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Department of Aviation and Security.

**The Making of a Serial Killer**

A literature study into the effects of Cognitive, Biological and  
Social psychological factors in serial killing.

**Author:**

Brittani Oldham

21606815

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**Supervisor:**

Allison Savory

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For my Mum and Dad, who taught me that the limit is only where I set it.

For my Nanny, who showed me that with love, compassion and a passion for learning anything is possible.

For my Connor, who held my hand through it all.

## **Abstract**

Although serial killing was only defined in 1988, there is still more research to be conducted into the causes of this phenomena. Therefore, the aim of this thesis is to look into potential causes of serial killing, with emphasis on social, biological and cognitive psychology. A plethora of literature and various case studies of incarcerated serial killers have been used to support or debunk the theories explored.

Serial murderer is classified as the murder of 3 or more victims by the same offender, over multiple locations with the presence of a cooling off period (Ressler et al, 1988). Definitional problems with defining serial murder has led to confusion when classifying murder and therefore its causes. Social psychology explores the nurture side of the 'nature vs nurture' debate, with emphasis on childhood trauma, re-enactment and self-evaluation. Biological psychology explores the nature side of the debate, with emphasis on chromosomal abnormalities, a biological predisposition for crime and other biological functions. Cognitive psychology explores how brain dysfunctions can lead to serial murder, with emphasis on head injury causing frontal lobe damage. Lastly, personality disorders are explored in relation to social, biological and cognitive psychology and how they link to serial killing.

After reviewing the evidence, it is reasonable to suggest that there is not one singular cause of serial killing, rather a variety of social, biological and cognitive

factors and that can cause someone to be susceptible or expedite the process of becoming a serial killer.

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## **Chapter One: Introduction.**

Serial murder has been apparent throughout history for thousands of years, with historical examples such as Liu Pengali, the Prince of Jidong. Pengali is one of the first recorded serial killers in the world, who in 116 B.C, would take hunting parties of slaves and outlaws and kill 100's of people and taking their belongings out of boredom (Qian, 86 B.C). These multiple murders have created widespread moral panic since its inception, especially when the murders have been particularly horrifying, causing the public to fear that they could be next (Soothill, 2008). Prolific cases such as Jeffrey Dahmer, Ted Bundy and the Moors Murderers (fuelled by media sensation) created worldwide panic and fear of these so called 'monsters', with the public why they had committed such crimes (Soothill, 2008). This 'why' has led to the fear and distrust of others, fearing they too could be a murderer. Over the last few years, the public's interest in the motivating factors of serial killing has peaked, with many docu-series being released exploring possible reasons from childhood abuse to psychosis (Soothill, 2008). Leyton (2001) and Holmes and Holmes (1998, 2008) conducted research into the field of multiple murder and have failed to draw on one conclusive root cause of serial killing. This thesis will examine theories with the aim to identify a potential common denominator that could be a catalyst for serial murder and answer the research question 'What makes a Serial Killer?'.

This thesis will attempt to explore varying motivating factors for serial killing, with particular emphasis on biological, social and cognitive psychological factors. The aim is to decipher what makes a serial killer – are they born or are they made?

Chapter one will explore the concept of serial killing, looking at both practical and academic definitions as well as important case studies. Chapter two will go through the methodology used to format this thesis, as well as justifications for writing it. Chapter three will explore the biological aspects of serial killing and will cover the nature side of the nature vs nurture debate. More specifically looking into genetic makeup and links to serial killing as well as hereditary predispositions to murder. Chapter four will explore the sociological aspects and will look into the nurture aspect, specifically exploring psychological trauma and abuse as well as familial and environmental factors. Chapter five will explore the cognitive aspects of serial killing with a focus of physical trauma such as brain injury, with links to serial killing. Lastly, in Chapter six will be the conclusion of these findings, pinpointing one or more motivating factors for serial killing with justifications. These justifications will be based on academic research and interpretation by Leyton (2001), Fox and Levin (2018), Holmes and Holmes (1998, 2008), Knight (2006), Wresh (2014), Turco (2001) and others.

## **Chapter Two: Methodology**

This thesis will explore the problem of serial killing by attempting to understand the motivations behind these multiple murders. Serial killing over the last decade has become sensationalised in the media. Jewkes (2015, p:48) would suggest that serial killing would be 'newsworthy' as it conforms to several news values. For example, a news agency will rarely report on crime prevention or personal safety but will incorporate this message into an ongoing narrative about a serious offender as it poses a direct threat to the safety of society (Jewkes, 2015: p55). Although singular homicide is usually committed by someone who knows the victim on a personal level (Silverman & Kennedy, 1987), the media sensationalise the reporting of serial murder due to the increase in chance of the offender being unpredictable and targeting people at random, creating a 'culture of fear' (Greer, 2003). Hickey (2015), in his study of 250 serial murderers, showed that 81% of the victims had no relationship to the offender and were complete strangers. Furthermore, the common appearance of sexual assault further heightens the ensuing moral panic (Fox, Level & Fridel, 2019) Cohen (1972), further iterates that news outlets can amplify moral panic through sensationalistic journalism. The robust reporting of serial murder can create an illusion of a murder 'epidemic', with great emphasis placed on the outcomes of the subsequent investigation. Contradictory to this, Fox et al (2019) state that serial killing is extraordinarily ordinary.

This thesis aims to understand why people commit serial murder, by looking at three different psychological aspects (biological, sociological and cognitive). The



research gathered will help expand the understanding of multiple factors that lead people to commit these heinous crimes. A vast quantity of research already exists in this field, consisting of a mixture of primary and secondary research. This current chapter will further discuss the method used in this thesis, whilst exploring the concepts of primary and secondary research as well as the ethical concerns when conducting research on this topic. It will further include the research methodology undertaken.

## **2.1 Primary Research:**

Primary research is defined as factual, first-hand accounts made by a subject participating in a study. For this study, primary research is not suitable due to ethical reasons. Firstly, undergraduate students cannot undertake primary research that could potentially place them in harm's way (Bryman, 2008). However, if the thesis were to be conducted using primary research, qualitative interviews with offenders convicted of serial murder would provide an unparalleled insight to the backgrounds and inner workings of serial killers (Bryman, 2008). Surveys would provide data that could be translated for statistical analysis, allowing for common denominators in psychology profiles and offending behaviours to become more apparent (Bryman, 2008). This would allow for links to be made between these offenders, potentially narrowing down data to one psychological factor as the main catalyst for serial offending. Secondly, undergraduate students are unable to access police records and psychological

profiles that would be needed as an aid to gather information for an offender profile without great difficulty. The access to these records is severely limited to most people without proper channels being visited and gone through to achieve access. An undergraduate dissertation would not get permission due to the stringent data protection principles set out in Data Protection Act 2018. It could be argued that the information needed to answer this research question will not be “used in a way that is adequate, relevant and limited to only what is necessary” (Data Protection Act 2018) as the question is quite wide and many questions that would infringe on a person's privacy would need to be asked. However, primary research would provide data that would for the expansion of previous research into the causes of serial killing.

