
- 1. Yes

**DE. Emotional**

This category will indicate that the type of spousal abuses the killer observed as a child was emotional abuse.

- 0. No
- 1. Yes

**Who Was The Abuser?**

**DF. Husband**

This category will state the abusive individual was the husband.

- 0. No
- 1. Yes

**DG. Wife**

This category will state the abusive individual was the wife.

- 0. No
- 1. Yes

**DH. Mutual Abuse**

This category will state that there was mutual abuse in the relationship.

- 0. No

1. Yes

**DI. Boyfriend**

This category will state the abusive individual was the boyfriend/girlfriend.

0. No

1. Yes

**DJ. Killer Experienced Psychological Abuse As A Child**

This category will state if the killer experienced psychological abuse as a child.

0. No

1. Yes

**DK. Describe The Psychological Abuse**

This category qualifies the type of psychological abuse experiences by the child (i.e. were told that they were stupid, were dressed as a girl when they were a boy, were made to sit outside the home if they wet their pants).

**DL. Killer Experienced Physical Abuse As A Child**

This category will state if the killer experienced physical abuse as a child. Physical abuse is defined as the child suffering from or being put at risk for physical harm, inflicted by the person having charge of the child or caused by or resulting from a person's, failure to adequately care for, provide for, supervise or protect the child.

0. No

1. Yes

**DM. Method Of Physical Abuse**

This category qualifies the method of physical abuse the killer experiences as a child (i.e. physical beatings with hands, belts, etc.)

**DN. Killer Experienced Sexual Abuse As A Child.**

This category will state if the killer experienced sexual abuse as a child. Sexual abuse is defined as having been sexually molested or sexually exploited, by a person having charge of the child or by another person where the person having charge of the child knows or should know of the possibility of sexual molestation or sexual exploitation and failed to protect the child.

0. No

1. Yes

**DO. Killer Experienced Any Neglect As A Child.**

This category will state if the killer experienced neglect as a child. Neglect is considered when the child's parent or the person having charge of the child does not provide, or refuses or is unavailable or unable to consent to, services or treatment to remedy or alleviate the harm; g) there is a risk that the child is likely to suffer emotional harm resulting from the actions, failure to act or pattern of neglect on the part of the child's parent or the person having charge of the child.

0. No

1. Yes

**DP. Killer Experienced Any Abuse As A Child.**

This category will state if the killer experienced any form of abuse as a child.

0. No

1. Yes

**DQ. Killer Wet The Bed Frequently As A Child/ Into Adolescence**

This category will state if the killer wet the bed frequently as a child/into adolescence

0. No

1. Yes

**DR. Age When Bed Wetting Occurred**

This category states the age of the serial killer at the time that their bed wetting occurred in actual numerical age ex 13.

**DS. Converted Age When Bed Wetting Occurred.**

This category states the converted age of the serial killer at the time that their bed wetting occurred. These numbers have been converted for SPSS.

1. 0 – 1
2. 2 – 5
3. 6 – 9
4. 10 – 15
5. 16 – 20

**Animal Abuse**

**DT. Killer Abused Animals As A Child**

This category will state if the killer abused animals as a child.

0. No
1. Yes

**DU. Age When Animal Abuse Occurred**

This category states the age of the serial killer at the time that their animal abuse occurred in numbers ex 13.

**DV. Converted Age When Animal Abuse Occurred.**

This category states the converted age of the serial killer at the time that their animal abuse occurred. These numbers have been converted for SPSS.

1. 0 – 1
2. 2 – 5
3. 6 – 9
4. 10 – 15
5. 16 – 20

**Setting Fires**

**DW. Killer Set Fires As A Child**

This category will state if the killer set fires as a child.

0. No
1. Yes

**DX. Age When Fire Setting Occurred**

This category states the age of the serial killer at the time that their fire setting occurred in numbers ex 13.

**DY. Converted Age When Fire Setting Occurred.**

This category states the converted age of the serial killer at the time that their fire setting occurred. These numbers have been converted for SPSS.

1. 0 – 1
2. 2 – 5
3. 6 – 9
4. 10 – 15
5. 16 – 20

**Triad Features**

**DZ. Killer Had Any Of The Triad Features**

This category will state if the killer displayed any of the following behaviours: bed wetting, arson, or animal cruelty.

0. No

- 1. Yes

**EA. Killer Had All Of The Triad Features**

This category will state if the killer displayed all of the following behaviours: bed wetting, arson, or animal cruelty.

- 0. No
- 1. Yes

**Psychiatric Institutionalization As A Child**

**EB. Did The Killer Receive Psychiatric Treatment In An Institution?**

This category will state whether the killer was, as a child, ever sent to a psychiatric institution as a child? This would refer to long term stays as opposed to one-time visits.

- 0. No
- 1. Yes

**EC. Age When Treatment Was Sought**

This category states the age of the serial killer at the time that they sought psychiatric treatment in an institution in numbers ex 13.

**ED. Converted Age When Treatment Was Sought**

This category states the converted age of the serial killer at the time that they sought psychiatric treatment in an institution in numbers ex 13. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20

**EE. No, But Should Have Been**

This category will reflect whether the killer, as a child, suffered from a mental, emotional or developmental condition that, if not remedied, could have seriously impaired the child's development and the child's parent or the person having charge of the child did not provide, or refused or was unavailable or unable to consent to, treatment to remedy or alleviate the condition

- 0. No
- 1. Yes

**EF. Did The Killer Have Invasive Psychiatric Treatment As A Child?**

This category will state if the killer has had any invasive psychiatric treatment as a child. It includes such information as whether the killer, as a child, was ever exposed to invasive psychiatric treatments as a child? Invasive psychiatric treatments would include those such as ECT and psychopharmacological therapy/treatments. Cognitively based non-pharmaceutical treatments (such as CBT/DBT etc.) are NOT included.

- 0. No
- 1. Yes

**Type of treatment**

**EG. ECT**

This category will state the type of treatment the killer had.

- 0. No
- 1. Yes

**EH. Ritalin, Dilantin, Serentil**

This category will state the type of treatment the killer had.

- 0. No
- 1. Yes



**EI. Lithium**

This category will state the type of treatment the killer had.

- 0. No
- 1. Yes

**EJ. Did The Serial Killer Have (4+ Signs Of) Conduct Disorder As A Youth?**

This category will state that the killer had 4+ signs of conduct disorder (CD) as a youth. CD will be defined as: A repetitive and persistent pattern of behaviour in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the additional criteria as indicated in the DSM-V in the past 12 months, with at least one criterion present in the past 6 months

- 0. No
- 1. Yes

**Age Of The Conduct Disorder**

**EK. Age When The Conduct Order Began**

This category states the age of the serial killer at the time that the conduct order began in numerical age ex 13.

**EL. Converted Age When The Conduct Order Began**

This category states the converted age of the serial killer at the time that the conduct order began. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20

**Signs of Conduct Disorder in Youth (prior to age 18)**

**EM. Truant From School Before The Age Of 13**

This category will state that the killer had truant from school before the age of 13.

- 0. No
- 1. Yes

**EN. Often Bullies, Threatens, Or Intimidates People**

This category will state that the killer has often bullies, threatens, or intimidates people.

- 0. No
- 1. Yes

**EO. Has Deliberately Engaged In Fire Setting**

This category will state that the killer had deliberately engaged in fire setting.

- 0. No
- 1. Yes

**EP. Run Away From Home At Least Twice**

This category will state that the killer had run away from home at least twice.

- 0. No
- 1. Yes

**EQ. Alcohol/ Drug Abuse (Including Dealing)**

This category will state that the killer had alcohol and/or drug abuse (including dealing).

- 0. No
- 1. Yes

**ER. Age When Substance Abuse Began**

This category will state the age the killer's substance abuse began. This will be recorded by years of age ex 12.

**ES. Converted Age When Substance Abuse Began**

This category will state the age the killer's substance abuse began. These numbers have been converted for SPSS.

1. 0 – 1
2. 2 – 5
3. 6 – 9
4. 10 – 15
5. 16 – 20

**ET. Forced Someone Into Sexual Activity**

This category will state that the killer had forced someone into sexual activity.

0. No
1. Yes

**EU. Deliberately Destroyed The Property Of Others**

This category will state that the killer had deliberately destroyed the property of others.

0. No
1. Yes

**EV. Stolen Items Of Non-Trivial Value**

This category will state that the killer had stolen items of non-trivial value.

