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A CRIMINOLOGICAL ANALYSIS OF NOTORIOUS SERIAL KILLERS IN THE
UNITED STATES

By Hannah Booth

A Thesis Submitted in Partial Fulfillment
Of the Requirements for the
University Honors Program

Department of Criminal Justice
The University of South Dakota
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ABSTRACT

A Criminological Analysis of Notorious Serial Killers in the United States

Hannah Booth

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Serial killing is a phenomenon that both fascinates and scares people. The United States has experienced several notorious serial killers that remain well-known, even years after their crimes. Serial killers are known for having many similar, but also many different traits. Ted Bundy, Dennis Rader, and Aileen Wuornos are some of America's deadliest serial killers, but each has backgrounds and traits that make them unique. This paper will provide an analysis of their psychopathic traits, and a model showing the significance of biological and environmental factors in their lives. Analyzing individual case studies for each killer will explain how their childhoods, behavior patterns, and whether they had certain disorders or traumas advance the general knowledge on serial killers from a criminological perspective. By looking at the characteristics and lifestyles of these offenders and analyzing their behavior through the Psychopath Checklist-Revised, results will illuminate if they meet the criteria of a “psychopath.” These results will help explain how both nature and nurture play a role in creating a serial killer.

KEYWORDS: serial killers, serial murder, psychopathy, criminology, Ted Bundy, Dennis Rader, Aileen Wuornos, United States

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INTRODUCTION

Serial murderers are disturbing, yet fascinating people to study. The topic of serial murder is universally frightening even though it is an extraordinarily rare occurrence (Knoll, 2006). It is estimated that in the United States there are anywhere from 35 to 100 serial killers active during any given year, and the number of victims is estimated between 120 and 180 (Hickey, 2010). This is a relatively small number considering the general assessment that serial murder is a growing epidemic in the United States. According to Knoll (2006), there appears to be no solid evidence that more serial killers are active. Nevertheless, names like Ted Bundy or “The Campus Killer” and Aileen Wuornos or “Damsel of Death” are forever etched into the minds of the public, even years after their crimes took place.

Bundy and Wuornos each captured a public audience because of their distinctive personalities and heinous acts of violence and torture. This fascination with some of the world’s most vile people can be justified through various explanations. With a general interest in the different lives and crimes of serial murderers, whether it be out of fear or thrill, many movies, books, television shows, and documentaries have been made to try to better understand how a human can commit such volatile acts. Researchers often try to examine serial killers and their motives through different lenses. Understanding serial murderers, however, is not an easy task. Primarily, the difficulty could be related to the fact that serial murder occurs at a low base rate, so empirically it is hard to study (Dowden 2005; Jenkins, 1994; Keeney & Heide, 1993; Knoll, 2006; White, 2014). Serial murderers are unique in their methods of killing, but many of their similar qualities,

motivations, and psychological composition help people understand and explain their behaviors.

Through an in-depth study of three notorious serial murderers (Theodore “Ted” Bundy, Dennis Rader, and Aileen Wuornos) this paper will develop an understanding and analysis of their overall behavioral and psychological makeup. Using a case study approach, this paper will explore the psychological, biological, and sociological factors that help explain serial murder. It will examine and compare psychopathy categories, like psychopaths, sociopaths, and different personality disorders, to determine if any of the serial killers in the study fall into the specific category of psychopathy. By looking at the serial killers’ lives, it will be clear that they develop distinctive motives but many of them have similar experiences that shape them into the killers they ultimately became. The information utilized and established in this paper will inform a model of serial murderers to assess and detail commonalities between the killers. By the conclusion of this paper, the evidence and research will support the argument that both nature and nurture have influences on serial killing. To support this argument, it is important to ask the following questions: How do psychological, biological, or sociological factors influence serial killing? Do serial killers Bundy, Rader, and Wuornos display psychopathic characteristics?

LITERATURE REVIEW

Defining Serial Murderers

Understanding serial murderers require a deeper look into the history of the crime. Before a person can look at the different reasons serial killers kill, serial homicide needs to be clearly defined. Most researchers agree that for someone to be a serial murderer there needs to be “three or more instances that are considered separate, due to a ‘cooling period’” (Weatherby, et. al., 2009). This definition helps to differentiate serial homicide from other types of murder, like terrorism or mass murder. White (2015) asserts, “the emotional cooling off or refractory period is the state of the murderer returning to his or her usual way of life between killings and varies in lengths for each individual offender, lasting days, weeks, months, or even years” (p. 11).

Researchers and popular media similarly define and recognize serial killers often because of the wide publicity and stereotypical characteristics that have formed throughout the last several decades. The terms “serial killer” and “serial murderer” were first coined in 1981 after the United States experienced what appeared to be a surge in criminals who were committing multiple murders (Hickey, 2016). No one at the time knew exactly why people were preying on hapless victims and hiding in habitually safe communities but serial killers had been lurking in the United States for centuries. According to the H.H. Holmes Biography (2014), Holmes was a con artist and criminal who is known today as one of the United States’ first serial killers. Though the number is uncertain, it is believed that Holmes killed anywhere between 20 and 200 people until he was caught in 1894. White (2014) asserts that before the creation of the term “serial

murder” as a defining term in 1981, serial murder was categorized with the broad definition of mass murder.

Theories of Serial Murder

Several factors contribute to why a person chooses to kill. Many biological, psychological, and sociological theories help explain serial murder. Criminological theories have been shaped alongside the public's general knowledge of serial killing. Like all aspects of crime, serial murder is multifaceted and can be explained through various lenses. It is important to examine different serial killers and their lives through various types of criminological theories.

Biological

One of the earliest theories of criminality came from Cesare Lombroso. He coined the idea that criminality is an inheritable trait (Hickey, 2016). Research using sophisticated methods has provided evidence genetic influences on crime (Beaver et al., 2009). Due to these methodological differences, the magnitude of genetic influences on criminal behavior ranges from about 40-60% (Beaver et al., 2009). Both age and type of offending are related to magnitude of genetic influences on crime. For example, criminality that begins early in someone's life and persists tends to become more heritable than criminality present only in childhood.

In a study of adoption and twin studies, there appears to be about a 50% variation that attributes antisocial behavior to genetics (Fox et al., 2019). This research has proven to be somewhat concrete, but biologists studying violence generally do not consider behavioral traits to be entirely inheritable traits. More evidence is needed to establish a relationship between heredity, environment, and criminality. Hickey (2016) contends,

“the argument that biological factors determine aggressive behavior remains premature, with little substantiating data” (p. 70).

Other biological theories have determined that specific brain dysfunctions may attribute to the neurobiological explanation of serial murderers. Fox et al. (2019) found fundamental dysfunction in psychopathy is linked to the section of the brain called the amygdala. The amygdala is the area in the brain that is primarily responsible for emotional processing and functioning. Some studies have even gone on to dissect the brain of a serial murderer in an attempt to find explanations for the violent and murderous behaviors they exhibited while living (Fox et al., 2019). Realistically, because only a small number of serial killers have been biologically examined to look at dysfunctions in the brain and elsewhere in the body, it is unlikely that biological factors can be used as a primary theory for serial murder.

Epigenetics

Subsequent research shifted focus from biological factors as the emphasis to environmental factors on biological traits that may be found in the family, society, and economy (Fox et al., 2019). The early belief in biological assumptions of criminality is mainly explained now by different genetic factors, opposing genders, and brain dysfunctions found in serial killers. In turn, some social scientists have begun looking at epigenetics to explain criminal behaviors. Epigenetics is the study of how a person’s behaviors and environment can cause changes in gene readability. Researchers have found that exposures to different environments may alter the epigenome and the alterations may cause certain genes to be expressed differently (Beaver, 2013). With this discovery, it is easy to see the relationship between genes and a person’s behaviors and

overall environment. Epigeneticists have found that epigenetic patterns change throughout a person's life course and this in turn changes gene expression (Beaver, 2013). Serial killers encounter adverse childhood experiences (ACEs) that alter their life course and may influence their genes, without altering the genes completely. Different ACEs such as stressors or environmental cues like household traumas or childhood maltreatments can impact epigenetics. Research has been able to detect early head trauma or child abuse as a common theme among multiple serial killers, including Ted Bundy and Aileen Wuornos (Holmes and Holmes, 2010). This further contends the argument that both nature and nurture play a role in shaping serial killers because biological and sociological factors are heavily interrelated.

Biological Continued

Epigenetics is important research for advanced biological theories related to serial killers, it is also beneficial for researchers to examine male and female differences. Biological differences between genders have also been theorized to see how male and female serial killers differ. Much of the research on serial killers tends to focus on male serial killers and less on female serial killers. Male serial killers exist in the United States with a large consistency (Hickey, 2016). As a result, the historical focus of the serial killer is often different when looking at males in comparison to females. In general, if a person were to think of stereotypical ideas about serial killers, it can be assumed they are thinking about a male killer. While most serial killers are males, about 17% of known serial killers have been female (Walters, Drislane, Hickey, & Patrick, 2014). With a small minority, it is understood why females are not often included in the discussion of sinister and sexually motivated killers. Hickey (2016) finds that usually victims of male serial

killers are killed in much more violent matters in comparison to other homicide victims. Along with an aspect of greater violence, various elements shape male serial killers, including their methods and motives for killing. Hickey (2016) states, “in serial killing, we are often faced with a process of murder rather than a brief act. Consequently, offenders were frequently found to have used a variety of nonlethal, potentially lethal, and lethal attacks on the victims” (p. 274).