Furthermore, data interpretation is better for primary research as the collected data can be interpreted by the researchers depending on their research aims rather than relying on the interpretation made by collectors of secondary data (Burgess and Bryman, 1999). On the other hand, primary research is time consuming and undergraduate students would not have the time to undertake thorough primary research amongst their studies and exams (Bryman, 2008). It is also highly inconvenient to go and interview serial killers as it would take an inordinate amount of time to gather the research necessary and the offenders being interviewed may not be cooperative and can get aggressive. Therefore, secondary research would be the most optimal form of research for convenience, time scale and ethical reasons.

## **2.2 Ethics:**

Furthermore, a literature-based research project such as this thesis is much more ethical than conducting primary research as it wouldn't be possible, as an undergraduate student, to interview incarcerated serial murderers or have access to police files. Incarcerated serial killers who are serving life sentences with parole not eligible for a substantial amount of time or those who are sentenced to whole life sentences without parole may become volatile and aggressive as there is no further punishment in the United Kingdom for further crimes; therefore, they effectively can get away with anything- including harming the researcher. Harm is defined as an act that inflicts physical, psychological, developmental harm, loss of self-esteem, stress and inducing subjects to commit reprehensible acts (Diener & Crandall, 1978). An infamous example of flagrant ethics violation related to harm of subjects would be Milgram (1967) experiment on obedience. He had participants administer potentially harmful and fatal electric shocks to other participants when questions asked were answered incorrectly. Milgram was attempting to see if people would carry out commands regardless of their own moral conscience. However, what the participants administering the electric shocks didn't know was that the shocks were fake- meaning no one was physically harmed. A study later found out that a great level of anxiety and stress was

exhibited by participants when administering the shocks due to the coercion to commit a reprehensible act (Bryman, 2008).

Moreover, interviewing said offenders and then publishing a report into their crimes and their criminal career may cause upset to the victims' families due to what could be seen as the 'trivialization of their trauma' (Bradford, 2016). With the particular line of questioning in this thesis, it can almost seem as if this research is trying to justify their actions and exonerate their guilt and place blame on their past experiences (Bradford, 2016). Therefore, this report must emphasise the fact that all conclusions made are simply conjecture made upon the facts of an offender's criminal profile and biography, with psychological research as an underpinning (Bryman, 2008). It must also be emphasized that undergraduate students are not clinical professionals, therefore any conclusions are not made on from a registered professional.

### **2.3 Secondary Research:**

Therefore, secondary research will be the method used to undertake this study. Secondary research can be defined as an analysis and interpretation of primary research (Dale et al, 1988). The aim of secondary research is to utilise primary search conducted by other professionals and interpret their results in order to prove or disprove the working hypothesis being tested (Bryman, 2008). Other psychologists and professionals such as Boduszek and Hyland (2012); Silva et al (2002) and Wresh (2014); have conducted similar research, providing the resources and academic data needed to be able to draw accurate conclusions.

Moreover, there is academic literature that looks into various motivating factors of serial killing, with a plethora of research that specifically specializes in the correlation of one factor to instance of serial murder such as Mitchell and Aamodt's (2005) research into the instance of child abuse and its link to serial murder. Linear studies have also been conducted into specific serial killers such as Frederick West (Boduszek & Hyland, 2012) and Jeffrey Dahmer (Silva, Ferrari & leong, 2002). However, in comparison to this thesis, these articles have only explored one person of interest and their specific life history, whereas this thesis will explore all aspects and motivating factors of serial killing, whilst drawing on case studies as examples. The conclusion drawn from this study will provide a better understanding into the possible factors that can induce serial murder.

For the intended purpose of this literature review, large quantities of information from varying sources such as journals and books were used, using the library search engines to narrow down my search into each specific chapter. After which, notes were collated and placed into one of the three psychological factors- biological, cognitive or sociological. All research conducted, and articles found were directly related to the topic and question, have all been peer reviewed in their relevant professions and have been published in academic journals. The large range of academic material used provides a fuller picture of how theories have developed over time to add to the plethora of research into the serial killers' origins. Qualitative and quantitative studies have been included in this thesis as the statistics allow us to look at these theories of serial killing in a practical sense,

as well as giving us a relative statistic which can either support or debunk the dissertation question.

### **Chapter three: What is serial murder?**

Before FBI agent Robert Ressler created and defined the term 'serial murder' in 1988, the term had never been used in relation to multiple victims of a singular offender (Ressler et al, 1988). Serial murder was grouped into a generic classification of mass murder (Kenney & Heide, 1995). Ressler et al (1988) used the term to explain murders that occurred in a serial cycle due to the perpetrators needs not being satisfied with the first murder, therefore the perpetrator feels compelled to commit subsequent murders until his needs are satiated (Vronsky, 2004). The FBI initially launched research into murder due to rising numbers of reported murders in America (Ressler et al, 2008). Between the years of 1976-1986, the number of reported homicides rose from 16,605 in 1976, to 21,860 in 1980, before dipping to 20,613 in 1986 (Ressler et al, 2008). Through their research, Ressler et al (1986) found that not only were the homicides different in nature but also found similarities between different types of homicide. The FBI created the first typology of serial killing- the organized/disorganized dichotomy (Ressler et al, 1986). The organised serial killer meticulously plans out their kills, coming prepared with restraints and weapons as well as crime scene clean up and body disposal (Ressler et al, 1986). However disorganised killers are seen as being less intelligent, more impulsive and has little regard for being caught (Douglas et al, 1992). Using this new-found knowledge, he further created 3

different types of murder- mass, spree and serial murder (Ressler et al, 1988; Gebreth, 1986).

Mass murder is characterised as the murder of three or more people at one location, in a single instance (Holmes & DeBurger, 1988; Hickey, 1997) with examples such as the Orlando Nightclub killings in 2016 where shooter Omar Mateen shot and killed 43 people at Pulse nightclub or the Christchurch Mosque shooting in 2019 where a white supremacist opened fire on a New Zealand mosque during prayer killing 49 people. A further example would be the various school shootings in the United States of America, such as the Columbine Massacre in 1999 and more recently, the Sandy Hook Elementary school shootings in 2012 and the Stoneman Douglas High school shooting in 2018. The minimum body count has been a topic of intense stipulation, with some academics starting five as the minimum (Dietz, 1986) or four (Hazelwood & Douglas, 1980). In contrast, spree murder is defined as any incidence where three or more deaths have occurred, in multiple locations with the absence of a cooling off period (Gebreth, 1986). An example of a spree murderer would be Andrew Cunanan, who famously murdered five people, one of whom was the fashion designer Gianni Versace, over a period of three months in 1997. The absence of a cooling off period in spree murder is the definitional difference between spree and serial murder (Osborne & Salfati, 2014).