0. No
1. Yes

**EW. Age When The Killer Stole Items Of Non-Trivial Value**

This category will state the age of the killer when they stole items of non-trivial value. This will be recorded by years of age ex 12.

**EX. Had Used Weapons To Harm Others**

This category will state that the killer had used weapons to harm others.

0. No
1. Yes

**EY. Stolen While Confronting The Victim**

This category will state that the killer had stolen while confronting the victim.

0. No
1. Yes

**EZ. Physically Cruel To People**

This category will state that the killer had been physically cruel to people.

0. No
1. Yes

**FA. Age When Began**

This category will state the age of the killer when they began being physically cruel to people. This will be recorded by years of age ex 12.

**FB. Burglary**

This category will state that the killer had participated in burglary.

0. No
1. Yes

**FC. Age When First Burglary Occurred**

This category will state the age of the killer when the first burglary. This will be recorded by years of age ex 12.

**FD. Age When Second Burglary Occurred**

This category will state the age of the killer when the second burglary. This will be recorded by years of age ex 12.

**FE. Broken Into The Homes Of Other People**

This category will state that the killer had broken into the homes of other people.

- 0. No
- 1. Yes

**FF. Petty Crimes**

This category will state that the killer had participated in petty crimes.

- 0. No
- 1. Yes

**FG. Age When Petty Crimes Began**

This category will state the age of the killer when their petty crimes began. This will be recorded by years of age ex 12.

**FH. Lies To Obtain Goods**

This category will state that the killer had lied in order to obtain goods.

- 0. No
- 1. Yes

**FI. Stays Out Late Before The Age Of 13**

This category will state that the killer had stayed out late before the age of 13.

- 0. No
- 1. Yes

**FJ. Did The Killer Have A Juvenile Record?**

This category will state if the killer had a juvenile record.

- 0. No
- 1. Yes

**FK. Sent To Boarding School For Delinquency As A Youth?**

This category will state if the killer was sent to boarding school for delinquency as a youth.

- 0. No
- 1. Yes

**FL. Juvenile Detention**

This category will state if the killer was sent to juvenile detention.

- 0. No
- 1. Yes

**FM. Did The Killer Have Any Non-Convicted Offences In His Youth?**

This category will state if the killer has any non-convicted offenses in his youth. This would include offenses the offender committed but was never convicted of. This would also include offenses for which they were never caught or arrested for.

- 0. No
- 1. Yes

**FN. Did The Killer Demonstrate A Pattern Of Adolescent Delinquency?**

This category will state if the killer demonstrated a pattern of Adolescent Delinquency.

- 0. No
- 1. Yes

**Deviant Sexual Fantasies In Youth**

**FO. Did the killer have deviant sexual fantasies in his youth?**

This category will state if the killer had deviant sexual fantasies in his youth. Sexually deviant fantasizing includes as illegal sexual behaviour or inappropriate behaviour that is directly related to reinforcement of the sex offender's fantasizing, such as collecting pictures of children, inappropriate touching/boundary issues, keeping secret diaries with sexually violent content, or written plans to sexually offend. It also includes fantasies about violent sex or sex where death and/or cannibalism was a feature, also bestiality fantasies, or fantasies where there is torture of a sexual partner.

- 0. No
- 1. Yes

**FP. Age when Fantasies began**

This category will state the age that the killer's fantasies began, represented in years ex 3. If no age the code will be 0. No

**FQ. Converted Age When Fantasies Began**

This category will state the converted age that the killer's fantasies began. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20
- 6. 20+

**Violent Fantasies In Youth**

**FR. Did The Killer Have Violent Fantasies In His Youth?**

This category will state if the killer had violent fantasies in his youth. Violent fantasies could include mutilation, murder, and torture, or any sadistic thoughts where animals or humans are the primary focus of the infliction of pain.

- 0. No
- 1. Yes

**FS. Age when Fantasies Began**

This category will be represented in year ex 4. If no age the code will be 0. No

**FT. Converted Age When Fantasies Began**

This category will state the converted age that the killer's fantasies began. These numbers have been converted for SPSS.

- 1. 0 – 1
- 2. 2 – 5
- 3. 6 – 9
- 4. 10 – 15
- 5. 16 – 20
- 6. 20+

**FU. Killer Moved Frequently As A Child**

This category will state if the killer moved around a lot as a child.

- 0. No
- 1. Yes

**SES in Youth**

This information can be found in school records, psychiatric records, and legal transcripts. This can also be found by locating the annual income and comparing that to the poverty index for the country and at the specific timeframe when the offender was growing up.

**FV. Low**

This category will state if the killer had low SES.

- 0. No
- 1. Yes

**FW. Medium**

This category will state if the killer had medium SES.

- 0. No
- 1. Yes

**FX. High**

This category will state if the killer had high SES.

- 0. No
- 1. Yes

**FY. Killer Was Teased Or Bullied While In School**

This category will state if the killer was teased or bullied while in school. This would indicate whether the offender was ever the target of bullying from other children. Bullying can include: physical assault, mocking, teasing, or verbal abuse. It can also include psychological abuse fear and intimidation are used.

- 0. No
- 1. Yes

**FZ. Killer Bullied Others While In School.**

This category will state if the killer teased or bullied others while in school. This would indicate whether the offender the offender was known to bully others. Bullying can include: physical assaults on other children, mocking, teasing, or verbally abusing other children. It can also include acts of psychological abuse where the child instills a feeling of fear and intimidation in other children.

- 0. No
- 1. Yes

**GA. Killer Was A Loner While In School**

This category will state if the killer was a loner while in school. Indications of being a loner include: having no friends, not being able to have close peer groups, was reclusive and liked to keep to himself, was unable to form lasting relationships

- 0. No
- 1. Yes

**GB. Age When Killer Began To Isolate Him/Herself**

This category will be represented in numerical age example, age 4 = 4. If no age the code will be 0 (=No)

**GC. Killer Got Along With Fellow Students**

This category will state if the killer got along with fellow students. His peers do not have to be close friends, but could include school mates, neighborhood kids, kids with whom the offender was enrolled with in after school programming or camp activities etc.

- 0. No
- 1. Yes

**GD. Killer Had A Close Peer Group**

This category will state if the killer had a close peer group. A close peer group could include having a small group of friends (2+) for whom the killer was close. If the offender did not have any close friend groups (2+) but had one individual (of a similar age) with whom he was very close, please indicate this by inputting the number 2.

- 0. No
- 1. Yes

**GE. Killer Did Not Have A Close Peer Group But Had One Close Friend**

This category will state if the killer did not have a close peer group but had one close friend.

- 0. No
- 1. Yes

**GF. Killer Did Well Scholastically**

This category will state if the killer did well scholastically. Indications of good performance include: achieving high grades, having strong academic and social reviews from teachers, having been involved in the school community (i.e. sports, band etc.) etc.

- 0. No
- 1. Yes

**Killer Did Poorly In School Because Of...**

These categories will state why the killer did poorly in school.

**GG. Lack of Application**

This category will state that the killer did poorly in school due to lack of application during their studies.

- 0. No
- 1. Yes

**GH. Intellectual Deficits**

This category will state that the killer did poorly in school due to intellectual deficits.

- 0. No
- 1. Yes

**GI. Stress**

This category will state that the killer did poorly in school due to stress.

- 0. No
- 1. Yes

**Killer's Education Level Prior To Killing**

Highest level of academic achievement is meant to include the highest degree for which the offender has completed. i. e. if they went to high school and dropped out in grade 10, the offenders highest level of academic achievement will be 'elementary.'

**GJ. Associate's**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GK. Bachelor's**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GL. Diploma**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GM. Doctorate**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GN. GED**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GO. Master's**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GP. None**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GQ. M.D.**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GR. Drop Out**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**GS. Nursing**

This category will state the killer's education level prior to killing.

- 0. No
- 1. Yes

**Enrolled in Military?**

**GT. Serial Killer Was Enrolled In The Military**

This category will state if the killer was enrolled in the military.

- 0. No
- 1. Yes

**GU. Age when enrolled**

This category will state the age at which the killer was enrolled in the military, recorded in numerical age. For example, age 13 = 13. IF nothing to code than 0 (=no) will be present.

**GV. Converted age when enrolled in the military**

This category will state the converted age at which the killer was enrolled in the military. These numbers have been converted for SPSS.