The fact that serial killers typically revel in their murders more than other homicides is an important aspect in illustrating biological gendered methods for killing and why they choose to kill. In a breakdown of male serial killers’ methods and motives, Hickey (2016) illustrates that most male serial murderers carried out their killings with a combination of several different methods – including firearms, strangulation, stabbing, and bludgeoning. In this breakdown, Hickey (2016) also cites the common misconception about male serial killers and the idea that their motivations for killing are all rooted in sexual gratification. While the majority of male serial killers can be labeled as “lust killers” for their sexually driven kills, other reasons that serial killers commit their murders include reasons such as control, money, racism, and enjoyment (Hickey, 2016). Male serial killers are a distinctive type of criminal, even rarer than the male serial killer, however, is the female serial killer.

Mostly speaking, it is difficult for the media and the public to view females as killers. Females are traditionally viewed as caregivers and motherly figures, how could someone like that kill another person? Hickey (2016) explains, “consequently, those few females who are serial murderers may be even less likely to come under suspicion than their male counterparts or females who commit other types of murder” (p. 308). The

information and data regarding female killers are much smaller than that of male killers. Epstein (1995) contends that female serial killers are not usually portrayed to the public accurately. He explained, “actual murders by women who meet the definitional requirements of serial killing frequently involve the killing of children, the elderly, or the sick” (p. 310). Because of this, female serial murderers, especially when acting alone, can go virtually undetected, almost invisible to the public eye (Hickey, 2016). Female serial killers are quiet killers, this does not mean they are less lethal or deadly than male serial killers, but their crimes are often less gruesome and visible to the public, making their crimes easier to overlook as an accidental incident.

Females have been killing for as long as males, but their different methods of killing such as poisoning and smothering victims allowed them to slip under the radar. Aileen Wuornos is generally classified as the first female serial killer, but that is only because she killed her victims with a gun like many male killers have. The reality is, Wuornos is an abnormal type of female serial killer. In a study of 64 female serial killers, many of the women were identified as “black widows,” nurses, and other care provider types (Hickey, 2016). Black widows are female killer that murder their husbands or other family members. Nurse and care-provider killers typically victimize the people that they have control over. Therefore, female serial killers tend to target elderly women and men, as well as babies because they are often helpless or dependent on their assailant. Female killers also tended to select victims with whom they were acquainted or related (Hickey, 2016). Motives will also vary between male and female serial murderers. Hickey, (2016) explains “women in this study, with a few exceptions, generally were not sexually involved with their victims, nor did they kill them by particularly violent methods in

comparison to their male counterparts” (p. 325). This leads researchers to believe that many female serial killers are often motivated by financial gains or deeper psychological and biological reasonings. Hickey (2016) states, “in truth, every serial killer, male or female, has certain distinguishing features that identify him or her as a serial killer and make that person unique, even though he or she fits the serial-killer mold” (p. 312). This is important to reflect on when comparing biological male and female serial murderers. Biological factors alone are not the reason for criminal and violent behavior, but pairing the factors with biosocial and environmental factors provides more insight into serial murder.

Sociological

Fox et al. (2019) explained that many sociologists believe that serial killers are not typically born criminals but rather are shaped by the social contexts of the lives they lead. General strain theory, social learning theory, routine activity theory, and social control/bond theory help explain the motives and methods of serial murderers.

First, general strain theory is based on the idea that the strains and difficulties that an offender may face in their day-to-day life are difficult to deal with and criminals will "innovate" to have greater access to different life opportunities (Fox et al., 2019). Turning away from mainstream societal ways of success, an offender may take the strains in their life and instead unconventionally try to succeed by engaging in criminal behaviors that will allow them to get ahead in life. The theory which was originally hypothesized by Robert Agnew (2001) is based on three different factors: failing to achieve a goal, the existence of harmful impulses, and removing the positive impulses one has in their life. A variety of negative experiences or disappointments early on in social relationships at

school, home, or work cause strains that lead to anger, depression, anxiety, frustration, and even criminal behavior (Fox et al., 2019). Many serial killers are riddled with strains from their childhood, such as bullying from a classmate, physical or sexual abuse in the home, or having a parent with a previous criminal history. These strains could also be known as adverse childhood experiences (ACEs). ACEs include child maltreatment, household dysfunctions, and domestic violence (Rajan et. al, 2019). Many serial killers experience ACEs that are stressful or traumatic during their childhoods that impact their development into adulthood. For some serial killers, the inability to cope with life's strains can lead to antisocial behavior. Strain theory and serial murder remain tightly woven together due to the multitude of serial killers who have been shaped by the negative experience that punctured their lives.

The next sociological theory that helps to explain serial killer tendencies and motives is the social learning theory. Fox et al. (2019) explain this theory is shaped by the idea that people develop a tendency to kill from their interactions and learning experiences with other people. Social learning theorizes that people observe behaviors and then in turn mimic that behavior (Akers, 1985). Some researchers have suggested that people with military backgrounds have been provided with experiences and environments that teach them to kill the enemy or to be violent (Fox et al., 2019). Many people in the armed forces eventually become desensitized to acts of violence. Of course, this violent tendency can be learned outside of the military, and more research needs to be done on the relationship between military training and serial murder. Some serial killers learn and practice their inclination toward violence and torture through the mutilation of animals during their adolescent years. This learning does not have to be

done face-to-face and especially with advancements in technology, it is apparent that people can learn behaviors through videos they watch and books they may read. Social learning theory demonstrates that some serial killers may see media coverage of criminality as positive reinforcement and recognition for the crimes that are committed. Serial killers that are considered sexually deviant and motivated by lust may have been exposed to the behavior through observations of role models or in the media (Chan, Heide, & Beauregard, 2010).

The third sociological theory to support the understanding of serial killers and their crimes is the routine activity theory. The theory which originates from Cohen and Felson (1979) explains that situations in everyday life allow for the opportunity to select victims based on the presence of a routine. Serial killers often select victims based on their victims' lifestyles and can lure or trap them into vulnerable situations. Serial murderers may also select victims based on the jobs that the killers themselves have. Routine activity theory traditionally highlights the role of offender motivations, target suitability, and the effective guardianship that explains different victimization patterns (Drawve, Thomas, Walker, 2014). Various groups of people are victimized at different rates because of their age, job, location, or even individual capabilities. Routine activity theory can also explain why some people can get away with criminal activities. Victim selection is typically a rational choice that serial killers have thought about very intentionally. Serial killers generally have a victim type based on a set of criteria that holds some amount of significance (Boudreaux, Lord, & Jarvis, 2001; Canter, 1989; Chan, Heide, & Beauregard, 2010). Routine activity theory explains that although a serial murderer may have a specific victim type, the victim type could very well be based on

the opportunities of the killer's and victim's everyday lives. Serial killing is not usually a disorganized attack, enabling routine activity to further the sociological discussion.

Lastly, the social bond theory is explained by the idea that people who feel a connection or commitment to society, family, or education are less likely to engage in criminal activity (Hickey, 2016). Travis Hirschi coined the theory with four basic elements of control and bonding: attachment, commitment, involvement, and belief. (Hirschi, 1969). One can assume that if someone is involved in conventional activities during their day-to-day lives they will have less time to partake in criminal actions. Hickey (2016) explains how Hirschi's theory has begun to provide insight into serial murderer's actions Specifically he states, "these offenders do not appear to have the requisite ties to family, peers, and community that Hirschi found among those who tended not to engage in criminal behavior" (p. 126). Many serial killers grow up with very weak or toxic relationships with their families and peers, explaining why they may turn to crime and killing as a means of control. The theory was initially established to address delinquent youths, not adults, but when looking at serial killers many of their connections to community and family are lost long before they commit their crimes. If someone lacks strong social ties early in their life they may also be insufficient at abiding by everyday laws (Fox et al., 2019). If an offender does not hold a stake in the society in which they live they do not care for anyone other than themselves. Serial killers that lack connections with their families and their communities, especially beginning during their childhood, can be analyzed and clarified with the social control theory.

Psychological

The final category of criminological theory helps strengthen the argument that serial killers are best understood through both nature and nurture. Psychological theories tend to look at whether there are true psychological predispositions that serial killers possess (Holmes & Holmes, 2010). An analysis of different disorders, including narcissistic personality disorder, antisocial personality disorder, borderline personality disorder, and dissociative identity disorder, promote a deeper understanding of motivations and methods exhibited by serial killers. It is important to discuss mental disorders that are relevant states of mind when talking about thought processes and behaviors of violent offenders like serial killers (Hickey, 2016). Psychological theories of these disorders help researchers better interpret certain characteristics and personality types of individuals in relation to serial murder.

Narcissism is a personality characteristic that is frequently examined when talking about serial murder. People think of narcissism as an obsession with one's outward appearance, however, it additionally includes fantasies of superiority, pomposity, a need for admiration, and an overall lack of empathy (American Psychology Association, 2013). Many serial killers have active fantasy lives starting in early childhood. Many serial killers can be classified as narcissistic due to their self-absorbed nature and distance from other people in their lives. While narcissism is not always correlated with violent actions, Abrahamsen (1973) and McCarty (1978) indicate events that trigger intense inner pain or humiliation can cause malicious narcissists to resort to violence because they may feel the need to prove their inner feelings of superiority or to regain self-esteem and respect (Fox et al., 2019). Malicious narcissists may use their narcissism as a defense for their feelings of inadequacy or lowered self-esteem. Like all personality disorders,

narcissism comes in different forms and with various degrees of severity. One form of narcissism that is commonly associated with serial killers is destructive narcissism. Rosenfeld (1971) describes destructive narcissism as the link to the “death instinct” which is essentially a drive toward death and destruction shown through aggressive behaviors. Some argue that narcissism is destructive in nature, so the death instinct especially relates to serial killers and their narcissistic tendencies. Many serial killers have been identified as narcissistic, so the disorder has been very important when trying to understand serial killing.