Serial murder as a phenomenon where three murders are committed without a specific time frame, with the presence of a cooling off period (Ressler et al, 1988;

Egger, 1990; Holmes and DeBurger, 1988; Levin & Fox, 1985). The time frame can be anywhere from multiple days (Levin & Fox, 1985) or months to years (Fox & Levin, 1994). There have been many high-profile cases such as Ted Bundy, John Wayne Gacy, Jeffrey Dahmer, Aileen Wuornos, Fred and Rose West and Myra Hindley and Ian Brady. Ted Bundy is a notorious example of extreme killing, confessing to the murders of over thirty women between the years of 1974-1978 in seven different states. During his killings, Bundy would revert to his 'normal' life, working and studying as well as engaging in normalistic relationships- a phenomena first defined as the 'cooling off period' (Ressler et al, 1992). The cooling off period is the defining characteristic of serial murder (Douglas, Ressler, Burgess, & Hartman, 1986), described as the state of returning to the offender's usual way of life between homicides (Burgess, 2006). This was further supported by Holmes and Holmes (1998) stating that a "significant cooling-off period" must occur between offences.

Serial killers have a cycle during which they kill, presumably during a significant period of stress, which acts as a temporary cathartic release of the pressure created by the stress. After this release, they return to their lives before the insistence of killing, a period known as the cooling off period (Osborne & Salfati, 2014). Although the exact number of serial killers through history is unknown, estimates range as high as 1,500 serial killers (Newton, 2006).

### **Chapter 3.1: Theories of serial killing:**



The first study conducted into the phenomena of serial killing was undertaken by Cormier et al (1972). The studies purpose was to clarify the term 'serial murder', finding that the number of murders committed by one perpetrator were spread over a significant period of time (Cormier et al, 1972). It was further stated that the motivation was primarily pathological, with the motivating factor being internalised and irrational (Cormier et al, 1972; Egger, 1990; Hickey, 1991; Holmes & DeBurger, 1988; Levin & Fox, 1985; Leyton, 1989; Linedecker, 1988; Norris, 1988; Ressler et al., 1988; Rule, 1980). They further maintained that the murderer consistently selected a certain type of victim and was likely to continue killing until arrest, as seen with Ted Bundy (Kenney & Heide, 1995). Cormier et al (1972) expanded their theory, creating six dimensions they thought set the parameters for serial murder- motive, victim type, victim-offender relationship, sex specific, time period and psychological state of murderer. as a result of this study, nine out of ten of the authors following their research used the majority if not all of the dimensions in their definitions of serial murder (Kenney & Heide, 1995).

However, definitional problems exist when defining serial killing as the definitions are either too broad or too limited (Kenney & Heide, 1995). Out of the 10 authors that followed the research, 9 included the presence of abnormal psychological mind states and no relationships with the victims (Rule, 1980, Levin & Fox, 1985; Leyton, 1989; Holmes & DeBurger, 1988; Norris, 1988; Ressler, Burgess & Douglas 1988; Lindecker, 1988; Egger, 1990; Hickey, 1991). Each of the 10 definitions further emphasizes one of the 6 motivations for serial killing as

mentioned before. Therefore, each definition on its own cannot accurately define or rationalise serial killing as not every murder would fit that one specific definition making it too rigid to be generalised (Kenney & Heide, 1995). These theories can be said to be outdated as not all murderers have abnormal psychological states of mind and not all crimes are sex specific (Cormier et al, 1972).

Dietz (1986), created three typologies of a serial killer- the psychotic killer, the custodial poisoners and asphyxiators and sexual sadists. The psychotic serial killer can be characterised by hallucinations and hearing voices telling them to commit murder. Custodial poisoners and asphyxiators are those in a position of power such as carer's, doctors and nurses. These killers often kill for financial gain, frustration or control. An infamous example is Harold Shipman, a doctor who murdered 250 of his patients. He would forge the wills of his patients to make him the sole beneficiary of their estate. He would kill his patients with an overdose of a strong painkiller, then signing their death certificate as natural causes. He was charged for 15 murders on January 2000 and received a whole life imprisonment. Sexually sadistic serial killers are characterised as a white male between the ages of 20-30, who is intelligent, social and intrinsically motivated. They are often abused as children and use their victims as a catharsis for this abuse. An infamous example would be Ted Bundy, who between the years of - murdered 30 young women who resembled his ex-girlfriend that had left him previously. He was intelligent, handsome and charismatic, yet he had grown up with a difficult childhood. He had grown up thinking his mother was actually his sister, and his

grandmother was his mother, later in his adolescence Bundy revealed his true parentage leaving him conflicted with his self-identity.

Holmes and DeBruger (1988), further developed this typology, creating four more typologies- the visionary, mission oriented, hedonistic and power and control. The visionary is characterised by being out of touch of reality, psychotic and often diagnosed with schizophrenia. They feel compelled to commit murder out of paranoia created by 'voices' in their head. Mission oriented killers devote their lives to eradicate as certain sect of people. Examples can be the targeting of prostitutes, or those who are stereotyped as being 'immoral'. Peter Sutcliffe the 'Yorkshire Ripper' was convicted of murdering 13 women between the years of 1975 and 1980. He claimed he had been given a mission by God to murder prostitutes as they were deemed 'sinners'. Hedonistic killers kill for the thrill and engage in perverted and cruel sexual activity (Holmes & Deburger, 1988; Holmes & Holmes, 1988). Examples can be Edmund Kemper who brutally murdered young women and then performed sexual acts on their decomposing bodies years after their deaths, like Ted Bundy did with his victims (Wilson & Wilson, 2008). Power and control killers kill for the satisfaction of complete control over someone rather than sexual desire or bloodlust (Holmes & Deburger, 1988; Holmes & Holmes, 1988). Even though sex is almost always involved, it isn't to satisfy sexual urges but to exercise complete control over another using sex as their weapon of choice (Holmes & Holmes, 1988). Fred and Rose West were prime examples of power and control killers. Fred and Rose murdered women, brutally torturing them

and binding them so that they could commit their perverted actions without resistance.

Fox and Levin (2018) further extended, creating the motivational typologies- power, revenge, loyalty, profit and terror. They stated that serial killers may kill for one or more of these motivating factors, explaining it as an event that pushes them towards their spree. Power can constitute as a motivational typology for those who kill or the thrill of sexual satisfaction or dominance by controlling the lives and the deaths of their victims. Revenge killers like Dr Anthony Garcia, are categorised as mission orientated killers, as their murders serve a specific aim or need such as a catharsis for their humiliation or injury, whether it be physical, financial or emotional injury (Holmes & Deburger, 1988). In 2008, Garcia fatally stabbed 11-year-old Thomas Hunter, the son of Creighton university faculty member Dr. William Hunter, where Garcia was formerly employed. Garcia was also convicted of killing the family's housekeeper, 57-year-old Shirlee Sherman, at the family's home in Omaha. In 2013, Garcia went on to kill another Creighton university faculty member, Dr Roger Brumback and his wife Mary in their Omaha home. It is said that Garcia's anger over being fired in 2001 by Hunter and Brumback from the Creighton medical school residency program were his primary motivations for his attacks. Dennis Rader can be classes as a terror serial killer, someone who kills to gain attention or fame. Rader killed 10 people between the years of 1974-1991 and would send puzzles, letters and photos to the newspapers and police. This created a media storm that gave him the attention that he craved.