- 1: 16 – 19
- 2: 20 – 23
- 3: 24 – 28
- 4: 29 – 35
- 5: 36+

**Branch of Military That The Serial Killer Was In.**

These following categories will state what branch of the military the killer was part of.

**GW. Army**

This category will state that the killer was enrolled in the army.

- 0. No
- 1. Yes

**GX. Navy**

This category will state that the killer was enrolled in the navy.

- 0. No
- 1. Yes

**GY. Air Force**

This category will state that the killer was enrolled in the air force.

- 0. No
- 1. Yes

**GZ. Marines**

This category will state that the killer was enrolled in the marines.

- 0. No
- 1. Yes

**HA. Coast Guard**

This category will state that the killer was enrolled in the coast guard.

- 0. No
- 1. Yes

**Occupation**

**HB. Construction/General Labor**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HC. Medical**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HD. Criminal**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HE. Law Enforcement**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HF. Artist**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HG. Business Law**

This category will state that the killer's occupation.

- 0. No
- 1. Yes



**HH. Government**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HI. Unemployed Drifter**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HJ. Retail/Sales**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HK. Transportation**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HL. Self-employed**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HM. Food/Beverage Industry**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HN. Student**

This category will state that the killer's occupation.

- 0. No
- 1. Yes

**HO. Did the Serial Killer Ever Apply To Be A Cop?**

This category will state if the killer ever applied to be a cop.

- 0. No
- 1. Yes

**HP. Did The Serial Killer Ever Work As A Cop?**

This category will state if the killer ever worked as a cop.

- 0. No
- 1. Yes

**Psychiatric Care Or Treatment As An Adult**

**HQ. Psychiatric care as an adult**

This category will state if the killer received psychiatric care or treatment as an adult, prior to their murder series.

- 0. No
- 1. Yes

**HR. Age at care/treatment**

This category will state the age at which the killer received psychiatric care or treatment, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**HS. Converted age at care/treatment**

This category will state the converted age at which the killer received psychiatric care or treatment. These numbers have been converted for SPSS.

- 1: 16 – 19
- 2: 20 – 23
- 3: 24 – 28
- 4: 29 – 35
- 5: 36+

**HT. Did The Serial Killer Seek Psychiatric Help More Than Once?**

This category will state if the killer sought psychiatric help more than once.

- 0. No
- 1. Yes

**HU. Psychiatric Diagnosis Prior To Arrest**

This category will state if the killer had a psychiatric diagnosis prior to their arrest.

- 0. No
- 1. Yes

**HV. Age at Diagnosis**

This category will state the age at which the killer received a psychiatric diagnosis, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**HW. Converted Age At Care/Treatment**

This category will state the converted age at which the killer received a psychiatric diagnosis. These numbers have been converted for SPSS.

- 1: 16 – 19
- 2: 20 – 23
- 3: 24 – 28
- 4: 29 – 35
- 5: 36+

**Types Of Psychological Diagnosis**

**HX. Psychopathy**

This category will state if the killer had diagnoses of psychopathy.

- 0. No
- 1. Yes

**HY. Sociopathy**

This category will state if the killer had diagnoses of sociopathy.

- 0. No
- 1. Yes

**HZ. Antisocial PD**

This category will state if the killer had antisocial PD.

- 0. No
- 1. Yes

**IA. Schizoid**

This category will state if the killer had diagnoses of schizoid.

- 0. No
- 1. Yes

**IB. Depression**

This category will state if the killer had depression.

- 0. No

1. Yes

**IC. Schizophrenia or Psychosis**

This category will state if the killer had a diagnosis of schizophrenia.

0. No

1. Yes

**ID. Borderline Personality Disorder**

This category will state if the killer had borderline personality disorder

0. No

1. Yes

**IE. Intermittent Explosive Disorder**

This category will state if the killer has intermittent explosive disorder

0. No

1. Yes

**IF. Paraphilia**

This category will state if the killer had paraphilia. Paraphilia is defined as any recurrent, intense sexually arousing fantasy, sexual urges, or behaviours generally involving i) non-human objects, ii) the suffering or humiliation of oneself or one's partner, or iii) children or other non-consenting persons that occur over a period of at least 6 months" (DSM-V, p.566).

0. No

1. Yes

**IG. Anxiety**

This category will state if the killer had anxiety.

0. No

1. Yes

**IH. Substance Abuse**

This category will state if the killer substance abuse.

0. No

1. Yes

**II Alcohol**

This category will state if the killer abused alcohol.

0. No

1. Yes

**IJ. Age Of Substance Abuse**

This category will state the age of the killer's substance abuse, represented in years ex 3. If no age the code will be 0. No

**IK. Converted Age Of Substance Abuse**

This category will state the converted age of the killer's substance abuse. These numbers have been converted for SPSS.

1: 0 – 1

2: 2 – 5

3: 6 – 9

4: 10 – 15

5: 16 – 20

6: 21- 23

- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**IL. Drugs**

This category will state if the killer abused recreational drugs.

- 0. No
- 1. Yes

**IM. Age Of Drug Abuse**

This category will state the age of the killer's recreational drug abuse, represented in years ex 3. If no age the code will be 0. No

**IN. Converted Age Of Substance Abuse**

This category will state the converted age of the killer's drug abuse. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**IO. ADD/ADHD**

This category will state if the killer had ADD/ADHD.

- 0. No
- 1. Yes

**IP. Obsessive Compulsive Disorder**

This category will state if the killer had OCD.

- 0. No
- 1. Yes

**IQ. Suicidal Ideation**

This category will state if the killer suicidal ideation.

- 0. No
- 1. Yes

**IR. Unknown DX**

This category will state if the killer had unknown but confirmed diagnosis

- 0. No
- 1. Yes

**IS. Bipolar**

This category will state if the killer had Bipolar disorder.

- 0. No
- 1. Yes

**IT. Fear of Abandonment**

This category will state if the killer was afraid of abandonment.

- 0. No
- 1. Yes

**IU. Nervous Breakdown**

This category will state if the killer had nervous breakdowns.

- 0. No
- 1. Yes

**IV. Impulse Control**

This category will state if the killer had impulse control issues.

- 0. No
- 1. Yes

**IW. Insecure Attachment**

This category will state if the killer had insecure attachment.

- 0. No
- 1. Yes

**IX. Conduct Disorder**

This category will state if the killer had conduct disorder

- 0. No
- 1. Yes

**IY. Self-Consciousness**

This category will state if the killer had diagnoses of extreme self-consciousness.

- 0. No
- 1. Yes

**IZ. Disrupted Attachment**

This category will state if the killer had disrupted attachment.

- 0. No
- 1. Yes

**JA. Extreme Emotional Issues**

This category will state if psychiatric reports indicated that the killer had extreme emotional issues

- 0. No
- 1. Yes

**JB. Trichotillomania**

This category will state if the killer had trichotillomania

- 0. No
- 1. Yes

**JC. Passive Aggressive PD**

This category will state if the killer had passive aggressive personality disorder.

- 0. No
- 1. Yes

**JD. Evidence of OCD**

This category will state if the killer had evidence of obsessive compulsive disorder.

- 0. No
- 1. Yes

**JE. Did The Killer Have Previous Arrests?**

This category will state that the killer had any previous arrests.

- 0. No
- 1. Yes

**First Arrest**

**JF. First Arrest Was For...**

This category will describe what the killer's first arrest was for (e.g., molestation, intoxicated driving, etc.)

**JG. Age At First Arrest**

This category will state the age at which the killer was first arrested, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**JH. Converted Age At First Arrest**

This category will state the converted age at which the killer was first arrested. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**JI. Did The Killer Have More Than One Previous Arrest?**

This category will state that the killer had more than one previous arrests.

- 0. No
- 1. Yes

**Second Arrest**

**JJ. Second Arrest Was For...**

This category will describe what the killer's second arrest was for (e.g., molestation, intoxicated driving, etc.)

**JK. Age At Second Arrest**

This category will state the age of the killers second arrest, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**JL. Converted Age At First Arrest**

This category will state the converted age of the killers second arrest. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**Third Arrest**

**JM. Third Arrest Was For...**

This category will describe what the killer's third arrest was for (e.g., molestation, intoxicated driving, etc.)