Antisocial personality disorder or (ASPD) and narcissistic personality disorder are commonly explained in conjunction with one another given their similarities. Hickey (2016) explains that antisocial behaviors can include: “incorrigibility, theft, fighting during childhood, deceitfulness, excessive alcohol/drug use, reckless regard for the safety of self or others, impulsivity, and aggressive behavior during adolescence” (p. 91). These behaviors are common among violent offenders such as serial killers. There are two types of ASPD: psychopathy and sociopathy. This distinction can be confusing, but the underlying difference is that “sociopath” refers to someone who is the way they are because of their environment, and a “psychopath” is someone that is born or genetically predisposed to the disorder (Cossio, 2020). Serial murderers have been categorized under both types of ASPD. Fox et al. (2019) discuss the relationship between serial killers, ASPD, and psychopathy. They explain, “while most serial killers are psychopathic by nature, their formal clinical diagnosis is antisocial personality disorder” (p. 48). ASPD has also been seen as a co-existing disorder because of the number of traits found in multiple other psychological diagnoses. Antisocial people tend to harbor extreme

disregard for other people, almost as if they are completely unaware of their feelings and emotions. Fox et al. (2019) state that ASPD is a common diagnosis for multiple murderers because similar diagnoses, such as psychopathy or sociopathy cannot be proven to be as reliable and valid as the general ASPD given the number of standards that need to be met. Thus, it is much easier to clinically diagnose a person with ASPD than it is to categorize them as a psychopath. Therefore, ASPD is a well-defined disorder that helps to further the discussion of psychological theories about serial murderers.

Borderline personality disorder (BPD) is best defined as instability in interpersonal relationships and one's self-image, as well as actions of extreme impulsivity (Hickey, 2016). People who struggle with BPD and tend to be impulsive and have trouble controlling their emotions and anger issues. Therefore, psychiatrists like Schlesinger (1998) argue that BPD is a primary disorder associated with multiple murders and disorders like narcissism and antisocial personality disorder or psychopathy just stimulate violent tendencies. People with BPD often engage in impulsive and violent behavior, with nearly 50% of homicide offenders having been diagnosed with the disorder (Fox et al., 2019). One of the biggest perpetrators of BPD is the fear of abandonment or feelings of emptiness. It is thought that people with BPD are not necessarily motivated by violence, but rather behave in violent ways to cope or disassociate from negative childhood experiences, such as rejection (Fox et al., 2019). When a killer pushes these feelings onto their victims through violence, they are able to also kill the negative emotions and restore their personality. Many serial murderers have been diagnosed with BPD. Ansevics and Doweiko (1991) noted that in an analysis of 11 serial killers, nearly all of them were raised in violent homes and experiences great loss during their

childhoods, this implies that the core psychological issue may be BPD, not antisocial.

Borderline personalities are disorganized and killers who suffer from this disorder may be confused and angry when they kill, but that does not mean they do not have a capacity for empathy and compassion like killers that are narcissistic or antisocial (Fox et al., 2019). Borderline personality disorder shares many characteristics with dissociative identity disorder.

The ability to be or act like a person completely different than your true identity can be defined as dissociative identity disorder (DID). Hickey (2016) defines DID as, "the development of two or more distinct personalities, sometimes referred to as subpersonalities or alternate personalities, that each has their own memories, thoughts, and emotions" (p. 80). Serial killers are very good at hiding or altering their real identity to fit into the constraints of society. Killers can have multiple identities. Carlisle (1993) describes, "in this way, all homicidal impulses are compartmentalized in a certain fragment of the personality that allows the assailant to lead a seemingly normal life disassociated from his or her violent crimes" (Fox et al., 2019, p. 51). It is known that serial murderers have a cooling-off period between their kills, this space in time could be due to the killer having switched identities. Sometimes when a killer's identities start to overlap he or she may become more reckless or risky with their crimes. Similar to borderline personality disorder, DID is usually the result of traumatic or negative childhood experiences. Research of the disorder has found that certain personalities serve to protect the host from the trauma they experienced in their younger years (Barlow & Durand, 2012; Ellason & Ross, 1997; Ross et. al., 1990). Still, the relationship between serial killers and DID needs more research because many serial murderers may be

described as having multiple personalities, but there may be no formal diagnosis. The serial killers in this paper have been analyzed relative to dissociative identity disorder.

Defining “Psychopaths”

Before looking at individual serial killers and theories that further the studies regarding them, one must understand the relationship between psychopathy and serial killers. Gao & Raine (2010) point out that there has been a significant increase in research regarding psychopathy but there is still little known about psychopaths generally and in the real world. Dr. Robert Hare is one of the pioneers that worked toward understanding psychopath and he has provided researchers with a clear definition and diagnostic tool (*Psychopathy Checklist*) of psychopathy. Hare, as well as Dr. Hervey Cleckley, author of *The Mask of Sanity*, have provided various descriptions and studies of male and female psychopaths. *The Mask of Sanity* contains multiple interviews between Cleckley and incarcerated “Psychopaths.” The basic idea behind Cleckley’s book is that people who are psychopaths conceal their disorder with a “mask” of their “normal” personality. Both Hare’s and Cleckley’s work is still largely accepted and used today when reviewing psychopathy.

Psychopathy can be defined as a collection of personality characteristics that include glibness, manipulation, callousness, lack of emotions or empathy, irresponsibility, impulsivity, and aggression (Gao & Raine, 2010; Hare, 2003). This definition shows that psychopathy is like other psychological disorders but in fact, researchers estimate that only one percent of the population is clinically psychopathic (Fox et al., 2019). The one percent of people who are considered psychopathic, according to Hare (1993), are very active in criminal activity in the United States. Gao & Raine (2010) exert, “serial murder and psychopathy are inevitably linked, although not all serial killers display the characteristic traits of superficial charm, intelligence, lack of remorse,

impulsivity, and associated psychopathic traits” (p. 202). Many killers have psychopathic traits but a clinical diagnosis as psychopathic requires deep assessments and analyses.

The *Psychopathic Checklist* created by Hare became known as the *Psychopathic Checklist-Revised* or the PCL—R after Hare revisited his original checklist and added more items to his scale for assessing psychopathy in adults. This checklist was based on previous research by Cleckley and other researchers, as well as through numerous years of his own research (Hare, 1993). The items on the scale measure personality traits and behaviors related to customary ideas of psychopathy (Hare, 2003). No changes were made by Hare regarding the scoring or wording of the checklist. Instead, the changes made to the checklist included differential information regarding gender. The PCL—R is applicable and reliable for all genders and ethnicities (Hart & Hare, 1991; Kosson, Smith, & Newman, 1990). There are some concerns, however, when using the checklist for female assessment. This is due to the conclusion that females generally present a smaller base rate of psychopathy when compared to males (Norris, 2011, Vitale et al., 2002). The differences between males and females are not necessarily because women are less psychopathic, but because they may be better at acting discreetly and with less aggression than men (Cleckley, 1976; Hare, 1993). Overall, these differences do not discredit the results of the PCL—R.

Hare’s PCL—R is a 20-item scale that measures core characteristics and personality traits of psychopathy. Norris (2011) asserts, “each of these items is then rated using a 3-point scale from (0- 3) in which 0= (Not Applicable) no examples of behavior evident; 1= (Uncertain) at least one example of behavior exhibited, but behavior not exhibited consistently; or 2= (Definitely Present) multiple examples, a pattern of behavior

exists” (p. 34). This type of calculation allows for a score totaling between (0-40). Those people who score above 30 are the standard for a diagnosis of psychopathy and those who score below 30 are not considered to be clinically psychopathic (Hare, 1991). The characteristics on the scale are broken into different categories based on their relations to the other characteristics.

The following list contains the characteristics and personality traits analyzed in the PCL—R as well as a brief description for each:

1. Superficial Charm and Glib – Well-spoken and able to attract other people with exuberant charm and charisma (Hare, 1991, 1993).
2. Grandiose Self-Worth – Extreme narcissism and egocentricity, psychopaths have little regard for society’s rules and regulation and often talk about their huge life plans (Hare, 1991, 1993).
3. Need for Stimulation – Psychopaths are easily bored and constantly seek excitement, when their relationships have become routine or mundane they get bored and disappear (Hare, 1991, 1993).
4. Pathological Lying – Psychopaths feel the urge to lie about many details in their life, big or small for no apparent reason at all (Hare, 1991).
5. Manipulative and Cunning – The ability to lie their way out of any situation they find themselves caught in, psychopaths will cover up lie after lie (Hare, 1991, 1993).
6. Lack of Guilt or Remorse – Many excuses are readily waiting as psychopaths do not feel sorry for their actions and they often do not take blame regardless of the evidence present (Hare, 1991, 1993).