However, the scope of these typologies is limited, as they do not account for a killer being a mixture of the typologies which makes it inflexible when applying it to cases. The typologies are based on the criminal profiles of killers, meaning that linkage blindness can occur where killers kill in different jurisdictions. Police officers will be less likely to link these murders as they do not see or are prevented from seeing beyond their own jurisdictional responsibilities (Egger, 1990). This may lead to the case going unsolved and the murderer can be free to commit more murders. Furthermore, these typologies are based on the killer's Modus Operandi (MO). The MO is what the offender must do in order to commit the crime and is a learned behaviour that is subject to change. A serial killer will alter and refine their MO to accommodate new circumstances or to incorporate new skills and information as their criminal career progresses (Bonn, 2014). Therefore, by not accounting for this change of MO, the typologies may not apply to the whole of the killer's victims (Bonn, 2014).

## **Chapter four: Social Psychology**

Finding a reason that a person would participate in serial murder has brought various facets of the perpetrator's life into consideration (Pincus, 2002; Ressler & Shachtman, 2002). Possible biological catalysts for serial murder include frontal lobe dysfunction and injury involving brain damage, brain anomalies, and genetic anomalies. Environmental attributes include the physical absence or lack of personal involvement by one or both parents and substance abuse. However, a much-researched antagonizing factor contributing to the development of a serial killer is abuse that is experienced in the offender's primary years (Johnson & Becker, 1997; Mitchell & Aamodt, 2005; Gould et al, 2012; Wresh, 2014). This chapter will explore the sociological factors of an offender's existence, looking at various environmental factors that could be a catalyst for serial killing.

Child abuse can constitute as the presence of physical, sexual, psychological exploitation or the instance of neglect (Gould, 2012) Child abuse in the early 20th century was seen as the cause of all serial murder (De Becker, 1997). Ressler and Shachtman (1992) reports that, 40 percent of serial murderers they studied stated they had been physically beaten and abused in their childhoods. A further 70 percent reported having partaken or witnessed a sexually stressful event in their childhoods. A common conclusion found in various studies reveals adolescents who have grown up witnessing violence in their homes or in their immediate community have a greater probability of suffering from long term emotional, physical, and mental trauma (Higgs, 2012). These children will also suffer with

difficulties associated with attachment, regressive behaviour, anxiety and depression, and aggression and conduct problems (Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009). Case studies include the crimes of Kenneth Bianchi, Fred and Rose West, Richard Ramirez, Ottis Toole and Henry Lee Lucas. Each of the offenders had experienced at least one form of abuse during their childhood, which later became a catalyst for their killing.

Fred and Rose West brutally sodomised, tortured and murdered 12 women between the years of 1987-1967 (Boduszek & Hyland, 2012). Both Fred and Rose had experienced abuse in their childhood years. Fred was forced to watch his father have incestuous relationships with his sisters (Crimelibrary, 2009) and was taught the practice of bestiality from a young age (Boduszek & Hyland, 2012). Furthermore, he was subjected to repeated sexual abuse from his mother from the age of 12 (Morris, 2007). Rose witnessed her father subject her siblings to cruel and frequent beatings, whereas Rose and her sister Glenys were given more favorable treatment as long as they did not resist his sexual advances (Woodrow, 2012). At the age of 13, Rose replicated her father's sexual abuse, turning her attention to her two younger brothers and by the age of 14, she was arrested for soliciting sex (Woodrow, 2012).

Furthermore, Freud proposed another perspective to childhood trauma and serial killing. Psychoanalysis is a type of therapy that aims to release repressed emotions and memories to lead the client to a cathartic release (McLeod, 2014). This was used in the case of serial murderer, Aileen Wuornos. Wuornos was a

prostitute who murdered seven of her male clients between the years of 1989 and 1990. Before her birth, her schizophrenic father was imprisoned for child molestation, leaving her with no male role model in her early years. Subsequently her mother abandoned her and Wuornos was sent to live with her grandmother and alcoholic grandfather who officially adopted both Aileen and her brother Keith. Her grandfather physically abused her, making her strip beforehand to humiliate her and then subsequently sexually assaulting her (Taylor, 2008). By age 11, Wuornos was soliciting sex for money and cigarettes at school and by the age of 13, she became pregnant by one of her grandfather's accomplices. Furthermore, she was in a sexual relationship with her brother Keith. The fact that her crimes were perpetrated against males are symbolic of the failed male relationships she has had in her life, and a way of taking control of her life away from her abusers- a cathartic release (Taylor, 2008).

Hickey (2002), proposed that historical childhood sexual abuse may contribute to offending due to Trauma Control Theory. He theorized that an offender's sense of inadequacy created from historical trauma is hidden behind a facade of self-confidence and self-control. These destabilizing influences are split, allowing a dark side to emerge as represented by their violence, total control, and domination of their victims (Van der Kolk, 1989; Arndt et al, 2004). Van der Kolk (1989, p1), further theorized that those who experience childhood trauma expose themselves to situations reminiscent of the original trauma. They then go one step further and re-enact their trauma on another victim- later stated as a way of gaining mastery of



the trauma (Freud, 1920). Therefore, it can be suggested that serial killers who have experienced childhood abuse re-enact their abuse on their victims in a way of gaining control of their own traumatic past (Freud, 1920; Van der Kolk, 1989). Burgess et al (1987) further supported this theory by studying 34 sexually abused boys and found a few years later they had been involved in violence and substance abuse. Lewis et al (1988) studied 14 juveniles condemned to death for murder. He found that 12 of the 14 juveniles had been horrifically physically abused and five had been sodomised by relatives- further supporting the replication-re-enactment theory.

However, not all serial killers have been abused and other theories have been suggested to explain the phenomenon. Cooley as early as 1902, proposed the 'looking glass self' theory, a concept that was founded on the basis of an individual's subject self-evaluation. A person will examine their own personality and make a subjective judgment of their self-value. They will then seek out information from those whose opinion bears weight on their conscience and will then internalize their judgement leading to certain changes in attitude and behaviour (Cooley, 1902). If the opinion of a person does not affect the killer, they will not internalise this as a valid judgement of their self-worth. Even though the term 'serial killer' did not exist before the early 1980's this theory can be used to potentially explain the mind set of a serial killer and why they committed the crimes they did.

Goffman (1959; 1963) built upon Cooley's (1902) ideas to offer a more refined perspective. Goffman theorized that an individual may change behaviour when something (or someone) of significance enters the life of the person for a significant amount of time. This may result in radical changes of behaviour (Goffman, 1959; 1963). Goffman theorized that there were two views of social identity: the virtual social identity and the actual social identity. The virtual social identity is the aspect of self that is managed and presented by the individual to be suitable for public view. The actual social identity is the unmanaged version of the self and represents who the person "truly" is internally and whom the individual knows himself to be. Therefore, as a child develops in their early years, fragmentalization (where an individual compartmentalized traumatic experiences) occurs allowing for personality traits of a serial murderer to set in (Holmes & Holmes & Tewksbury, 1999). This allows for the person to be aware of their internalized feelings, thoughts and motivations early on in their life, creating the 'actual social identity' (Goffman, 1959; 1963) that will allow them to rationalise subsequent serial homicide (Holmes & Holmes, 1998).