**JN. Age At Third Arrest**

This category will state the age of the killers third arrest, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**JO. Converted Age At Third Arrest.**

This category will state the converted age of the killers third arrest. These numbers have been converted for

SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**JP. Did The Killer Have More Than Four Previous Arrests?**

This category will state if the killer had more than four previous arrests.

- 0. No
- 1. Yes

**Was The Killer Previously In Prison?**

**JQ. Had The Killer Previously Been In Prison Or Jail?**

This category will state that the killer had previously been in prison or jail.

- 0. No
- 1. Yes

**JR. Age Of First Prison Sentence**

This category will state the age of the killer at his first prison sentence, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**JS. Converted Age Of First Prison Sentence**

This category will state the converted age of the killer at his first prison sentence. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**JT. Had The Killer Ever Been In Prison For Murder Or Attempted Murder**

This category will state if the killer had ever been in prison for murder or attempted murder.

- 0. No
- 1. Yes

**Age Of First Non-Series Murder**

**JU. Age Of First Non-Series Murder**

This category will state the age of the killers first non-series murder, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**JV. Converted Age Of First Non-Series Murder**

This category will state the converted age of the killers first non-series murder. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15

- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**Was the killer on parole or bond?**

**JW. For Murder**

This category will state if the killer was on parole for murder.

- 0. No
- 1. Yes

**JX. Not for Murder**

This category will state if the killer was on parole for anything other than murder.

- 0. No
- 1. Yes

**Did The Killer Violate Their Parole?**

**JY. Violated Parole For A Violent Offence**

This category will state if the killer violated their parole for a violent offence.

- 0. No
- 1. Yes

**JZ. Violated Parole For A Non-Violent Offence**

This category will state if the killer violated their parole for a non-violent offence.

- 0. No
- 1. Yes

**Sexual Offences Prior To Arrest**

**KA. Did The Killer Have A Conviction For A Sexual Offence Prior To Arrest?**

This category will state if the killer had a conviction for a sexual offence prior to arrest. The sexual offence must have been one for which there was a conviction.

- 0. No
- 1. Yes

**KB. Age Of First Offence**

This category will state the age of the killer at their first offence, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**KC. Converted Age At First Offence**

This category will state the converted age of the killer at their first offence. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**KD. Age Of Second Offence**

This category will state the age of the killer at their second offence, recorded in numbers ex 13. IF nothing to code than 0. No will be present.



**KE. Converted Age At Second Offence**

This category will state the converted age of the killer at their first offence. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**KF. Sexual Offence Known But Never Convicted**

This category will state if it is known that sexual offence but was never convicted.

- 0. No
- 1. Yes

**KG. Age Of Non-Convicted Offence**

This category will state the age of the killer at their unknown offence, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**KH. Converted Age At Non-Convicted Offence**

This category will state the converted age of the killer at their unknown offence. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**KI. Were They A Registered Sex Offender Prior To Their Series?**

This category will state if the killer was a registered sex offender prior to their series

- 0. No
- 1. Yes

**KJ. Age Of Registration**

This category will state the age of the killer at the time of their registry, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**KK. Converted Age Of Registration**

This category will state the converted age of the killer at the time of their registry. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

## Type of Sexual Offence

### **KL. Molestation of a Minor**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KM. Indecent exposure**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KN. Rape**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KO. Sexual Assault**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KP. Sexual Indecency**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KQ. Solicitation**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KR. Attempted Rape**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KS. Sexual Misconduct**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KT. Public Masturbation**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KU. Peeping/Voyeurism**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

### **KV. Propositioning**

This category will state if the killer had committed this type of sexual offence.

- 0. No
- 1. Yes

## Marital Status

**KW. Single**

This category will state the killer's marital status was single.

- 0. No
- 1. Yes

**KX. Married**

This category will state the killer's marital status was married.

- 0. No
- 1. Yes

**KY. Separated**

This category will state the killer's marital status was separated.

- 0. No
- 1. Yes

**KZ. Divorced**

This category will state the killer's marital status was divorce.

- 0. No
- 1. Yes

**LA. Widowed**

This category will state the killer's marital status was widowed.

- 0. No
- 1. Yes

**LB. Engaged**

This category will state the killer's marital status was engaged

- 0. No
- 1. Yes

**L.C. Domestic Violence In Marriage**

This category will state whether the serial killer was physically, sexually, or emotionally, abusive to his spouse.

- 0. No
- 1. Yes

**LD. Age When Domestic Abuse Began**

This category will state the age of the killer when they began to assault their spouses or relationship partners. Age will be recorded numerically. For example, age 13 = 13. If not applicable, cell will contain 0.

**LE. Converted Age When Domestic Abuse Began**

This category will state the converted age of the killers when domestic abuse began. These numbers have been converted for SPSS.

- 1: 16 – 19
- 2: 20 – 23
- 3: 24 – 28
- 4: 29 – 35
- 5: 36+

**L.F. Multiple Incidents Of Domestic Abuse**

This category will state whether there were multiple incidents of domestic abuse.

- 0. No
- 1. Yes

**L.G. Number Of Incidents Reported To Police**

This category will state the number of incidents of domestic abuse reported to police. This will be reported in numbers, ex: 12.

**L.H. Domestic Violence Incidents Occurred From**

This category will state the years that the domestic violence occurred.

**LI. Killer Had Multiple Divorces**

This category will state if the killer had been divorced on multiple occasions.

- 0. No
- 1. Yes

**LJ. Killer Had Children**

This category will state if the killer had children.

- 0. No
- 1. Yes

**Who Did The Killer Live With In Adulthood?**

**LK. Spouse**

This category will state if the killer lived with their spouse.

- 0. No
- 1. Yes

**LL. Self**

This category will state if the killer lived on their own.

- 0. No
- 1. Yes

**LM. Girlfriend/ Lover**

This category will state if the killer lived with their girlfriend/ lover.

- 0. No
- 1. Yes

**LN. Friend**

This category will state if the killer lived with their friend.

- 0. No
- 1. Yes

**LO. Mother**

This category will state if the killer lived with their mother.

- 0. No
- 1. Yes

**LP. Other family**

This category will state if the killer lived with other family.

- 0. No
- 1. Yes

**LQ. Killer Ever Kicked Out Of Their Home By A Spouse?**

This category will state if the killer was ever kicked out of their home by their spouse.

- 0. No
- 1. Yes

**LR. Precipitating Event Prior To The Murder**

This category will state if there was a precipitating event prior to the murder.

- 0. No
- 1. Yes

**LS. Specify**

This category will describe the precipitating event prior to the murder (ex: death of both parents, divorce, etc.) If nothing to code than 0. No will be present.

**LT. Time Between Precipitating Events And First Murder**

This category will state the time between the precipitating events and the first murder. This will be recorded as a number of years (ex., 2 years)

**LU. Time Between Prison Release And First Series Murder.**

This category will state the time between the prison release and the first series murder. This will be recorded as a number of years (ex., 2 years)

**LV. Converted Time Between Prison Release And First Series Murder.**

This category will state the converted Time between prison release and first series murder. These numbers have been converted for SPSS.

- 1: 1 – 3 weeks
- 2: 1 – 3 months
- 3: 4 months – year
- 4: 1 year+

**LW. Year Of The Serial Killer's First Murder In The Series**

This category will have the year of the killer's first murder in the series

**LX. Killers Age At The Time Of Their First Murder In The Series.**

This category will state the age of the killer at the time of their first murder in the series, recorded in numbers ex 13. IF nothing to code than 0. No will be present.

**LY. Converted Age At The Time Of Their First Murder In The Series.**

This category will state the converted age at the time of their first murder in the series. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**The Killers Age Group At The Time Of Their Murders**

This category describes the age group which when the serial killer committed their murders, recorded in decades.

**LZ. 10**

This category describes that the killers were in this age group when they committed their murders.

- 0. No
- 1. Yes

**MA. 20**

This category describes that the killers were in this age group when they committed their murders.

- 0. No
- 1. Yes

**MB. 30**

This category describes that the killers were in this age group when they committed their murders.

- 0. No
- 1. Yes

**MC. 40**

This category describes that the killers were in this age group when they committed their murders.

- 0. No
- 1. Yes

**MD. 50**

This category describes that the killers were in this age group when they committed their murders.

- 0. No
- 1. Yes

**ME. 60**

This category describes that the killers were in this age group when they committed their murders.