7. Shallow Affect – The emotional depth of psychopaths is very shallow, and they may appear very distant, cold, or blank (Hare, 1991, 1993).
8. Callousness and Lack of Empathy – Psychopaths cannot see things from other people's perspectives because they lack emotional attachment and feelings (Hare, 1991, 1993).
9. Parasitic Lifestyle – People that live parasitic lives are manipulative, selfish, and dependent on others (Hare, 1991).
10. Poor Behavior Controls – Psychopaths have a difficult time controlling their emotions and they may become provoked or react to situations intensely (Hare, 1991, 1993).
11. Promiscuous Sexual Behavior – When psychopaths engage in promiscuous sex, they do so because it boosts their ego and makes them feel powerful (Hare, 2003).
12. Early Behavior Problems – Most psychopaths begin to exhibit their strange life patterns early in life, the problems tend to be persistent and for a long duration of their childhood (Hare, 1991, 1993).
13. Lack of Realistic or Long-Term Goals – Unable to follow a life plan, psychopaths live without care and do not try to plan for their future life (Cleckley, 1955)
14. Impulsivity – Self-serving and spontaneous, psychopaths do not evaluate their decisions before making them (Hare, 1991, 1993).

15. Irresponsibility – Psychopaths do not hold responsibilities well and have no sense of pride in “real” work because they always manipulate their way out of it (Hare, 1991, 1993).
16. Adult Antisocial Behavior – Psychopaths carry their early behavior problems with them into adulthood, often they have a very diverse criminal background (Hare, 1991, 1993).
17. Many Short-Term Marital Relationships – Psychopaths struggle to build relationships with other people, this does not exclude their romantic relationships. This struggle to bond leads to potential marriage failures (Hare, 1991).
18. Juvenile Delinquency – Like many psychopaths who have early childhood behaviors, many of them also engage in deviant and criminal acts as a child that could land them a criminal record young (Hare, 1991).
19. Revocation of Condition Release – Psychopaths may violate their probation or conditional releases because of different violations or carelessness (Hare, 1991).
20. Criminal Versatility – Because of their impulsive behaviors, ability to be easily bored, and antisocial behaviors, psychopaths tend to engage in various types of crime both violent and nonviolent in nature (Hare, 1991).

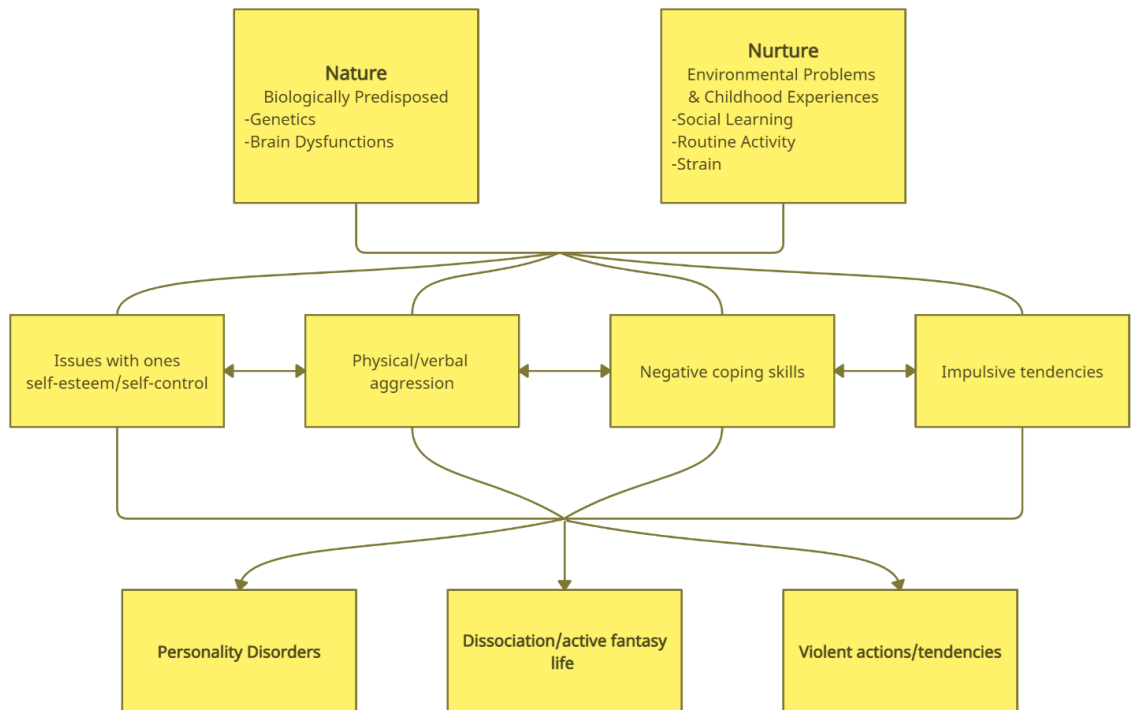
The examination of psychopaths would be incomplete without making a comparative analysis with sociopaths. As previously mentioned, some people believe sociopaths are created through the trials and tribulations they face in their environment, and psychopaths are predisposed at birth to the negative characteristics that define them. LaDonna (2021)

explains that "psychopaths tend to be more manipulative, can be seen by others as more charming, lead a semblance of a normal life, and minimize risk in criminal activities. Sociopaths tend to be more erratic, rage-prone, and unable to lead as much of a normal life" (n.p.). Serial killers have been categorized as both sociopaths and psychopaths, but because psychopaths tend to be more manipulative and can lead normal lives, categorizing serial killers as a psychopath may be the more logical option.

Linking Biological, Sociological, and Psychological Theories Together

Figure 1 represents a model for explaining the argument that both nature and nurture play a part in shaping serial killers. The argument of nature versus nurture is inaccurate because the idea that biological predispositions alone create a serial killer has been largely shown to be imprecise. Nature versus nurture also establishes the argument that environmental experiences alone create a serial killer. In truth, it is a combination of both. As researchers say, "genetics loads the gun, but the environment pulls the trigger." This is evident through the biological, sociological, and psychological theories that interconnect to explain serial killers and their methods and motives. For serial killers especially, their biological functions and the experiences and environment they are raised in come together and create negative characteristics. These characteristics form into personality disorders or certain tendencies that allow their serial killing to flourish. This study examines how psychological, biological, or sociological factors influence serial killing in Ted Bundy, Dennis Rader, and Aileen Wuornos. In addition, it will determine if serial killers Bundy, Rader, and Wuornos display any of the psychopathic characteristics previously listed. Next, the methodology section will explain how this is accomplished.

Figure 1 – Nature and Nurture Model of Serial Murder



METHODOLOGY

The methodology used for this research was achieved primarily through a multiple case study analysis. This descriptive research paper maintains the goal of analyzing and comparing multiple serial killers that were once active in the United States and determine what, if any, specific psychological, biological, and sociological characteristics can better explain their criminal methods and motives. Most of this analysis is done in the form of three individual case studies, one for each serial killer being dissected throughout this project. Within each case study, relevant criminological factors will be highlighted.

Each killer was chosen for a specific reason or characteristic. Ted Bundy was chosen as the starting point for what most people know about serial killers. His name is still a household name despite his crimes being nearly fifty years ago. Bundy also has unique victimology that is important to look at when seeking to understand serial killers' methods and motives. Dennis Rader was chosen because he is still alive and because of how he was ultimately caught. His ability to avoid capture for so long and his taunting of the media and police have been important when studying serial killers' lives. Rader also has unique characteristics that make him worthy of reviewing. His frequent communications with the media and law enforcement and his seemingly normal childhood make him distinctive when considering typical serial murderers. Aileen Wuornos was selected for this paper because she is heavily discussed in the literature regarding female serial killers. Wuornos is a unique case for all killers, but she is even more unique when looking at female serial killers in the United States. Wuornos had standard victim typologies, but her unorthodox methods and motives are important to

serial killer research. Analyzing these three serial killers and their secret identities as killers at a deeper level helps further the discussion of nurture and nature influences on serial murderers.

The majority of source material for the literature review and case studies is derived from peer-reviewed journals, scholarly articles, or other newspaper/media outlets. It should be noted that the case study method limits external validity. Although there are weaknesses in case study analyses, the method of multiple-case design is more powerful than a single-case design because it allows for a more in-depth explanation of serial killers and their unique personalities and characteristics. Each serial killer is analyzed using several different criminological theories. The personal experiences that each serial killer faced will show how criminological theories can be used in conjunction with other theories to show how nature and nurture both play a role in the development of serial killers. Figure 1 will serve as a guide to highlight nature and nurture in serial killing will help establish the connections between psychological, biological, and sociological theories of crime. After reviewing the information provided in each case study, I will evaluate each serial killer using *the Psychopathy Checklist-Revised* created by Dr. Robert Hare. This is my own modified version of the PCL—R, I utilize the same traits and scale for the checklist but analyzed the three serial killers based on different criminological theories and their case studies. This evaluation will help to conclude whether any of the three serial killers in this study may be classified as true psychopaths.

CASE STUDIES

Theodore “Ted” Bundy

Theodore “Ted” Bundy was an American serial murderer and rapist active during the 20th century. Today, Bundy remains one of the most notorious serial killers in the United States because of his unique victim type. Murray (2017) explains, “unlike most serial killers who seek their victims from the transient fringes of society, Bundy sought out the idealized woman” (p. 741). Not only did he seek out unlikely victims of murder, but Murray (2017) points out that he acted with an obvious sexual element of torture when committing his killings. Most people could not have predicted that Bundy would kill and torture as he did. To the average person, Bundy would appear to have a typical life. A college graduate who later went on to study law, Bundy did not fit into the public's preconceived notions of a serial killer. Nevertheless, Bundy's "normal life" was riddled with jealousy and the desire to be someone better or different than his true identity, this constant desire would lead him to kill.