The victims of serial killers often have similar characteristics that represent a pivotal moment in a killer's life that they are aiming to replicate (Van der Kolk, 1989). Killers such as Ted Bundy and Kevin Bianchi (The Hillside Strangler) are said to have selected victims that resemble their mothers (Fox and Levin, 2018). They would then, replicate the same abuse received from their mother on their chosen victims, taking revenge for all they have suffered (Abrahamsen, 1973;

Barnes, 1984). This mother-hate theory suggests that serial killers will displace their anger based on the real or perceived abuse inflicted by their parents on to victims that either look or act similarly to their abuser (Moesch, 1998). Donald Lunde (2007) took Bianchi's evaluation one step further, stating that Bianchi's hate for his mother will never be satiated until he killed his mother. The serial killer Henry Lee Lucas was dressed as a girl by his mother and was forced to watch her sexual exploits. She beat him regularly and refused him medical attention when he severely cut his eye- which later had to be surgically removed. He went on to murder his mother in anger and confessed to sexually mutilating her corpse (Fox & Levin, 2018). This further justifies the mother-hate theory of Abrahmsen (1973) and Barnes (1984) showing that true catharsis is only achieved once the killer murders their own mother (Fox & Levin, 2018). Moreover, the murders committed by Arthur Shawcross are another example of potential displaced mother hatred. Shawcross's mother was not shy of her sexual provocativeness, often making her young son watch her exploits. He then went on to murder multiple prostitutes throughout his criminal career. The deaths of these prostitutes could be Shawcross's attempt to sublimate his hatred of his mother's protectiveness (Fox & Levin, 2018).

However, the availability and easiness of victim type could also be a factor in why women are the primary target of male serial killers (Lee & Reid, 2018). Prostitutes are often found at night on their own, making them easy prey for someone on the hunt for their next victim. Killers could lure them to their car without making a

scene and their absence would not be considered suspicious as the prostitute would willingly have gotten into the car (Lee & Reid, 2018). Therefore, the mother-hate theory could not be accurately applied to all serial murders involving women as there is no accurate way of proving that each victim represents an abusive mother, unless further stated in confession (Lee & Reid, 2018).

Overall, a person's upbringing, environment and personal experiences shape the way they act in later life (Schechter & Schechter, 2010). However, this does not take into account biological predispositions that could also affect a person's behaviour and actions such as mental disabilities like Asperger's syndrome or Down Syndrome, chromosomal abnormalities or head injury. In the next chapter, the nature side of the debate will be discussed, focusing on genetic abnormalities, mental disabilities and the potential genetic link to criminality.

## **Chapter Five: Biological Psychology and the Link to Serial Killing.**

In this chapter, the nature aspect of the nature vs nurture debate will be discussed, looking at how biological predispositions can be a motivating factor or have a causal link to serial killing. Early research conducted by Lombroso (1911), popularised the ideology of the 'born criminal' through biological determinism. Lombroso found that physical anomalies in a person's anatomy were markers of a 'born criminal'. Physical atavistic stigmas such as; prominent chins, hawk like noses, large jaws, low slanting foreheads, high cheekbones, handle shaped ears, flattened or upturned nose, fleshy lips, shifty eyes, scanty beard or baldness, insensitivity to pain and long arms were some of the markers that could identify someone as a criminal (Lombroso, 1911). However, this theory is refuted by Modern schools of criminology, as atavistic features do not invariably suggest that a person has a predisposition for criminal behaviour and due to a lack of ethical reasoning during his research (Lombroso, 1911; Spiegel, 2013).

Although Lombroso's (1911) theory was debunked, that does not mean that a biological predisposition for criminal behaviour does not exist. Twin studies have been a major focus in research trying to relate a genetic predisposition to criminal behaviour (Boduszek & Hyland, 2012). The purpose of these studies is to test the hypothesis that criminality can be passed down through the genes of the parents to their children, giving them a genetic predisposition for committing crime regardless of social factors (Brennan et al, 2003). A review of over 100 adoption

and twin studies showed that 50% of the variation in reported antisocial behaviour can be

attributed to genetics (Blair et al, 2006; Moffitt, 2005). Lange (1930) conducted the first twin study, where he examined 12 monozygotic (MZ, who share 100% of the same genes) twins and 17 dizygotic (DZ, who share 50% of the same genes) twins where one of them had been imprisoned. He found that of the 10 pairs of the MZ and 2 pairs of the DZ twins, both had spent time incarcerated for criminal behaviour (Lange, 1930). He stated that this showed that genetics play an important role in a person's behaviour (Lange, 1930). Rosanoff et al, (1934) further supported these claims by studying 97 pairs of twins- 33 MZ and 23 DZ same sex twins. He found that 67% of the MZ twins and 13% of the DZ twins had both experienced incarceration- further supporting the basis for a genetic predisposition for criminality (Joseph, 2001). However, to get detailed results from twin studies, researchers must endeavour to ensure that the environmental conditions for both MZ and DZ twins are similar, although this was not the case as stated by (Dalgard & Kringlen, 1976; Kringlen, 1967). Furthermore, researchers did not always factor in the sex of the twins- whether they were same sex or opposite sex twins, male twins or female twins. Therefore, researchers would not have factored in the differing relationships females and males have with each other and with those of the same sex, making it virtually impossible to ensure that environmental conditions were exactly the same for all pairs of twins (Joseph, 2001)

Looking further into genetic abnormalities and the link to crime, Jacobs et al (1965), conducted a chromosome survey of male patients at the State Hospital in Carstairs, Scotland, and found that men with the 47, XYY karyotype were particularly frequent among inmates in penal institutions. 47, XYY karyotype syndrome is a genetic chromosomal abnormality which gives males an extra Y chromosome (Stockholm et al, 2012). Finley et al (1973) found that between 1960 and 1970, men diagnosed with XYY syndrome were overrepresented in prisons with reporting of increased criminality and sexually motivated crimes amongst those diagnosed with the condition (Shröder et al, 1981). This theory was further supported by Götz, Johnstone & Ratcliffe (1999), who found an increased rate of criminal behaviour among persons with 47, XYY syndrome and Ratcliffe et al (1999) who reported a fourfold increase of criminal behaviour of those with the condition. A study was conducted by Stockholm et al (2012) to investigate the link between 47, XYY and homicide and found an increased prevalence of homicide amongst those with diagnosed with the condition. However, when Stockholm et al (2012) combined the presence of the 47, XYY karyotype with socioeconomic factors such as a good level of education, fatherhood and cohabitation, they found that the instance of homicide decreased dramatically- showing only a slight increase in the instance of sexual assault. Therefore, it is reasonable to suggest that the presence of the 47, XYY karyotype alone is not enough to cause the afflicted the commit serial murder but accompanied with poor socioeconomic

status can be a contributing factor in all forms of criminality, including serial murder (Stockholm et al, 2012; Shröder et al, 1981).