- 0. No
- 1. Yes

**First Victim**

**MF. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**MG. Weapon Used For Murder/Attack**

This category will describe the method in which in the victim was killed or assaulted. Items can include such things a strangulation, stabbing, shot, bludgeon etc.

**MH. Approximate Location Of The Murder/Attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**MI. Victim's Dump Site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**MJ. Time Between The Victim's Death And When They Were Found**

This category will state the time interval between the victim's death and when they were located by police.

**MK. Where Was The Victim Last Seen?**

This category will describe where the victim was last seen prior to their murder.

**ML. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**MM. Victim's Age**

This category will state the age of the victim.

**MN. Investigative Issue Present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**MO. Investigative Issues Described**

This category will describe what the investigative issues were.

**MP. Death Originally Ruled...**

This category will describe what the victim's death was originally ruled.

**MQ. Was the Victim Raped?**

This category will indicate whether the victim was raped during the time of the attack.

0. No

1. Yes

**MR. Time Between The First Event Of Murder/Attack And The Second**

This category will state the time between the first event of murder and the second. Times can vary from days to years.

**Second Victim****MS. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**MT. Weapon Used For Murder/Attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**MU. Approximate Location Of The Murder/Attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**MV. Victim's Dump Site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**MW. Time Between The Victim's Death And When They Were Found**

This category will state the time interval between the victim's death and when they were located by police.

**MX. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**MY. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**MZ. Victim's Age**

This category will state the age of the victim.

**NA. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

0. No

1. Yes

**NB. Investigative issues described**

This category will describe what the investigative issues were.

**NC. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**ND. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

- 0. No
- 1. Yes

**NE. Time between the second event of murder and the third**

This category will state the time between the second event of murder and the third. Times can vary from days to years.

**Third Victim**

**NF. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**NG. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**NH. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**NI. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**NJ. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**NK. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**NL. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**NM. Victim's Age**

This category will state the age of the victim.

**NN. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**NO. Investigative issues described**

This category will describe what the investigative issues were.

**NP. Death originally ruled...**

This category will describe what the victim's death was originally ruled.



**NQ. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

- 0. No
- 1. Yes

**NR. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**NS. Time between the third event of murder and the fourth**

This category will state the time between the third event of murder and the fourth. Times can vary from days to years.

**Fourth Victim****NT. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**NU. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**NV. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**NW. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**NX. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**NY. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**NZ. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**OA. Victim's Age**

This category will state the age of the victim.

**OB. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**OC. Investigative issues described**

This category will describe what the investigative issues were.

**OD. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**OE. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

0. No

1. Yes

**OF. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**OG. Time between the fourth event of murder and the fifth**

This category will state the time between the fourth event of murder and the fifth. Times can vary from days to years.

**Fifth Victim**

**OH. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**OI. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**OJ. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**OK. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**OL. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**OM. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**ON. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**OO. Victim's Age**

This category will state the age of the victim.

**OP. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

0. No

1. Yes

**OQ. Investigative issues described**

This category will describe what the investigative issues were.

**OR. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**OS. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

0. No

1. Yes

**OT. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**OU. Time between the fifth and sixth murder**

This category will state the time between the fifth event of murder and the sixth. Times can vary from days to years.

**Sixth Victim**

**OV. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**OW. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**OX. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**OY. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**OZ. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**PA. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**PB. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**PC. Victim's Age**

This category will state the age of the victim.

**PD. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

0. No

1. Yes

**PE. Investigative issues described**

This category will describe what the investigative issues were.

**PF. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**PG. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

0. No

1. Yes

**PH. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**PI. Time between the sixth and seventh murder**

This category will state the time between the sixth event of murder and the seventh. Times can vary from days to years.

**PJ. Was there a long break between the sixth and the seventh murder?**

0. No

1. Yes

**Seventh Murder**

**PK. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**PL. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**PM. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**PN. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**PO. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**PP. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**PQ. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**PR. Victim's Age**

This category will state the age of the victim.

**PS. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**PT. Investigative issues described**

This category will describe what the investigative issues were.

**PU. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**PV. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

- 0. No
- 1. Yes

**PW. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**PX. Time between the seventh and eighth murder**

This category will state the time between the seventh event of murder and the eighth. Times can vary from days to years.

**PY. Was there a long break between the seventh and the eighth murder?**

- 0. No
- 1. Yes

**Eighth Victim**

**PZ. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**QA. Weapon used for murder/attack**

This category will describe the method in which in the victim was killed or assaulted. Items can include such things a strangulation, stabbing, shot, bludgeon etc.

**QB. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**QC. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**QD. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**QE. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**QF. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**QG. Victim's Age**

This category will state the age of the victim.

**QH. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

0. No

1. Yes

**QI. Investigative issues described**

This category will describe what the investigative issues were.

**QJ. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**QK. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

0. No

1. Yes

**QL. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**OM. Time between the eighth and ninth murder**

This category will state the time between the eighth event of murder and the ninth. Times can vary from days to years.

**ON. Was there a long break between the eighth and ninth murder?**

0. No

1. Yes

**Ninth Victim**

**QO. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**QP. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**QQ. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**QR. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the

attack (e.g. streets, addresses, landmarks, etc.)

**QS. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**QT. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**QU. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**QV. Victim's Age**

This category will state the age of the victim.

**QW. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**QX. Investigative issues described**

This category will describe what the investigative issues were.

**QY. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**QZ. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

- 0. No
- 1. Yes

**RA. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**RB. Time between the ninth and tenth murder**

This category will state the time between the ninth event of murder and the tenth. Times can vary from days to years.

**RC. Was there a long break between the ninth and tenth murder?**

- 0. No
- 1. Yes

**Tenth Victim**

**RD. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**RE. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**RF. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses,

landmarks, etc.)

**RG. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**RH. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**RI. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**RJ. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**RK. Victim's Age**

This category will state the age of the victim.

**RL. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**RM. Investigative issues described**

This category will describe what the investigative issues were.

**RN. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**RO. Was the victim raped?**

- This category will indicate whether the victim was raped during the time of the attack.
- 0. No
  - 1. Yes

**RP. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**RQ. Time between the tenth and eleventh murder**

This category will state the time between the ninth event of murder and the tenth. Times can vary from days to years.

**RR. Was there a long break between the tenth and eleventh murder?**

- 0. No
- 1. Yes

**Eleventh Victim**

**RS. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).



**RT. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

**RU. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**RV. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**RW. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**RX. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**RY. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**RZ. Victim's Age**

This category will state the age of the victim.

**SA. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

0. No

1. Yes

**SB. Investigative issues described**

This category will describe what the investigative issues were.

**SC. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**SD. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

0. No

1. Yes

**SE. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**SF. Time between the eleventh and twelfth murder**

This category will state the time between the eleventh event of murder and the twelfth. Times can vary from days to years.

**SG. Was there a long break between the ninth and tenth murder?**

0. No

1. Yes

1. Yes

## **Twelfth Victim**

### **SH. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

### **SI. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things as strangulation, stabbing, shot, bludgeon etc.

### **SJ. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

### **SK. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

### **SL. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

### **SM. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

### **SN. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

### **SO. Victim's Age**

This category will state the age of the victim.

### **SP. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

0. No

1. Yes

### **SQ. Investigative issues described**

This category will describe what the investigative issues were.

### **SR. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

### **SS. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

0. No

1. Yes

### **ST. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

### **SU. Time between the twelfth and thirteenth murder**

This category will state the time between the twelfth event of murder and the thirteenth. Times can vary from days to years.

**SV. Was there a long break between the twelfth and thirteenth murder?**

- 0. No
- 1. Yes

**Thirteenth Victim**

**SW. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**SX. Weapon used for murder/attack**

This category will describe the method in which in the victim was killed or assaulted. Items can include such things a strangulation, stabbing, shot, bludgeon etc.

**SY. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**SZ. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**TA. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**TB. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**TC. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**TD. Victim's Age**

This category will state the age of the victim.

**TE. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**TF. Investigative issues described**

This category will describe what the investigative issues were.

**TG. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**TH. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

- 0. No
- 1. Yes

**TI. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**TJ. Time between the twelfth and thirteenth murder**

This category will state the time between the twelfth event of murder and the thirteenth. Times can vary from days to years.

**TK. Was there a long break between the twelfth and thirteenth murder?**

- 0. No
- 1. Yes

**Fourteenth Victim**

**TL. Victim's Name**

This category will indicate the name of the victim. Victims can include anyone who had been murdered by the serial killer, a person whom the killer had attempted to kill but was unsuccessful for whatever reason, or a person who was viciously attacked by the killer but left to live (i.e. rape/physical assault).