In late 1973, Bundy began his killing career which spanned until 1978 in at least five different states (Hickey, 2016). Bundy was on a constant quest for an identity as he wanted to be anyone but himself. This could be the reason that his killings spread across multiple states including Washington, Oregon, Utah, Colorado, and Florida (Hickey, 2016). In the seemingly short time that Bundy was actively preying on victims, he was able to kill at least 30 victims across the United States. The sheer number of victims that Bundy had could be the reason for his notoriety, or it could be due to the publicity that his crimes and ultimate trial received from the media. Bundy, as well as other serial killers active in the 70s and 80s, became household names, some even referring to him as

“a societal icon” (Holmes & Holmes, 2010). He was a regular topic on television and radio talk shows in addition to various newspapers across the United States. Bundy was unlike serial killers before him, his charm and seemingly chaotic energy fascinated the public and the media alike. Ted Bundy continues to captivate an audience of interest even years after his death.

Ted Bundy may have appeared normal on the surface, but his upbringing was not exactly predictable. Born in Vermont on November 24, 1946, Bundy and his young mother lived with his deeply religious and judgmental grandparents until he was four years old. Bundy was initially raised to believe that his mother was his older sister because his grandparents did not want rumors to spread about his birth being out of wedlock ("Ted Bundy Biography", 2018). During his time with his grandparents, Bundy was exposed to deeply traumatic moments stemming from his grandfather's violent outbursts (Hickey, 2016). At the age of four, he and his biological mother moved to Washington where he would officially become a Bundy after his mother married his stepfather, Johnnie Bundy. His mother and stepfather had four more children and Ted was no longer the central focus of the adults in his life.

Bundy was a shy and smart child, though he did not seem to get along with other children until he was much older (“Ted Bundy Biography”, 2018). As a young boy, Bundy was involved in various sports during junior high and high school and his shyness and lack of confidence were evident in the locker room, Bundy would refuse to shower and change in the presence of other boys his age (McClellan, 2006). By the time Bundy entered high school, he had lost much of his confidence and did not perform as well in schoolwork. But this lack of confidence was not evident to his peers. Classmates would

describe Bundy as a good-looking, smart, and sensitive young boy, but he was a walking paradox. McClellan (2006) states, "he displayed charm and social graces that hid his psychosexual immaturity. He took what he could by theft, shoplifting, and burglary while enjoying the thrill of invading residences" (p. 24). When looking at Bundy's life, researchers find commonalities with other children who became serial killers, including his insecurities about his social status and his criminal tendencies of theft (Weatherby et al., 2009). By the time he was a teenager, he was showing even more signs of the gruesome serial killer he would become, including spying on unsuspecting women and delving into his fascination with violent pornography ("Ted Bundy", 2021). As Bundy got older, he began transforming himself into someone very confident and active in social circles.

After high school, the college courses Bundy enrolled in allowed him to study and practice criminal behavior. McClellan (2006) emphasized that the studies and jobs he held during college were very valuable at nourishing his predatory and murderous inclinations. This transformation was merely external. Bundy internally struggled with his status in the world and struggled to understand the dynamics of social life. Hickey (2016) describes Bundy as someone constantly trying to live an image he saw as better than his own, but he could never really attain that image. Bundy believed he had finally established that image of himself when he began dating the "love of his life", Stephanie Brooks who came from a wealthy family in San Francisco (Weatherby et al., 2009). Brooks and Bundy met while attending college in 1967 and Brooks would turn out to be one of the biggest influences on Bundy's life. When the relationship with Brooks ultimately failed, Bundy began acting out on different parts of his sexual fantasies, citing

his fascination with pornography from his youth, especially violent pornography, as what would, in the end, turn his fantasies into actions (Weatherby et al., 2009). Watching these pornographic videos may have provided Bundy with ideas about how to commit his vicious crimes, but one can also infer that Bundy had multiple unresolved childhood traumas that influenced his behavior. The image that describes Bundy is one of a man with dark sexual fantasies, low self-esteem issues, and an alcohol problem that led him to begin his murder career.

The sexual fantasies and alcohol mixed with Bundy's own antisocial and introvert tendencies turned out to be a lethal combination. Bundy is certainly a unique serial killer, but he can be categorized and better understood through several criminological theories. Strain theory and various psychological theories including psychopathy, antisocial personality disorder, narcissistic personality disorder, and borderline personality disorder help to better explain his antisocial behavior. Ted Bundy's life was full of various strains, starting at a very young age. The trauma that Bundy experienced through the relationships with his grandparents and his mother nourished his feelings of lowered self-esteem. He also always had the desire to be better than he was, searching for a way out of the middle-class lifestyle he had been living. Bundy had very few positive stimuli in his life which led him to attempt to make up for his lack of success by committing different crimes throughout his life. As a young man, Bundy would become well versed in the art of theft, burglary, shoplifting, and alcohol (McClellan, 2006). McClellan (2006) mentioned, "Ted was a quick study and showed early signs of criminal sophistication by preparing for his burglary forays by dressing in a suit and tie to become invisible to people who would otherwise be suspicious of neighborhood interlopers" (p. 23). Bundy

did not think twice about the crimes he committed, proving the emergence of this dark side very early in his life. This initial criminal behavior can be correlated to the strains and ACEs Bundy experienced within his familial and peer relationships.

The strains in Bundy's life also proved to nurture different psychological disorders that Bundy lived with. Because antisocial, narcissistic, and borderline personality disorders are often discussed in similar fashions, Bundy has been described by all three. A group of psychologists participated in a study about the personality structure of Bundy and 96% of the participant sample found Bundy to be antisocial and 80% found him to be narcissistic (Samuel & Widiger, 2007). Bundy displayed several traits in conjunction with a narcissistic personality disorder. The first being his lack of empathy. Bundy did not show signs of empathy for his victims and he also lacked signs of remorse for his horrendous crimes. Prithani (2019) also explained that many narcissists tend to be hypersexual and this can be tied to their need to have power and control over other people. Bundy talked about how killing and raping his victims helped him to feel in control. His other traits that reveal his narcissistic personality include his need to be admired and his pathological lying. Bundy would lie about when he began killing and how many people he killed, to this day the exact number is still unknown. Bundy's need for admiration later in life covered up the low self-esteem Bundy once harbored when he was a young boy. Narcissistic personality disorder better explains many of Bundy's methods and motives.

Bundy's childhood and adulthood are both riddled with signs of antisocial personality disorder. To name a few of the behaviors attributed to ASPD that Bundy exhibited, theft, excessive alcohol/drug use, and reckless regard for the safety of self or

others were common manners of Bundy. Most of his murders were committed while he was under the influence, of alcohol. This, along with his displays of theft and spying on women at a young age shows the lack of regard he had for other people and how he presented his ASPD. Does Bundy's antisocial personality go one step further into psychopathy? Many psychologists believe Bundy fits the characteristics of a psychopath. As seen through his diagnosis of several personality disorders, Bundy lacked empathy, was a master manipulator and displayed high amounts of superficial charm. These characteristics and more point to a possible diagnosis as a psychopath, but they were also the traits that helped Bundy succeed in his career and his murders. Many psychopaths do not go on serial killing sprees, remaining disguised in their daily lives. Bundy is no exception to this; he used his superficial charm to reel in victims and also to become a prominent young leader of the Republican party. Bundy's psychological analysis and his life experiences make it very likely that he is both antisocial and psychopathic in personality.

Bundy's many distinctive personality disorders made it easy for him to trick people into associating with him. Because of this, Bundy's victims spread across the United States and his motive and methods for killing each victim were very similar. All of Bundy's victims were white females and they varied in age from preteen to mid-20s. While Bundy was establishing himself as a young professional, he would also establish himself as a young murderer. In February 1974 Bundy would abduct and kill Lynda Healy in Seattle, Washington. Healy would only be the first of eleven victims that year. Bundy had a pattern for his victims – bludgeon, strangle, rape, and sodomize them (Norris, 2011). One of the women that Bundy attacked in November 1974, Carol

DaRonch, was able to fight off Bundy and escape a horrendous fate. Killing and attacking twelve people in a span of ten months does not go unnoticed, Bundy's name had been given to the police several times during the years before his eventual capture. But even with police on his trail, Bundy continued to kill. In 1975 Bundy had taken his killings across state lines and claimed six more victims, utilizing the same methods for his kills. It would be August 1975 when Bundy would be arrested for the first time. Attempting to drive away after being caught driving erratically, Bundy eventually stopped and was found to be in possession of a crowbar, handcuffs, an icepick, and a mask (Norris, 2011). Bundy of course lied, telling the officer he used the items to keep himself warm on the Colorado slopes. The officer still arrested him, and later that year Carol would identify Bundy in a lineup as her attacker (Yang, et al., 2019).

This led to his first trial, he was convicted and sentenced to fifteen years in prison for the attempted kidnapping of Carol DaRonch (Norris, 2011; Lewis, 2009; Michaud & Aynesworth, 1989; Rule, 2000). Several months after this conviction, Bundy would again be charged with an offense but this time for the murder of Caryn Campbell. He pled not guilty and assisted in his defense in the case. Acting as his own defense allowed him access to the jailhouse library and he was able to escape from the second-story window (Yang et al., 2019). He would be caught in less than a week, but he would plan and execute another escape from his prison cell in December 1977. This last escape would be lethal for several women. Somehow, Bundy was able to flee to Florida from Colorado. In Florida, Bundy would accrue his long list of victims. On January 15, 1978, Bundy broke into the Chi Omega Sorority house and proceeded to bludgeon, rape, and strangle four sorority women, killing two of them (Norris, 2011). He would attack another woman

moments later in her house a few blocks away and finally, in February he claimed his last and youngest victim.