The nervous system plays an integral part on a person's mood and therefore, subsequent actions (Alley et al, 2014). The nervous system is responsible for the secretion of neurotransmitters such as Testosterone, Serotonin and Dopamine. When Testosterone levels are high and Serotonin levels are low it has been shown to increase aggression and sadistic behaviour (Scott, 1996). Low serotonergic activity in humans has been linked to self-destructive and impulsive violence (Söderström, Blennow, Manhem, & Forsman, 2001) Whereas greater synaptic Serotonin levels have been linked to aggression (Baron-Cohen, 2012; Bell, Abrams, & Nutt, 2001; Raine, 1993; Raine, Lencz, & Scerbo, 1995; Volavka, 1995, 1999). Dopamine and Norepinephrine are also known to increase aggression, (Raine, 1993). Deficits or surges in these neurotransmitters alone cannot explain serial killers, however when coupled with the presence of Monoamine oxidase A (MAO-A), an enzyme that is involved in the metabolic processes of Norepinephrine, Serotonin and Dopamine can lead to increasingly violent behaviour and an increase in violent crimes (Alley et al, 2014). The amount of MAO-A enzyme is genetically determined (Alley et al, 2014), with men with low MAO-A activity being three times more likely to be convicted of a violent crime by the time they are 26 years old than men with high MAO-A activity (Heide & Solomon, 2006). Therefore, increased incidence of violent crimes such as assault, singular and serial murder can have an underlying biological underpinning,



creating a genetic predisposition to crime (Alley et al, 2014; Scott, 2000). Tiihonen et al (2015) further supported this claim, reporting a significant link between low MAO-A levels and offenders who commit violent crimes- including murder, attempted murder, battery and rape. However, again this does not provide a conclusive cause for serial killing yet coupled with poor socio-economic factors could provide a greater understanding of the causes of serial murder (Miller, 2000).

Several empirical studies have suggested a link between brain injury and both violent and non-violent crimes (Freedman & Hemenway, 2000; Sarapata et al, 1998; Grafman et al 1996). Freeman and Hemenway (2000) found that of 12 of 16 death row inmates interviewed had a history of brain damage, with over half of them having been caused by grievous assaults. For a brain injury to alter the behaviour of an individual, the front lobe is often the site of the damage as this part of the brain controls emotion, personality, memory, language and sexual behaviours. Therefore, those who experience altered personality traits and behaviours will often exhibit problems with social perception, self-control, judgement and rapidly interchanging moods and emotions (Grafman et al, 1996). Furthermore, Blake et al (1995), conducted neurological testing on 31 individuals awaiting trial or sentencing for murder. Neurological examination revealed evidence of frontal lobe dysfunction in 20 of the 31 one inmates (Blake et al, 1995). The serial murderer Fred West suffered a serious motorcycle accident, injuring his frontal lobe in the process. He is said to have experienced sudden fits

of rage and lack of control over his emotions because of this accident (Boduszek & Hyland, 2012). Phineas Gage was a railroad worker who had a metal railroad pike penetrate his front lobe, running through the full length of his cranium. Described as a quiet and amiable man, Gage experienced unexplained fits of rage, paranoia, aggression and volatile mood swings after the incident due to the damage to his frontal lobe (Larner & Leach, 2012). Given the proportion serial killers with brain damage as reported by (Wilson & Wilson, 2008; Vronsky, 2008), it is reasonable to suggest a causal link between frontal lobe damage and violent or aggressive behaviour. Even though the majority of studies into the biological underpinning of human behaviour has focused mainly on the presence of violent behaviour rather than that of serial murder; they are still relevant when trying to explore the likelihood of a biological catalyst for murder, as most serial murders are violent in execution (UNODC, 2013).

Overall, there is a plethora of evidence in favour of a biological and genetic predisposition for violence and serial murder as reported by Raine (2008) who attributed 7 genes to antisocial behaviour, and 14 genes related to psychopathic traits which are partially hereditary as reported by Chakrabarti et al (2009) and Zahn-Waxler et al, (1992). The further evidence provided by twin and adoption studies also show a predisposition for antisocial behaviour and violent offending (Brennan et al, 2000). However, research does not provide data on those with genetic abnormalities as discussed above but do not commit crime, providing little data for comparison (Fox & Levin, 2018). Furthermore, the research does not take

into account the presence of social factors in the shaping of a person's behaviour- therefore it cannot be conclusively said that biological factors are the predominant cause for serial murder (Fox & Levin, 2018).

## **Chapter Six: Cognitive Psychology and the Link to Serial Killing**

In this chapter, the cognition of a person in relation to serial killing will be discussed, with the first section exploring the effects of abnormal cognitive functions on thought processes, perception and reasoning that could act as a catalyst for serial murder. The second section will explore the effect of brain damage on cognitive functions and how these altered cognitive functions can cause someone to become a serial killer.

### **Reasoning, Perception and Reaction**

There is currently a substantial body of work suggesting that violent offenders perceive and interpret information differently (Brookman, 2014). Dodge (1986), created the social information processing model, later reformed by Crick and Dodge in 1994. Social information processing theory (SIP) is the concept of how mental operations affect behavioral responding in social situations (Dodge & Rabiner, 2004). The SIP model theorized that anomalies in the mental operations

that are used to generate a behavioral response can cause an aggressive response, without provocation needed from the victim (Vidmar, 2000). The SIP model created 6 criteria that need to be met to generate a 'normal social interaction' (Castro et al, 2002). 1) the information needs to be encoded appropriately, 2) the encoded information needs to be represented correctly, 3) an outcome of the interaction needs to be specified, 4) alternative responses are generated, 5) alternatives are to be evaluated, with an optimal primary response selected, 6) the selected response is enacted (Castro et al, 2002). An atypical response at any of the 6 stages can result in aggressive behaviour (Dodge, 1986). This correlates abnormal information processing with overt, physical aggression (Mikami et al, 2011). Therefore, serial murder can be attributed to the murderer's atypical response to their victim's behaviour (Vidmar, 2000). This further correlates with what the United Nations Office on Drugs and Crime (UNODC) reported, stating that serial murders often involve an element of violence and aggression (UNODC, 2013), linking abnormal cognitive processes to acts of violence such as murder (Brookman, 2015).

This theory takes into account that individuals will enter a social situation with biological and environmentally predetermined influences, known as 'hostile attributional bias' or 'provocation interpretational bias' (PIB) (Castro et al, 2002; Fontaine, 2009). Crick and Dodge (1987) and Beck (1999) state that a violent offender's internalized biases can lead to them perceiving hostility and provocation where none exists (Brookman, 2015). Beck (1999) provides an example where the

offenders perception leads him to believe that he is the victim in the situation, who others treat with disrespect. This cognitive distortion can cause the offender to internalize feelings of worthlessness, failure and that of low self-esteem (Brookman, 2015). This subsequently causes the offender to create an interpretational bias that will be integrated into their further reactions, which can ultimately, culminate in violence (Beck, 1999). In relation to serial killing, the offender will be unable to properly assess the impact of a deviant act due to a provocation interpretational bias being present, causing an anomaly to occur in one of the 6 stages of SIP, leading to an atypical response in the form of violence and aggression (Malizia, 2017). As a result, the offender fails to consider the consequences and is more interested in the emotional gratification that can result from their actions (Ciappi, 1998; Malizia, 2017). There is an inordinate amount of support for the concept that cognitive bias can trigger reactive anger and violence (Fontaine, 2009)- including emotionally charged or 'heat-of-passion' homicide. Fontaine (2009) further illustrates that reactive aggressive individuals have a greater chance of encoding negative aspects of social cues and attributing hostile meaning to incoming social information, thus leading to an aggressive response.