**TM. Weapon used for murder/attack**

This category will describe the method in which the victim was killed or assaulted. Items can include such things a strangulation, stabbing, shot, bludgeon etc.

**TN. Approximate location of the murder/attack**

This category will describe the approximate location of the first murder or attack (e.g., streets, addresses, landmarks, etc.)

**TO. Victim's dump site**

This category will describe where the killer disposed of the victim's body following the murder or the attack (e.g. streets, addresses, landmarks, etc.)

**TP. Time between the victim's death and when they were found**

This category will state the time interval between the victim's death and when they were located by police.

**TQ. Where was the victim last seen?**

This category will describe where the victim was last seen prior to their murder.

**TR. Victim Trait**

This category will describe any notable characteristics of the victim's trait (e.g. prostitute, child, gay man, black etc.)

**TS. Victim's Age**

This category will state the age of the victim.

**TT. Investigative issue present**

This category will state if there were any investigative issues that stalled or otherwise impeded the investigation. This could include such things as lack of DNA evidence, lack of DNA technology, disappearance not taken seriously by police, etc.

- 0. No
- 1. Yes

**TU. Investigative issues described**

This category will describe what the investigative issues were.

**TV. Death originally ruled...**

This category will describe what the victim's death was originally ruled.

**TW. Was the victim raped?**

This category will indicate whether the victim was raped during the time of the attack.

- 0. No
- 1. Yes

**TX. Info between crimes**

This category will describe the life happenings, events, and situations surrounding the killer in and around the time of the murders.

**Decade the killer was active**

**TY. 2010**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**TZ. 2000**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UA. 1990**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UB. 1980**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UC. 1970**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UD. 1960**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UE. 1950**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UF. 1940**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UG. 1930**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UH. 1920**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UI. 1910**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**UJ. 1900**

This category will state that the killer was active within this decade.

- 0. No
- 1. Yes

**What type of victim did the killer murder?**

**UK. Women**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UL. Female Prostitutes and Junkies**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UM. Female Unpaid sexual romantic acquaintance**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UN. Female Stranger**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UO. Female Acquaintance/Friend**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UP. Female Family/Spouse**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UQ. Targeted men**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UR. Male Prostitutes and Junkies**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**US. Gay men**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UT. Male Unpaid sexual romantic acquaintance**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UU. Male Stranger**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UV. Male Acquaintance/Friend**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UW. Male Family/Spouse**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UX. Children**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UY. Child Stranger**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**UZ. Child Acquaintance/Friend**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**VA. Child Family/Spouse**

This category will state that this the killer murdered this victim type.

- 0. No
- 1. Yes

**Race of the Victim**

**VB. White**

This category will state what race the killer's victim was.

- 0. No
- 1. Yes

**VC. Black**

This category will state what race the killer's victim was.

- 0. No
- 1. Yes

**VD. Hispanic**

This category will state what race the killer's victim was.

- 0. No
- 1. Yes

**VE. Asian**

This category will state what race the killer's victim was.

- 0. No
- 1. Yes

**VF. Native American**

This category will state what race the killer's victim was.

- 0. No
- 1. Yes

**VG. Mixed**

This category will state what race the killer's victim was.

- 0. No
- 1. Yes

**VH. Was the victim raped**

This category will state that this the killer raped his victim.

- 0. No
- 1. Yes

**VI. Killer tortured his victim**

This category will state that the killer tortured his victim.

- 0. No
- 1. Yes

**VJ. Was there evidence of overkill?**

This category will state that this the killer created evidence of overkill with their victim.

- 0. No
- 1. Yes

**VK. Was the murder was carried out quickly?**

This category will state that the killer made the murder quick.

- 0. No
- 1. Yes

**VL. Killer used a blindfold**

This category will state that the killer used a blindfold with their victims.

- 0. No
- 1. Yes

**VM. Killer bound his victim**

This category will state that the killer bound their victims.

- 0. No
- 1. Yes

**VN. Killer mutilated his victim**

This category will state that the killer mutilated his victim.

- 0. No
- 1. Yes

**VO. Killer took a personal item from the victim**

This category will state that the killer took a personal item from their victim.

- 0. No
- 1. Yes



**VP. Killer engaged in post-mortem sex with the victim**

This category will state that the killer engaged in postmortem sex with the victim.

- 0. No
- 1. Yes

**VQ. Killer engaged in cannibalism**

This category will state that the killer engage in cannibalism with their victims.

- 0. No
- 1. Yes

**VR. Killer drank the blood of the victim**

This category will state that the killer drank the blood of the victim.

- 0. No
- 1. Yes

**VS. Killer posed the body**

This category will state that the killer posed the body of the victim.

- 0. No
- 1. Yes

**VT. Killer took a body piece from the victim as a souvenir**

This category will state that the killer took a body piece from the victim as a souvenir.

- 0. No
- 1. Yes

**VU. Killer took a personal item from the victim as a souvenir**

This category will state that the killer took a personal item from the victim as a souvenir.

- 0. No
- 1. Yes

**VV. Killer followed his crimes in the news.**

This category will state that the killer followed his crimes in the news.

- 0. No
- 1. Yes

**VW. Killer left the body at the crime scene**

This category will state that the killer left the body at the crime scene.

- 0. No
- 1. Yes

**VX. Killer hid the body at the crime scene**

This category will state that the killer hid the body at the crime scene.

- 0. No
- 1. Yes

**VY. Killer left the body at the crime scene and buried it**

This category will state that the killer left the body at the crime scene and buried it.

- 0. No
- 1. Yes

**VZ. Killer moved the body to a different location**

This category will state that the killer moved the body to a different location.

- 0. No
- 1. Yes

**WA. Killer moved the body to a different location and attempted to hide it**

This category will state that the killer moved the body to a different location and attempted to hide it.

- 0. No
- 1. Yes

**WB. Killer moved the body to a different location and buried it.**

This category will state that the killer moved the body to a different location and buried it.

- 0. No
- 1. Yes

**WC. Killer cut the body up and disposed of it**

This category will state that the killer cut the body up and disposed of it.

- 0. No
- 1. Yes

**WD. Killer took the body of his victim home**

This category will state that the killer took the body of his victim home.

- 0. No
- 1. Yes

**WE. Killer killed inmate or prison guard**

This category will state that the killer killed inmate or prison guard.

- 0. No
- 1. Yes

**WF. Killer killed using multiple methods**

This category will state that the killer killed using multiple methods.

- 0. No
- 1. Yes

**Method(s) used by Killer**

**WG. Bludgeon**

This category will state that the killer had used this method to kill his victim.

- 0. No
- 1. Yes

**WH. Shoot**

This category will state that the killer had used this method to kill his victim.

- 0. No
- 1. Yes

**WI. Stab**

This category will state that the killer had used this method to kill his victim.

- 0. No
- 1. Yes

**WJ. Strangle**

This category will state that the killer had used this method to kill his victim.

- 0. No
- 1. Yes

**WK. Drown**

This category will state that the killer had used this method to kill his victim.

- 0. No
- 1. Yes

**WL. Poison**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WM. Run Over**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WN. Drug Overdose**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WO. Suffocate/ Smother**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WP. Bomb**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WQ. Burn/Fire**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WR. Electrocute**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WS. Push**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WT. Pills**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WU. Bodies never found**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WV. Hang**

This category will state that the killer had used this method to kill his victim.  
0. No  
1. Yes

**WW. Staged**

This category will state that the killer had used this method to kill his victim.

- 0. No
- 1. Yes

**WX. Can't be determined**

This category will state that the killer had used this method to kill his victim.

- 0. No
- 1. Yes

**WY. Did the killer have a partner**

This category will state that the killer had a partner with whom he/she committed the crimes.

- 0. No
- 1. Yes

**Partner's Sex**

**WZ. Male**

This category will state what gender was the killer's partner's sex was.

- 0. No
- 1. Yes

**XA. Female**

This category will state what gender was the killer's partner's sex was.

- 0. No
- 1. Yes

**What was the partner's relation to the killer?**

**XB. Gang criminal affiliation**

This category will state the relationship between the partner and the killer.

- 0. No
- 1. Yes

**XC. Girlfriend/Lover**

This category will state the relationship between the partner and the killer.