Bundy was arrested after driving with stolen plates on February 15, 1978. He lied about his identity, but the Florida police tested his DNA and determined they had captured one of the FBI's 10 Most Wanted fugitives (Norris, 2011; Rule, 2000). After a very public and rare trial where Bundy would act as his own attorney, he was found guilty of murder and attempted murder. This conviction would place Bundy on Florida's death row for the next nine years. During these nine years, Bundy managed to marry Carol Ann Boone and father two of her children, daughter Rose and son Jamie (Norris, 2011; Rule, 2000). After several failed appeals and multiple more confessions, on January 24, 1989, Bundy was executed by the electric chair. He remains a fascinating case for all people interested in crime, reminding everyone that even attractive and intelligent people have the ability and motivation to kill.

Dennis Rader “BTK Killer”

Dennis Rader is a serial killer that murdered 10 people in Wichita and Park City, Kansas during the late 20th century. People today remain enthralled by Rader's simultaneous ability to hide his murderous tendencies, all while he played an apparent game of "cat and mouse" with the media and police regarding the details of his crimes. No one could have been able to detect that Rader, the family man, and friendly neighbor, was the person behind terrorizing and destroying an entire community for several decades. Rader lived an unexpected double life, loving father and community leader by day, sadistic sexual serial killer by night. Granting himself the moniker of "BTK Killer" or "Bind, Torture, Kill", Rader would commit heinous acts of murder and violence over

17 years. It would be over 30 years until Rader would be caught by police. In the end, Rader was his own worst enemy. His need for credit and infamy is what led to his ultimate capture and conviction. Rader began his murder spree in 1974 and actively sought out victims until 1991.

Born on March 9, 1945, in Columbus, Kansas, Dennis Rader was the eldest of four boys born to William and Dorothea Rader. His parents worked very hard to provide for their family which led to them not being around the house as much while Rader was growing up. When they were around, Rader said his childhood was very normal and happy, aside from occasional scolding for being too loud when his father came home from work (Norris, 2011). But even this scolding from his father did not strike Rader as traumatic or animus. When he was in preschool, he spent a lot of his time at his paternal grandparent's farm (Norris, 2011). While he was on the family farm, he would help with the chores. Often, Rader would help his grandmother ring the necks of the chickens before dinner. According to Norris (2011), when he would ring the chickens' necks he would feel a "strange sensation" in his crotch and stomach area while the chickens ran around the yard with their heads cut off. After seeing this in Rader's journal, Douglass and Dodd (2007) reveal, "in the impressionable young synapses of Rader's developing brain, he began to equate death and its various associates with the intoxicating mystery of sexual arousal" (p. 131). These childhood feelings and experiences would prove to establish a relationship between sex and violence in Rader's life. Unusual sexual arousals aside, Rader exemplified traits of a normal Kansas boy. His classmates said he was the boy that their parents wanted them to be more like. He was polite and proper, but behind closed doors, Rader fueled his abnormal sexual cravings with fantasies of bondage and

rape scenarios (Norris, 2011). He would draw his fantasies as sketches, and he often cut out women from magazines and drew pictures of the women in different types of bondage. None of the people in Rader's life were able to uncover this side of him until he was discovered as the BTK Killer.

Moving into adult life, Rader continued to hide his illicit fantasies. Rader joined the Air Force in 1966 after graduating from high school and this life suited him well. While he was serving in Tokyo, he would find many prostitutes while out at the local bars (Singular, 2006). He served in the Air Force until 1970 and then he moved back to Wichita, Kansas. He married Paula Dietz a year later and they moved to the neighboring town of Park City. Rader would get a job in 1973 and lose it within the year, proving to be a detrimental detail in his murderous story (Douglass & Dodd, 2007). In between jobs, Rader had too much free time to sit and be consumed by his fantasy life. While Rader was unemployed, he would no longer be able to suppress his sexual fantasies and he began driving around Wichita looking for potential victims. This is when he selected who would soon be his first victims.

Externally, Rader seemed to be someone who would never harm another person. Clearly, however, many criminological theories can explain how Rader was able to hide his identity. Rader is one of the most self-absorbed serial killers, this translates into several theories including narcissistic personality disorder and dissociative identity disorder. While Rader was actively killing people in his community, he was actively communicating with police and the media about the details of his crimes. Norris (2011) explains, "Rader's infamous moniker was established in his first communication with the press in October. A call was placed by Rader to the Wichita Eagle newspaper stating

there was a letter hidden in a book at the local library" (p. 82). In these letters, Rader admitted to his first murders as well as gave himself the nickname of BTK Killer. Several more connections were made between Rader, the media, and the police because Rader needed people to know about his crimes. Riccardi and Zarembo (2005) explained that during the majority of his correspondences with law enforcement and the media Rader would talk about other serial killers and demand that he be portrayed with the same levels of infamy and notoriety.

Rader's narcissistic personality motivated him to commit more murders. His urge to kill coupled with his narcissism ultimately was the reason Rader would get caught by police. His self-obsessive need to gain the power and control that he lacked growing up manifested into his need to know what people thought of his killings. Rader needed to receive credit for his heinous crimes. This need for praise and infamy also translated into dissociative identity disorder. Rader lived the ultimate double life. Riccardi and Zarembo (2005) explain that Rader was unlike other serial killers because he was able to sustain relationships in his community, he was married, he has two children, and he regularly attended church. The majority of criminals do not have the same ability to maintain relationships. But, because Rader could disassociate his two personalities, he had no trouble pretending to be someone else. Rader remembers all of his crimes, but he often cites that someone or something else inside him was committing the murders. For example, Wenzel, Jespersen, Kelly, and Laviana (2007) cite how Rader talked about this personality:

He argued that his explanation—that there was a demon within, a monster that controlled him. "Factor X" as he sometimes called it—was the only one that made

sense. How else do you explain a man who made many friends but strangled people, who lovingly raised two children but murdered children? (p. 359)

Arguments have been made whether Rader did have DID or if rather he just needed something to blame. He would go on to tell people that his horrendous and evil traits belonged to "The Minotaur," this personality was what personified his sexual impulses and violent tendencies (Murphy, 2016). Rader could be trying to transfer culpability, but it is also possible that his ability to live a double life was due to the fact that he was disassociating to an alternate personality.

Rader is a creature of habit, so it is not coincidental that routine activity theory helps researchers understand his methods and motives for killing. Routine activity theory highlights offender motivations and victimization patterns that may be present. Many serial killers have been known to select their victims based on convenience or because of a job that killer has at the time. Rader began committing his murderous acts while he was unemployed, but soon after he began working as an employee for ADT Security Services. This job gave him new access to his victims' homes and their security systems. Killers like Rader often select victims based on their lifestyles and their status of vulnerability. Most of Rader's victims were women in their homes and one could conclude he saw these women as particularly vulnerable whether that be because of their age, job, or their location. Rader would lie in wait for his victims in their homes. Routine activity helps explain this behavior because Rader chose to kill his victims when it was most convenient for him and though it required preparation, it was often an element of his daily routine and it did not disrupt him.

Social learning theory can also be used to explore Rader's criminal background. This theory emphasizes interactions with other people and what can be inherited from these experiences (Fox et al., 2019). Social learning theory does not categorize that all learning must come from face-to-face interactions, which would help to explain that Rader could have learned his sadistic and vicious behaviors from materials he would read or watch while growing up. When Dennis and his grandmother would kill the chickens on the farm, Rader would experience a feeling that he had never felt before. He wanted to relieve that sexual feeling that was achieved from seeing dead animals, so much so that he would kill humans for even more gratification. It is also evident that Rader was an active member of the U.S. Air Force. People like Rader that have a military background learn to be desensitized to certain levels of violence, so it could be that Rader did not care about his violent acts. Rader sought out experiences that provide an optimal learning environment for violence.

Considering these theories of crime concerning Rader helps to understand his methods and motives for selecting and killing his victims. Rader noticed his first ideal victims on a drive back to his house. After this initial glimpse, Rader began to plan out how and when he would carry out his gruesome attack on the beautiful Otero women (Norris, 2011). On January 15, 1974, Rader carried out his first murderous attack. Arriving at the Otero's house, he promptly cut the phone lines. Rader was greeted outside by the Otero's young son Joseph Jr. and he promptly grabbed the boy and followed him into the back door. Rader had invented a lie to share with the family. He told them he was an escaped convict who just needed some money and the family car. Unbeknownst to Rader, the father Joseph Sr. was also home with Mrs. Otero and their daughter Josie. This

did not disrupt his plans, however, and Rader instructed the family to tie each other up. Rader continually reassured the family he was only tying them up so that he could rob them and cause them no harm (Douglass & Dodd, 2007). After the family was tied up to Rader's satisfaction, he began to suffocate Mr. Otero with a bag. Mr. Otero put up quite the fight, but ultimately Rader would kill both parents and Joseph Jr. by strangulation and suffocation. This left Josie Otero, who was the main target for Rader. Norris (2011) explains, "he carried Josie downstairs to the basement and tied a noose around an old water pipe. Rader was still trying to console the girl by telling her that her family was only sleeping and that soon they would all wake together in Heaven" (p. 81). Rader hung Josie from the noose and became aroused as he watched her die. He proceeded to masturbate onto her leg. This quadruple murder would shake the small community and it would only be three months before Rader would strike again.