SIP and PIB can be further linked to the presence of reactive and proactive aggression (Hammad & Awed, 2016). Reactive aggression can be defined as an aggressive, defensive response to a threat or perceived provocation (Pouw et al, 2013). Reactive aggression is strongly associated with Attention Deficit Hyperactivity Disorder (ADHD) (King & Waschbusch, 2010). People with this

disorder have the potential to miss important social cues due to the inattentiveness that is characterized with ADHD, thus creating a gap in one of the 6 stages of SIP (Waschbusch, 2002; King & Waschbusch, 2010). For example, someone with reactive aggression may experience problems in interpreting other people's reactions and provocative situations- including PIB (Orobio de castro et al, 2002). This could potentially lead to a phenomenon known as reactive homicide (Fontaine, 2009). Fontaine (2009) further iterates that reactive homicide can be linked to deviations in the first 2 steps of SIP. The offender will likely encode a social interaction with negative pretext, due to their PIB, that will cause them to react in a way that promotes aggression which could potentially result in a homicide (Fontaine, 2009). In its most serious form, PIB can mean that the offender is unable to interpret ambiguous provocation situations as anything other than significantly provocative (Fontaine, 2009). Therefore, serial murderers who commit reactive homicides may not have the ability to premeditate their murders as their cognitive dysfunction in the form of PIB means that any ambiguous situation will be automatically encoded as aggressive- meaning they will thus react accordingly (Fontaine, 2009).

These theories may factor in the effect of biological and environmental predispositions on cognitive bias and distortion, but it is not the only way a person's cognition can cause violent behaviour or serial murder. Angrilli (2013), found that in the case of the serial killer KT, the offender had no impairment of normal cognition (Blair et al, 1996; Hare & Macpherson, 1984) but rather a deficit

in emotional, social and moral cognition (Blair & Coles, 1991; Blair, 1995; Blair et al, 2002). Furthermore, although research into reactive aggression has been predominantly conducted on children (Hammad & Awed, 2016). Fontaine (2009) supports this theory in relation to adult cognitive functioning, stating that 'there is no reason to expect that the relation is any less strong or less relevant to aggressive reactivity in adults' (Fontaine, 2009, p248). Thus, making it possible for this theory to apply to adult serial murders, as a way of understanding why they commit their crimes. In literature, moral reasoning has been correlated with a person's emotional response (Greene et al, 2001).

### **Brain Dysfunctions and Disruption of Cognition**

As mentioned in Chapter 5, brain trauma is a common feature in serial killers, with psychologists such as Hemenway (2000), Freedman & Hemenway, (2000), Sarapata et al, (1998) and Grafman et al, (1996) reporting a high concentration of frontal lobe injuries which can be associated with aggressive behaviour and violence. Phineas Gage is a prime example of an individual whose cognitive functions became impaired due to severe frontal lobe damage (Larner & Leach, 2002).

Frontal lobe dysfunction has been linked to the actions of those charged with, or convicted of, violent crimes (Brower & Price, 2000). Empirical studies by Hemenway (2000), found that 12 of the 16 death row inmates interviewed had a

history of brain damage, thus suggesting a link between brain injury and extremely violent offending. Furthermore, in Allely et al's (2014) study into the link between head injury and killing, it was reported that of 239 eligible killers, 106 were to have experienced a form of head injury, which may have potentially contributed to their killing. Ioana (2013) further supports this argument in her study, where it is reported that damage to the Amygdala can cause a deficit in the ability to feel emotion, which can link to the diagnosis of psychopathy or Anti-social personality disorder, a common trait in serial killers (Stone, 2011). Studies into this link have taken particular focus on damage to the orbitofrontal cortex, a part of the brain which controls the cognitive function of decision making (Brower & Price, 2000), and the link to violent offending and serial murder. Clinical observation has shown that poor impulse control, explosive and aggressive outbursts, verbal lewdness and lack of interpersonal sensitivity are symptomatic of dysfunctions in the orbitofrontal cortex (Brower & Price, 2000)- characteristics that have been used to describe serial killers such as Jeffrey Dahmer, Albert Fish and Henry Lee Lucas (Wilson & Wilson, 2008). Furthermore, it is reported that subjects who have a history of frontal lobe injury may have minimal impairments to intelligence but display significant deficits in tasks that require the use of their judgement such as, socially accepted behaviour and the ability to link action to consequence (Allely et al, 2014). Richard Ramirez (The Night Stalker) is a prime example of the potential effects that frontal lobe damage could have on a person's cognitive functions and subsequently, their behaviour. At the age of 2, Ramirez suffered his first major



head injury when a chest of drawers landed on his head, nearly killing him (Allely et al, 2014). At the age of 5, he suffered another head injury when a swing his sister was using hit him in the head, resulting in a deep gash on his forehead (Allely et al, 2014). These injuries could be linked to his diagnosis of temporal epilepsy in the 5<sup>th</sup> grade, a brain dysfunction that causes an increase in aggression and violence (Allely et al, 2014). This could be a contributing factor to his rapid change in behaviour which became increasingly disturbed, with Ramirez becoming a devout Satanist, committing brutal rapes and murders in Satan's name (Wilson & Wilson, 2008). Furthermore, John Wayne Gacy experienced a similar significant head injury when at the age of 11 he was also struck in the head by a swing which resulted in Gacy having a blood clot in his brain and experiencing black outs (Wilson & Wilson, 2008). Both Gacy and Ramirez went on to become exceptionally violent and sexually depraved serial murderers. It is therefore reasonable to suggest, given the plethora of evidence into the cognitive effects of head trauma, that the head injuries they incurred could have been a contributing factor to these crimes (Allely et al, 2014)

However, the presence of brain injury cannot be used as a sole explanation for the onset of serial killing (Allely et al, 2014), as there are those who have significant cognitive impairments and do not become violent offenders or serial murderers (Brower & Price, 2001; Allely et al, 2014). However, the presence of psycho-social stressors such as childhood abuse, a parents divorce, death of family members and exposure to immoral behaviour in conjunction with the presence of a brain

dysfunction could further contribute to a person becoming a murderer (Alley et al, 2014). Of the 239 killers researched in Allely et al's (2014) research, 55% of the killers had experienced both a significant head injury and psycho-social stressors in their early life (Alley et al, 2014). Therefore, it is reasonable to suggest that head trauma alone cannot cause serial killing, rather a mixture of both cognitive deficits due to head trauma and the presence of psychosocial trauma as well as their upbringing could contribute to a person becoming a serial killer (Simpson et al, 2001; Alley et al, 2014).

## **Chapter Seven: Psychopathy and Antisocial Personality Disorder and the Link to Serial Killing**

In this chapter, the presence of psychopathy, antisocial personality disorder (ASD) and sociopathy will be discussed and their link to serial killing will be discussed, and how it could act as a catalyst for serial murder. As mentioned previously, psychopathy, ASD and sociopathy have roots in both cognitive, social and biological psychology, marrying the three areas together to create a well-rounded paradigm on the effects of personality disorders on serial murder.