- 0. No
- 1. Yes

**XD. Prison inmate/Friend**

This category will state the relationship between the partner and the killer.

- 0. No
- 1. Yes

**XE. Spouse/Family**

This category will state the relationship between the partner and the killer.

- 0. No
- 1. Yes

**XF. Interviewed about murders prior to arrest and let go**

This category will state if the killer was interviewed about murders prior to arrest and then let go due to lack of evidence.

- 0. No
- 1. Yes

**XG. Year Interviewed**

This category will have the year of the killer's interview. If killer was not interviewed, cells will be coded with 0 (meaning "no").

**XH. Year of Killers final murder in the series**

This category describes the year at which the serial killer committed their last murder in the series. This will be shown by year ex 1900

**XI. Year Arrested**

This category will have the year of the killer's arrest. If killer was not arrested (likely due to having committed suicide prior to his capture) cells will be coded with 0.

**XJ. How was the killer caught?**

This category will describe the way in which the killer was caught.

1. Victim released.
2. Murderer killed during the crime.
3. Voluntarily went to police and confessed.
4. Identified as being with victim(s) just prior to murder.
5. Communication with police or media.
6. Caught in the act.
7. Victim survived attack after being left for dead.
8. Victim escaped.
9. Linked to crime scene.
10. Linked to victim other than by eyewitnesses.
11. Arrested for a different offense.
12. Turned in by someone who knew offender.

**XK. Killer's age at the time of their last murder**

This category describes the age of the serial killer at the time of their last murder.

**XL. Killer's converted age at the time of their last murder**

This category describes the converted age of the serial killer at the time of their last murder. These numbers have been converted for SPSS.

- 1: 0 – 1
- 2: 2 – 5
- 3: 6 – 9
- 4: 10 – 15
- 5: 16 – 20
- 6: 21- 23
- 7: 24 – 28
- 8: 29 – 35
- 9: 36+

**XM. Years between first and last murders**

This category will state the years between the first and last kill, recorded by number.

**XN. Converted years between first and last**

This category will state the converted years between the first and last kill, recorded by number. These numbers have been converted for SPSS.

- 1: 1 month - 1 year
- 2: 2 – 3 years
- 3: 4 – 6 years
- 4: 7 – 10 years
- 5: 10 years+

**Number of people the killer murdered**

This category will describe amount of people murdered by each killer.

**XO. # of Male Victims**

This category will state the number of male victims that were murdered. This will be show by numbers ex

1.

**XP. # of Female Victims**

This category will state the number of female victims that were murdered. This will be shown by numbers ex 2.

**XQ. Suspected Deaths**

This category will state if the killer has any suspected deaths, recorded by number.

**XR. Confessed Deaths**

This category will state if the killer has confessed to deaths, recorded by number.

**XS. Convicted Deaths**

This category will state if the killer has any convicted deaths, recorded by number.

**XT. Confessed**

This category will demonstrate if killer confessed to the murder.

0. No

1. Yes

**XU. Yes, recant**

This category will demonstrate when the killer confessed to the murder and then took back the confession.

0. No

1. Yes

**XV. Yes, post sentencing**

This category will demonstrate if killer confessed after being sentenced.

0. No

1. Yes

**XW. Yes, Inmates**

This category will demonstrate if killer confessed to killing to jail inmates.

0. No

1. Yes

**XX. NGRI**

This category will demonstrate if killer was not guilty by reason of insanity.

0. No

1. Yes

**XY. NRG I Unsuccessful**

This category will demonstrate if killer's NRG I plea was unsuccessful

0. No

1. Yes

**XZ. Successful**

This category will demonstrate if killer's NRG I plea was successful

0. No

1. Yes

**YA. IQ at first measure**

This column mentions the score of IQ. This will be shown with numbers ex 104. If there is no data it will be coded 0. No.

**YB. IQ at second measure**

This column mentions the score of IQ. This will be shown with numbers ex 104. If there is no data it will be coded 0. No.

**YC. Verbal IQ.**

This category mentions the score of the serial killer's verbal IQ. This will be shown with numbers ex 104. If there is no data it will be coded 0. No.

**YD. Performance IQ**

This column mentions the score of the serial killer's performance IQ. This will be shown with numbers ex 104. If there is no data it will be coded 0. No.

**Sexual Orientation**

**YE. Heterosexual**

This category will state if the killer's sexuality was heterosexual.

- 0. No
- 1. Yes

**YF. Homosexual**

This category will state if the killer's sexuality was homosexual.

- 0. No
- 1. Yes

**YG. Bisexual**

This category will state if the killer's sexuality was bisexual.

- 0. No
- 1. Yes

**YH. Was the Serial Killer a Police Groupie?**

This category will state that the killer was a police groupie.

- 0. No
- 1. Yes

**Organized/Disorganized Dichotomy**

**YI. Organized**

- 0. No
- 1. Yes

**YJ. Disorganized**

- 0. No
- 1. Yes

**YK. Mixed Organized/Disorganized**

- 0. No
- 1. Yes

**Serial killer type**

These categories describes the supposed motivation behind the killers series.

**YL. Hedonist**

This category describes the reason for the killer committing the murders was due to enjoyment.

- 0. No
- 1. Yes

**YM. Rape/Lust**

This category describes why the killer committed the murders.

- 0. No

1. Yes

**YN. No Rape/ for Thrill**

This category describes why the killer committed the murders.

0. No

1. Yes

**YO. Financial Gain**

This category describes why the killer committed the murders for financial gain.

0. No

1. Yes

**YP. Power**

This category describes why the killer committed the murders under the category of enjoyment.

0. No

1. Yes

**YQ. Bluebeard**

This category describes why the killer committed the murders under the category of power.

0. No

1. Yes

**YR. Angel of Death**

This category describes why the killer committed the murders under the category of power.

0. No

1. Yes

**YS. Sniper**

This category describes why the killer committed the murders under the category of power.

0. No

1. Yes

**YT. Anger**

This category describes why the killer committed the murders due to anger.

0. No

1. Yes

**YU. Missionary**

This category describes why the killer committed the murders due to missionary reason.

0. No

1. Yes

**YV. Attention**

This category describes why the killer committed the murders due to attention received.

0. No

1. Yes

**YW. Convenience**

This category describes why the killer committed the murders due to convenience.

0. No

1. Yes



**YX. Multiple Motives**

This category describes that there were multiple motives of why the killer committed the murders.

- 0. No
- 1. Yes

**YY. Mental Illness**

This category describes why the killer committed the murders due to mental illness.

- 0. No
- 1. Yes

**YZ. Visionary**

This category describes why the killer committed the murders under the category of mental illness.

- 0. No
- 1. Yes

**ZA. Paranoia**

This category describes why the killer committed the murders under the category of mental illness.

- 0. No
- 1. Yes

**ZB. Other**

This category describes that there were other reasons why the killer committed the murders.

- 0. No
- 1. Yes

**ZC. Family History of Mental Illness**

This category will state if the Killer's family have a history of mental illness.

- 0. No
- 1. Yes

**ZD. Mother**

This category will state if the killer's mother or the mother's side of the family has history of mental illness.

- 0. No
- 1. Yes

**ZE. Father**

This category will state if the killer's father or father's side of the family have history of mental illness.

- 0. No
- 1. Yes

**ZF. Did the killer have any relatives who were murders?**

This category will state if the killer had any relatives who were murders

- 0. No
- 1. Yes

**ZG. Did the killer have multiple family members charged with murder?**

This category will state if the killer had multiple family members charged with murder.

- 0. No
- 1. Yes

**Was parent incarcerated for any offence?**

This category will state if the killer's parent was incarcerated for any offence.

**ZH. Mother**

This category will state if the killer's parent (mother) was incarcerated for any offence.

- 0. No
- 1. Yes

**ZI. Father**

This category will state if the killer's parent (father) was incarcerated for any offence.

- 0. No
- 1. Yes

**ZJ. Father was physically or emotionally absent**

This category will state if a father was physically or emotionally absent.

- 0. No
- 1. Yes

**ZK. Was imprisonment for a violent offence?**

This category will state if the killer's parent was imprisonment for a violent offence.

- 0. No
- 1. Yes

**ZL. Was killer's parent in the military?**

This category will state if the killer's parents were in the military. Had the parent ever been involved in the military? Military would include (Navy, army, marines etc., but NOT traditional law enforcement like the police).