In April 1974 Rader attacked Kathryn and Kevin Bright, a brother and sister who had just returned home. Ambushing them in the bedroom, Rader shot Kevin twice in the head and proceeded to stab Kathryn after she put up a tough fight (Norris, 2011). Kevin was able to survive the brutal attack, but Kathryn died in the hospital later that day. Arguably this was the most disorganized kill done by Rader because he did not do anything sexual to the victims or at the scene of the crime. It would be several years until he would kill Shirley Vian in March 1977 and Nancy Fox in December 1977. Both women were found strangled and tied up in their homes (The Associated Press, 2005). Rader's murders became more spread out after 1977 and he attacked three more women from April 1979 to September 1986. Rader's kills were driven by his sexually deviant fantasies, he would stalk his victims, wait for them in their homes, and then proceed to

strangle and tie them up. Murray (2017) explains, "Rader typically did not rape his victims while alive; rather, what excited him was the power, thrill, and control he had over his victims while he killed them" (p. 737). He lusted over the power and control he exerted on his victims. Rader was playing his game of cat and mouse with police and the media all while he played the role of a father, husband, and model community member. His first communication was a call to the *Wichita Eagle* in October 1974 informing them of a hidden letter in a book at the local library. This letter detailed his murders of the Oteros and it would be the letter that he would give himself the nickname of "BTK" or "Bind them, torture them, kill them" (Norris, 2011). Rader would send another letter and a poem about killing Vian and Fox. BTK would kill Marine Hedge in April 1985 and Vickey Wegerle in September 1986, again by strangulation. The communication about Wegerle's murder would include a photo of her body that could have only been taken at the scene of the crime by BTK himself. His final victim would be Dolores Davis in January 1991.

Rader would be done slaying people in 1991, but his communications with police and the media would resume in 2004 after 30 years had passed since the Otero murders. Norris (2011) writes, "the police were stunned both to receive communication after such an extended period of time and to have a murder that had not been attributed to the killer so suddenly solved. Rader would send several more letters in the next year that would ultimately lead police right to his door" (p. 83). Rader's desire to kill had sparked again in 2004 after the sudden reminder of his previous kills, this communication would lead to his eventual arrest. Rader sent the local media and authorities several letters filled with items related to his crimes, anything from pictures, a word puzzle, and even an outline for

a story about BTK (The Biography.com Editors, 2014). Rader used technological advances to his "advantage" and began typing his letters and saving them onto a floppy disk. Rader asked police if they would be able to trace his whereabouts with the floppy disk, they told him it was not possible. This was one of the biggest mistakes Rader would make regarding his serial murder career. With the floppy disks in police possession, they were able to use their computer forensic analysts and determine that the disks belonged to someone named "Dennis" (Norris, 2011). Between the floppy disks and Rader's semen samples from previous crime scenes, the evidence against Rader began to stack up. Police were able to match Rader's DNA left at several crime scenes to his daughter's DNA. Finally, in February 2005, Rader was arrested.

In June 2005 Dennis Rader plead guilty to 10 counts of first-degree murder and several other class A felonies. Riccardi and Zarembo (2005) explain, "Monday's confession by BTK killer Dennis L. Rader was a rare public look into the eerie world of serial killers, one that is full of tantalizing patterns but governed by a violence that scientists and profilers do not understand" (p. 1). Rader said that he killed to satisfy his sexual fantasies. He would go on to detail his vicious acts for the courtroom with virtually no emotions present. In August 2005, the BTK Killer Dennis Rader would receive 10 consecutive life sentences without the possibility of parole for 40 years. The death penalty was not reinstated in Kansas until 1994 so because Rader's crimes were committed between the years of 1973-1991 Rader slimly missed the death penalty. He is currently incarcerated in the El Dorado Correctional Facility.

Aileen Wuornos

Aileen Wuornos was a female serial killer in the United States. People often mistakenly call her the first female serial killer in America. Wuornos was not the first female serial killer, but she was the first female serial killer to get real attention as a serial killer. Her story is so rare and interesting it inspired a killer movie titled *Monster* (Norris, 2011). What made a Wuornos a monster, however, are the multiple murders she committed. Aileen Wuornos, named at birth as Aileen Carol Pittman was born in Rochester, Michigan on February 29, 1956. Aileen's parents, Diane Wuornos and Leo Pittman were married when Diane was only 15. Aileen was the younger sister to a brother named Keith. Shortly before Aileen was born her mother would divorce Mr. Pittman (Norris, 2011; Russell, 2002). The decision to divorce Pittman was a wise choice for the Wuornos family of three as he was a sadistic psychopath and child molester (Norris, 2011). Nevertheless, Aileen's life would not get any easier. Not long after Aileen's father was no longer in the picture, neither was her mother. Diane abandoned Aileen and her brother, leaving them with their maternal grandparents Lauri (Larry) and Britta Wuornos. Neither Aileen nor her brother knew that their grandparents were not their parents until they were teenagers, Lauri and Britta raised them as their own (Norris, 2011). Her grandparents, however, were not the perfect guardians. Aileen claimed that her grandfather was physically and sexually abusive toward her starting at a very young age (Norris, 2011; Kelleher & Kelleher, 1998). Evidence of this abuse was apparent in Aileen's behaviors. By age 12, she would already exchange sexual favors for cigarettes or other drugs with different neighborhood boys. Aileen had a child in her early teen years that she put up for adoption. Norris (2011) wrote about how Aileen would not admit who the father was, but she claimed she had been raped by a family friend. The

accuracy of this statement from Aileen is speculated because of her admittance to having an incestual relationship with her brother. Aileen was desperately looking for someone to want to be her friend or just to have someone care about her.

Aileen began running away from home around the age of 15. To support her own survival, Wuornos began working as a prostitute. She also became very good at pool and would hustle or steal money (Norris, 2011). After being placed in a girls' home, Aileen would attend high school and find it too difficult to complete. At this point, her criminal record was already full of several different offenses, from drunk driving to grand theft auto. By 21, Wuornos had an extensive criminal record, and both her grandparents and her brother had died (Norris, 2011; Meyers et al., 2005) The instability of Wuornos's life was ultimately lethal. The constant instability that Aileen would experience from her earliest years placed quite a strain on how she would live her adult life. Wuornos experienced several traumatic events throughout her lifetime, especially during her more formative years. She was abused at home by her family, she was bullied for her relationships with the boys in her neighborhood, and she did not do well in school. The strain theory explains that Aileen began establishing new ways to deal with the difficulties that she experienced in her life. These new coping skills can be seen in her lack of trust and the promiscuous behaviors she engaged in to make a living. So much of Wuornos's life was a disappointment, the strains she experienced led her to seek control through a life of crime and murder.

Aileen connected to very few people during her life. This lack of connections caused her to need control somewhere in her life. Social bond theorizes that if Wuornos would have felt a connection or a commitment from society or her family she may not

have turned to a life of crime. As someone who was abandoned by her parents, sexually and physically abused and living on her own as a teen, Wuornos felt like she had to turn to crime to survive. She did not have the same social opportunities that her peers had while growing up. Utilizing this theory, one can see how important nature and nurture were in Wuornos's development. Alienated by society and her family, Wuornos chose a life that seemed easiest to her and it would be this reckless lifestyle that would eventually lead her to serial murder (Robinson, 2015). The social bond theory places a large emphasis and focuses on a person's childhood experiences, for Wuornos her history of a variety of different crimes was a tell-tale sign of the criminal adulthood she would eventually lead.

Not only did the struggles in Aileen's life cause her harm and stress, but she also has been diagnosed with several psychological disorders. One that was very prominent, especially when seen the public eyes was borderline personality disorder. Explaining Wuornos with this disorder requires one to look at her unstable relationships and her extreme levels of impulsive behavior. Wuornos had many problems with self-functioning because of her unrealistic goals and plans for her life. She also faced problems within her relationships because of her underlying mistrust and hardships. BPD is frequently associated with multiple murders because the psychological disorder may increase violent behavior. People with BPD are constantly pierced with feelings of emptiness or fear of abandonment and given what Aileen experienced throughout her life, she felt empty and abandoned by the people in her life. The hardships and negative experiences of Wuornos's life led her to develop BPD.

Wuornos's criminal record spanned for several years, but the time she was actively killing was relatively short in comparison. From late 1989 until the fall of 1990, Wuornos murdered at least six men in Florida. Wuornos would claim that all of her murders were committed in self-defense. Her first victim would be Richard Mallory. For the first murder, Wuornos recounted that Mallory refused to pay her for prostitution and proceeded to beat and attempt to rape her. After she reached her pistol she proceeded to shoot him in the chest. Norris (2011) explains, “afterwards, she realized that if he survived, she may be caught. This thought inspired her to shoot him two more times in the chest at point-blank range” (p. 103). Aileen would go on to kill multiple more men in the same fashion as Mallory and with the same justification. All of the men were “Johns” who would pick her up for prostitution. Wuornos would shoot and rob them, abandon their bodies in a remote area, and dump their cars in another location. Aileen would often pawn off items she took from her victims and this act would be what led police right to her. Kelleher & Kelleher (1998) explain that the police tracked Aileen through fingerprints that she left on pawnshop sale cards.