Personality disorders can be characterized as the severe disturbance of character and behavioural tendencies of a person (Morana et al, 2006). Personality disorders are anomalies of one's psychic development, which when paired with impaired integration of attitudes, impulses and perception can manifest in their relationships with others. The first personality disorder to be discussed will be psychopathy. Cleckley (1976) defined the term 'psychopath' as someone who has low anxiety, immunity to guilt and shame, with the incapacity to feel love, who experiences reckless and amoral behaviour. Psychopathy cannot be understood solely in terms of social and environmental influences, as there is a strong likelihood that genetic factors can contribute to the presence of certain temperament and behaviour traits considered paramount in relation to the disorder (Raine & Sanmartin, 2001). McCord and McCord (1964) further added aggression, parasitic exploitation and manipulation to be present in a callous criminal psychopath. However, in relation to serial killing, Stone (2001) found that 86.5% of

serial killers interviewed met the Hare criteria for psychopathy and another 9% presented a lower quantity of psychopathic traits but not enough to qualify a diagnosis (Morana et al, 2006). The Hare criteria for psychopathy, better known as the PCL-R (Psychopathy Checklist- Revised) is a diagnosing tool used to diagnose a person as a psychopath (Hare,1996; 2001).

The PCL-R measures both personality and case history aspects of psychopathy (Fox & Levin, 2018). It also provides researchers and clinicians a common metric for the assessment of psychopathy, allowing clinicians to explore the central role of the disorder in relation to violent behaviour (Hare, 2001). The checklist consists of 20 behaviour's that have a rating of 0-2, in an aim to determine a person's level of psychopathy in comparison to the prototypical psychopath (Patrick et al, 2005). The behaviours cover a person's attitude towards themselves, their ability to feel empathy or remorse, how they treat others and their intelligence (Patrick et al, 2005). These traits are commonly found in power/control killers (Fox and Levin, 2018), like Ted Bundy, who relish in the thrill of having complete power over another person. Bundy displayed characteristics listed on the PCL-R checklist, such as a lack of empathy, little remorse, grandiose sense of self-worth, superficial charm, promiscuous sexual behaviour and impulsivity (Patrick et al, 2005; Lilienfeld & Arkowitz, 2008). Further examples of psychopathic serial killers include Dennis Rader, John Wayne Gacy, Ed Kemper, and Jeffrey Dahmer, all who showed no remorse once convicted of their crimes. Furthermore, Hare

(2001), found that diagnosed psychopaths are 4 times more likely to violently reoffend following release from incarceration than non-psychopathic offenders.

However, not all psychopaths become serial killers (Lilienfeld & Arkowitz, 2008). Psychopathy may predispose the afflicted to a life of crime, but many channel these traits into roles such as politicians and business executives which need an element of ruthlessness that a psychopath possesses (Verona, Patrick & Joiner, 2001). Although most psychopaths are not killers, let alone serial killers, as they possess the essence of a psychopath (Fox & Levin, 2018). Examples of are doctors like Harold Shipman who relish in the power and control over their patients (Cleckley, 1941). Stone (2001) further states that serial killers by definition, possess psychopathic and anti-social personality traits, citing example such as Ted Bundy Therefore, the concept of the 'psychopathic serial killer' is a realistic prospect, however as seen above, not all psychopaths are serial killers, which suggests that a person needs a trigger in their social environment such as childhood abuse, to cause them to become a serial killer (Raine & Sanmartin, 2001; Hare, 2001; Patrick et al, 2005; Craparo et al, 2013).

Therefore, if all killers are not psychopaths, it is reasonable to suggest that there are other personality disorders that have a link to murder. Sociopathy and psychopathy have been used interchangeably to describe someone who does not have the ability to feel empathy (Cleckley, 1941). Some literature argues that a psychopath is born without empathy whereas a sociopath loses the ability to feel empathy through traumatic experiences (Mealey, 1995; Poythress & Skeem,

2005). The nuances between psychopathy and sociopathy can establish various differences among serial murderers (Fox & Levin, 2018). Psychopaths like Ted Bundy who are intelligent and organized in their kills vary from sociopathic serial killers such as Henry Lee Lucas who act without impulse control and with little regard for the consequences (Fox & Levin, 2018). Sociopaths like Lucas killed because a person was 'just there' and did so for the perceived thrill it may bring them (Jeffers, 1991). Whereas Bundy's kills were methodical in victim selection and method and they served a purpose in a mission to satiate his needs. A sociopathic personality disorder is created when a person internalizes humiliation and suffering from a past trauma, which later translates into an uncontrollable form of anger and rage (Gilligan, 1997). The pain and suffering they cause is a way of compensating for their own suffering and self-hatred (Fox & Levin, 2018). Quite similarly, anti-social personality disorder is characterized by lack of remorse, apathy to others, manipulative, cunning, nonconforming of social norms and socially inept (LaBrode, 2007). Both of these personality disorders have a link to serial killing as reported by Fox and Levin (2018), who state that a serial killer who does not kill for revenge, financial gain or for thrill meet the criteria for anti-social personality disorder rather than a psychotic illness (NCCMH, 2010).

## **Conclusion**

This thesis has looked at the possible contributing factors to serial killing, in the form of biological, social and cognitive psychology. After reviewing all of the evidence, there are three main conclusions that can be drawn from this thesis.

Firstly, there is strong evidence to suggest that biological predispositions can lead to serial killing, as is evident in twin studies (Lange, 1930; Rosanoff et al, 1934), chromosomal abnormalities in the form of XYY karyotype syndrome (Götz, Johnstone & Ratcliffe, 1999) and the presence of decreased levels of MAO-A (Alley et al, 2014). However, it is to be said that there is evidence to suggest that these biological predispositions do not alone cause serial killing but they can certainly expedite the process (Allely et al, 2014). Secondly, cognitive dysfunctions related to the presence of a head injury have shown to have a substantial correlation with serial killing, with Allely et al, (2014) showing that a large portion of serial killers they interviewed had a previous head injury. It is therefore reasonable to suggest that the presence of a head injury can be a catalyst for serial killing (Brower & Price, 2001; Allely et al, 2014). Thirdly, evidence further suggests that the presence of historical childhood trauma can lead to the victim recreating their abuse in their killings, with Ted Bundy, Henry Lee Lucas and Aileen Wornous as leading examples of re-enactment theory (Freud, 1920; Van der Kolk, 1989).

Lastly, psychopathy, ASD and sociopathy have tied all 3 aspects together, as all 3 personality disorders are purportedly caused by either biological, cognitive or social psychology (Verona, Patrick & Joiner, 2001).

Overall, after reviewing the evidence, it would be reasonable to conclude that there is not a singular cause for serial killing, rather a mixture of factors that can expedite the process of someone becoming a serial killer. All of the evidence has stated that one factor on its own cannot cause someone to become a serial killer, but if combined with other factors mentioned, it could lead a person to become susceptible to becoming a serial killer.

**Word count: 10774**



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