- 0. No
- 1. Yes

**ZM. Was killers' parent in law enforcement?**

This category will state if the killer's parent was in law enforcement.

- 0. No
- 1. Yes

**ZN. Did the killer have a paraphilia?**

This category will state if the killer had a paraphilia. Paraphilia is defined as any recurrent, intense sexually arousing fantasy, sexual urges, or behaviours generally involving i) non-human objects, ii) the suffering or humiliation of oneself or one's partner, or iii) children or other non-consenting persons that occur over a period of at least 6 months" (DSM-V, p.566).

- 0. No
- 1. Yes

**Types of Paraphilia**

**ZO. Exhibitionism**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZP. Fetishism**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZQ. Sadism**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZR. Voyeurism**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZS. Chronophilia**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZT. Pedophilia**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZU. Hebophilia**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZV. Zoophilia**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZW. Necrophilia**

This category will state if the killer had this type of paraphilia.

- 0. No
- 1. Yes

**ZX. Was the killer diagnosed with a mental disorder following the arrest?**

This category will state if the killer was diagnosed with a mental disorder following the arrest.

- 0. No
- 1. Yes

**Types of Mental Disorder**

**ZY. Schizophrenia/Psychosis**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**ZZ. Psychopathy**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAA. Atypical Personality**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAB. Paranoid Psychosis**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAC. Autism**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAD. Bipolar**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAE. Borderline**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAF. Schizoaffective, Schizotypal, Schizoid**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAG. Depressive**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAH. DID (dissociative identity disorder)**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAI. OCD**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAJ. Narcissistic PD**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAK. PTSD**

This category will state if the killer had this type of mental disorder after arrest.

- 0. No
- 1. Yes

**AAL. Did the killer commit suicide?**

This category will state if the killer had committed suicide.

- 0. No
- 1. Yes

**AAM. Attempted Suicide**

This category will state if the killer had attempted to commit suicide.

- 0. No
- 1. Yes

**AAN. Did the killer live in a highly sexualized home as a child?**

This category will state if the killer had lived in a highly sexualized home as a child. This will indicate whether there was ever a lack of sexual boundaries between parents and the offender while the offender was a child/adolescent. Lack of sexual boundaries could include instances when the mother walks around the house naked or in lingerie, when the parent bathes or dresses their child up to an age where it would be socially inappropriate, instances where parents talk graphically about sexual experiences or sex in general (including bestiality and necrophilia). It could also include instances where pornographic materials are left in easily accessible locations for the offender (as a child). It could also include instances where the parent figure has sex in front of the child or where they leave their bedroom door open when sex is occurring. It could also include instances where the parent figure brings multiple sexual partners home and flaunts their sexuality in front of the child.

- 0. No
- 1. Yes

**Sexualized Parent**

**AAO. Mother**

This category will state the sexualized parent in the killer's life.

- 0. No
- 1. Yes

**AAP. Father**

This category will state the sexualized parent in the killer's life.

- 0. No
- 1. Yes

**AAQ. Both Parents**

This category will state the sexualized parent in the killer's life.

- 0. No
- 1. Yes

**AAR. Other**

This category will state the sexualized parent in the killer's life.

- 0. No
- 1. Yes

**AAS. Extreme revulsion toward sexuality in the killer's childhood home**

This category will state if there was an extreme revulsion toward sexuality in the killer's childhood home.

- 0. No
- 1. Yes

## **Appendix C**

### **Chi-Square Analyses**

#### **Loner and Low IQ**

A chi-square test for association was conducted between being a loner and low IQ. All expected cell frequencies were greater than five. There was a statistically significant association between being a loner and low IQ,  $\chi^2(1) = 3.996$ ,  $p = .046$ . In addition, a Fisher's Exact test was conducted between being a loner and low IQ. There was a statistically significant association between being a loner and low IQ,  $p = .041$ .

#### **Loner and Child of a Single Mother**

A chi-square test for association was conducted between being a loner and having a single mother. All expected cell frequencies were greater than five. There was a statistically significant association between being a loner and having a single mother.,  $\chi^2(1) = 6.906$ ,  $p = .009$ . In addition, a Fisher's Exact test was conducted between being a loner and having a single mother. There was a statistically significant association between being a loner and having a single mother,  $p = .014$ .

#### **Loner and Frequent Moving**

A chi-square test for association was conducted between being a loner and frequent moving. All expected cell frequencies were greater than five. There was a statistically significant association between being a loner and frequent moving,  $\chi^2(1) = 9.333$ ,  $p = .002$ . In addition, a Fisher's Exact test was conducted between being a loner and frequent moving. There was a statistically significant association between being a loner and frequent moving,  $p = .003$ .

#### **Loner and Experiencing Bullying**

A chi-square test for association was conducted between being a loner and experiencing bullying. All expected cell frequencies were greater than five. There was a statistically significant association between being a loner and experiencing bullying,  $\chi^2(1) = 4.479$ ,  $p = .034$ . In addition, a Fisher's Exact test was conducted between being a loner and experiencing bullying. There was a statistically significant association between being a loner and experiencing bullying,  $p = .043$ .

#### **Loner and Dropping Out of School**

A chi-square test for association was conducted between being a loner and dropping out of school. All expected cell frequencies were greater than five. There was a statistically significant association between being a loner and dropping out of school,  $\chi^2(1) = 7.150$ ,  $p = .007$ . In addition, a Fisher's Exact test was conducted between being a loner and dropping out of school. There was a statistically significant association between being a loner and dropping out of school,  $p = .007$ .

#### **Low-SES and Child Abuse**

A chi-square test for association was conducted between low-SES and experiencing child abuse. All expected cell frequencies were greater than five. There was a statistically significant association between low-SES and experiencing child abuse,  $\chi^2(1) = 4.204$ ,  $p = .040$ . In addition,

a Fisher's Exact test was conducted between low-SES and experiencing child abuse. There was a statistically significant association between low-SES and experiencing child abuse,  $p = .035$ .

### **Child Abuse and Family Histories of Mental Illness**

A chi-square test for association was conducted between experiencing child abuse and a family history of mental illness. All expected cell frequencies were greater than five. There was a statistically significant association between experiencing child abuse and a family history of mental illness,  $\chi^2(1) = 4.328$ ,  $p = .037$ . In addition, a Fisher's Exact test was conducted between experiencing child abuse and a family history of mental illness. There was a statistically significant association between experiencing child abuse and a family history of mental illness,  $p = .033$ .

### **Loner and a Conviction for a Sexual Offence**

A chi-square test for association was conducted between having been a loner as a youth and having had a conviction for a sexual offence prior to arrest. All expected cell frequencies were greater than five. There was a statistically significant association having been a loner as a youth and having had a conviction for a sexual offence prior to arrest,  $\chi^2(1) = 4.258$ ,  $p = .039$ . In addition, a Fisher's Exact test was conducted between having been a loner as a youth and having had a conviction for a sexual offence prior to arrest. There was a statistically significant association between having been a loner as a youth and having had a conviction for a sexual offence prior to arrest,  $p = .038$ .

### **Sexual Fantasies and a Conviction for a Sexual Offence**

A chi-square test for association was conducted between having had sexual fantasies as a youth and having had a conviction for a sexual offence prior to arrest. All expected cell frequencies were greater than five. There was a statistically significant association between having had sexual fantasies as a youth and having had a conviction for a sexual offence prior to arrest,  $\chi^2(1) = 5.657$ ,  $p = .017$ . In addition, a Fisher's Exact test was conducted between having had sexual fantasies as a youth and having had a conviction for a sexual offence prior to arrest. There was a statistically significant association between having had sexual fantasies as a youth and having had a conviction for a sexual offence prior to arrest,  $p = .017$ .

### **Having Been Teased or Bullied and a Conviction for a Sexual Offence**

A chi-square test for association was conducted between having a conviction for a sexual offence prior to arrest and having been teased or bullied as a child. All expected cell frequencies were greater than five. There was a statistically significant association between having a conviction for a sexual offence prior to arrest and having been teased or bullied as a child,  $\chi^2(1) = 3.818$ ,  $p = .050$ . In addition, a Fisher's Exact test was conducted between having a conviction for a sexual offence prior to arrest and having been teased or bullied as a child. There was a statistically significant association between having a conviction for a sexual offence prior to arrest and having been teased or bullied as a child,  $p = .043$ .