After 11 months of robbing and murdering men, Wuornos was arrested on January 9, 1991. It would be during the trial that Aileen’s long-time girlfriend and confidant Tyria Moore would betray Wuornos in order to secure her own immunity. Tyria spoke to Aileen on the phone after her arrest and convinced her to confess to her crimes. Wuornos would confess to six murders but as previously stated, she claimed they were all done in self-defense. The trial began nearly a year later on January 13, 1992. After hearing crucial testimony from Moore about Mallory’s murder and the conversations she had with Aileen, the jury deliberated for 2 hours and found Wuornos

guilty of first-degree murder. After the verdict was read Aileen would scream: “I’m innocent! I was raped! I hope you get raped! Scumbags of America!” (Burkeman, 2002). Wuornos was sentenced to death on January 29, 1992. Some details came about relating to Richard Mallory and his time spent in prison for a violent sexual attack, some people believed these details warranted a new trial for Wuornos, but she never got one (Norris, 2011). Aileen Wuornos was executed on October 9, 2002, via lethal injection.

DISCUSSION AND CONCLUSION

The terms “serial killer” and “serial murderer” were not established until 1981. Serial murderers are distinctive in their methods of killing, but many of their similar qualities, motivations, and criminological compositions help people understand and explain their behaviors. Throughout their lives, these killers develop distinctive motives for their crimes, yet they still experience similar environments that allow researchers to analyze them. Different criminological theories also explain serial killers. Most significantly, these criminological theories work together to show how nature and nurture qualities both attribute to serial killer development.

Ted Bundy is understood through different theories like the strain theory, narcissistic personality disorder, antisocial personality disorder, and psychopathy. The ACEs and severe trauma that Bundy faced paired with his already antisocial tendencies to set him up for serial killing. He experienced many negative environmental factors and he made poor decisions that supported his deviant behaviors. His genes could have undergone epigenetic alterations due to his environmental stressors, but there has not been specific research focusing on this idea. Even without a specific focus on epigenetics, however, Bundy was clearly a product of both his environment and his biological makeup.

Dennis Rader is explained by similar theories, narcissistic personality disorder, dissociative identity disorder, routine activity theory, and social learning theory. Though many of these theories are like theories used to explain Bundy, Rader led a life much different than Bundy. Rader did not experience many hardships early on in his life. Therefore, his criminality is much more difficult to justify through the ACEs and

epigenetic explanations. Different personality disorders that Rader has been diagnosed with help describe his criminal behaviors, but his seemingly normal childhood make him an outlier for researchers. However, even as an outlier, some of his childhood behaviors and internal thoughts point to the argument of nature and nurture coupling together to explain criminality.

Finally, Aileen Wuornos perhaps experienced the most difficulties and ACEs throughout her life. The strain theory, social bond theory, borderline personality disorder, and psychopathy. Because of her many negative life experiences she developed many different disorders and she had trouble developing relationships with other individuals. Wuornos's criminality was almost inevitable based on her early life. Epigenetics could have played a role on Aileen's criminal behaviors. Looking at various criminological theories, Wuornos is a clear example of nature and nurture having an effect on serial killing. The argument of nature and nurture argument of serial killing is also explainable by different psychopathic characteristics exhibited by each of these serial killers.

Both the individual case studies and the literature review help to explain the following results. After a thorough analysis of each serial killer was conducted, they were analyzed using a modified PCL—R (Table 1). Some of the results are obvious given the previous information presented in this paper, while other results warrant a deeper explanation. Ted Bundy scored 39 out of 40, on his analysis. This means 19 traits are “definitely present” in Bundy according to my research and evaluation. Of the characteristics, parasitic lifestyle was the most difficult to determine. Bundy was manipulative and selfish, but he was also able to live much of his life without being dependent on others. For this reason, he was assigned a 1 in parasitic lifestyle category.

These traits were present in Bundy because of the numerous hardships he endured in his life and due to the potential brain damage, he accrued as a young child.

The next serial killer, Dennis Rader, scored a 23 out of 40. Rader had many characteristics like Bundy but because of the differences in their childhoods and experiences, he scored much lower than Bundy. The first personality trait that was uncertain and received a score of 2 in Rader was the shallow effect. Although it is evident that Rader coldly committed multiple murders, the evidence of his family and community life makes it unlikely that he was distant and cold all the time. He established many important relationships and most likely used other manipulative traits to do so. Rader's next trait of uncertainty was early behavior problems because he had a very normal childhood but sometimes would engage in unusual behavior such as killing stray animals. However, these behaviors were not detected and therefore he did not appear to the public eye as having behavior problems. Coupling the next uncertain scores together, Rader received a score of 1 on both lack of realistic or long-term goals and impulsivity. Rader had a life plan, a wife, kids, and a stable job and it would be 30 years before he would be caught. The length of time in which he was not captured points to the fact he did not usually act impulsively, and he had plans for his future. Finally, Rader received a 1 on adult antisocial behavior, juvenile delinquency, and criminal versatility. Rader had no criminal background before his arrest for multiple murders. Although Rader most likely has some characteristics of antisocial behavior he did not exhibit them during his childhood or in his normal adult life. It is also uncertain whether Rader was a juvenile delinquent due to his ability to hide his true personality. Rader scored "Not applicable" or 0 on the following traits: parasitic lifestyle, poor behavior controls, irresponsibility, and

many short-term marital relationships. He received these scores because it is again evident that he could build relationships and be responsible for many people and things when he was not actively killing. His ability to live such an impressive double life may be cause for concern, but because he could exhibit emotions to certain people I do not believe he exhibited those five characteristics. Rader is distinctive because his seemingly normal life does not predict that he would live a horrendous double life as a serial killer.

Finally, serial killer Aileen Wuornos scored a 34 out of 40. There were several personality traits that I identified in Wuornos. Of the 20 traits, I was certain she displayed 16. The first trait that I am uncertain she exhibits is superficial charm and glib. Aileen was not very well-spoken but she was able to attract men throughout her life so she could have held some level of charisma and charm. The next characteristic was having many short-term marital relationships. I was uncertain whether Aileen fell into this category as she was married for a short time, but her relationship with Moore was very serious and long-term. So, I felt it best to classify her as uncertain in this regard. Lastly, I did not find that Wuornos exhibited the traits of grandiose self-worth and parasitic lifestyle. Aileen certainly did not have high self-esteem. Yes, she disregarded society's rules, but she did not believe herself to be superior or better than other people. Her low self-esteem is clear by the fact that she began giving sexual favors at the age of 12. She was not parasitic in life because she had no one to depend on. Early on in her life, she faced many negative environmental experiences that shaped her into the independent person that she was. She did not utilize her selfish tendencies by being dependent on others. She was selfish and manipulative in other aspects of her life.

Table 1 – Psychopathy Checklist—Revised

Personality Attributes	Ted Bundy	Dennis Rader	Aileen Wuornos
1. Superficial Charm and Glib	2	2	1
2. Grandiose Self-Worth	2	2	1
3. Need for Stimulation	2	2	2
4. Pathological Lying	2	2	2
5. Manipulative and Cunning	2	2	2
6. Lack of Guilt or Remorse	2	2	2
7. Shallow Affect	2	1	2
8. Callousness and Lack of Empathy	2	2	2
9. Parasitic Lifestyle	1	0	1
10. Poor Behavior Controls	2	0	2
11. Promiscuous Sexual Behavior	2	2	2
12. Early Behavior Problems	2	1	2
13. Lack of Realistic or Long-Term Goals	2	1	2
14. Impulsivity	2	1	2
15. Irresponsibility	2	0	2
16. Adult Antisocial Behavior	2	1	2
17. Many Short-Term Marital Relationships	2	0	1
18. Juvenile Delinquency	2	1	2
19. Revocation of Condition Release	2	0	2
20. Criminal Versatility	2	1	2

Source: Adapted from Hare (1991).

After reviewing the checklist, if one were to judge these scores as Hare intended, it would be evident that both Bundy and Wuornos could clinically be diagnosed as psychopathic. Rader received an average score below 30 points so one could conclude that although he exhibited many psychopathic traits he most likely would only be diagnosed with an antisocial personality disorder. It is important to acknowledge the gender differences between Bundy and Wuornos and understand that females like Wuornos may be better at acting less aggressively and more discreetly to hide their psychopathic traits. As stated, This could be the explanation for Wuornos's lower score. For all the scores, however, evidence shows that both biological and environmental factors intruded on the lives of these serial killers. Both Bundy and Wuornos had been studied because of potential head traumas and brain dysfunctions they may have experienced during their childhoods. Coincidentally, Wuornos and Bundy also were exposed to a substantial amount of environmental trauma during their childhoods. Many sociological theories highlight the importance of environments during periods of growth and development. Rader claims to have not experienced trauma during his younger years, but he harbored many of the unusual and psychotic thoughts.

An analysis of three of the most notorious serial killers in the United States established a better understanding of biological, sociological, and psychological theories related to serial murder. Although the topic is fascinating to most people, it is very difficult to study because of the unique characteristics and traits that each serial killer possesses. Many serial killers, experience ACEs that may be linked to epigenetic alterations that support criminal behaviors such as serial killing. But, because of that unique nature, the potential for future research is inevitable. Of the criminological

theories, biological theories would benefit the most from more concrete research because a large portion of previous research has been discredited over the years. Furthermore, many sociological and psychological theories are very strong in relation to serial murder, so creating concrete biological theories would help to solidify the nature and nurture argument. Although the topic is fascinating to most people, it is very difficult to study because of the unique characteristics and traits that each serial killer possesses. Researchers most likely will never be able to predict serial killing, but continuing research on the topic allows for a better understanding.

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