# SERIAL MURDER: FACTS AND MISCONCEPTIONS

Bethany K. Walters
California School of Forensic Studies, Alliant International University

Laura E. Drislane & Christopher J. Patrick Florida State University

Eric W. Hickey
California School of Forensic Studies, Alliant International University

### Abstract

Serial homicide is a tragic phenomenon that has been understudied scientifically considering the severe harm it inflicts on victims and affiliated others. The current article addresses the topic of serial murder through a review of conceptual perspectives and existing empirical findings. Along with discussion of basic definitional issues, we review evidence pertaining to relationships with mental illness and psychopathy, and ideas about causal mechanisms underscoring this extreme form of violent behavior. In doing so, we seek to debunk widespread myths about the phenomenon of serial murder, and in the process highlight important areas in critical need of further research.

Key Words: serial homicide, psychopathy, mass murder, killing

While the United States ranks near the middle of over 200 countries surveyed when it comes to homicide in general (United Nations Office on Drugs and Crime, 2011), the US is widely regarded as the epicenter of the most extreme and disturbing form of homicide - serial murder. While by no means a new phenomenon, there has been a steady rise in media portravals of serial murder cases in recent years. For example, in the 1950s, only four feature films depicted cases of this type; between 2000 and 2009, the number of film portrayals of serial murderers skyrocketed to more than 650, concurrent with increasing appearances in popular television series such as CSI and Hannibal (Hickey, 2013). One TV production, Showtime Network's successful and highly acclaimed series Dexter, features a serial killer the audience roots for, in stark contrast to depictions of serial killers from earlier decades as despicable monsters in horror films such as Psycho or Silence of the Lambs. Further speaking to the public fascination with serial murder, and the propensity for life to sometimes imitate art, certain real-life serial murderers have managed to attain celebrity-like status through exposure in the popular media (Schmid, 2006).

The proliferation of media coverage of serial murder has resulted in overestimation of the prevalence of such cases. In reality, serial murder—defined as the killing of two or more victims by a perpetrator (or team of perpetrators) at separate points in time (Morton & Hilts, 2008) - occurs rarely in comparison with murders of other types. The FBI estimates that there are approximately 20 active serial murderers in the United States at any given time (Diamond, 2012); however, precise estimates are difficult to establish, as some serial killers successfully evade law enforcement and are never apprehended (Hickey, 2013). Likewise, official statistics almost certainly underestimate the number of victims of serial murder, since an unknown portion of individuals who fall prey to serial murderers are either not found, or go unidentified

(Quinet, 2007). This represents the "dark picture" of serial murder.

What is known for certain is that the number of bodies identified as victims of serial murder in the United States has remained relatively low across time. For example, in any given year where thousands of total homicides occur in the US, only 2-3% (or 300-450 persons per year) are known victims of serial murderers (Hickey, 2013). Nonetheless, the horrific nature of the crimes perpetrated by such individuals and the public terror inspired by their actions makes this a critically important topic for scholarly analysis. Yet despite this, available empirical data in this area are highly limited at present. This is likely due in large part to factors that make the scientific study of serial and mass murder difficult. In particular, serial homicide is (fortunately) a low base phenomenon—constraining the total number of available research participants and providing a limited source of cases from which data can be analyzed. Consequently, readers need to bear in mind the inherent limitations of extant data when discussing this phenomenon. However, some scholarly work has begun to be undertaken on this topic. One valuable source is Hickey's (2013) textbook Serial Murderers and Their Victims, which includes data on nearly 650 serial murderers from 1800-2011 in the form of biographical case descriptions. The interested reader is referred to this book for a more detailed presentation of information covered in the present article.

Serial killers are distinguishable from mass murderers, defined as individuals who murder four or more victims over a limited period of time during a single killing episode (Morton & Hilts, 2008). Like serial murderers, mass murderers have varying ways of committing their crimes including, on occasion, bifurcated murders (i.e., first killing a family member or other known person in one location, typically at home, and then murdering others at a separate location—although many more cases are of a domestic nature only) and are subse-

quently arrested or killed, sometimes by their own hand (Hickey, 2013). Mass murderers are also far more likely to suffer from severe mental disorders such as psychosis or bipolar disorder than serial killers, and more apt to report relief from stress as a motive for their attacks rather than sexual gratification (Duwe, 2004; White-Hamon, 2000).

While still quite rare, the frequencies of serial and mass murder have remained relatively stable across time, despite the general trend of murder rates to decline over the past decade (Hickey, 2013). For instance, in the FBI's 2012 Unified Crime Report,14,827 total homicide victims in America, reflecting a decrease of 10.3% from the homicide rate in 2003 (Hickey, 2013). By contrast, more than 150 serial murderers were either apprehended or identified as being active between 2000 and 2011, greatly exceeding the total number of cases of serial murder identified in the preceding 25 years (Hickey, 2013). Some of this increase undoubtedly reflects improved technologies and investigative techniques used by law

enforcement. Another probable contributing factor is a change in the FBl's definition of serial murder that occurred in 2005 (cf. Morton & Hilts, 2008), to encompass cases involving the killing of two or more victims in separate events as opposed to three or more. While the intent of this revision was to focus the definition more on the pattern of killing involved, the change has been criticized on grounds that it underscores the artificiality of the definition and casts doubt on the meaningfulness and utility of the term "serial murder".

Despite the social importance of this topic and increases over time in available data from official records, existing scientific research on the phenomenon of serial murder is limited and misconceptions are widespread. With the aim of clarifying what is known and debunking common myths about serial murder (see Table 1), the current article provides a scholarly overview of this topic and highlights key directions for further systematic study.

Table 1. Serial Murder Misconceptions

Myths:	Facts:
All serial murderers are male	Approximately 16% are female
All serial murderers are Caucasian	Over ½ of contemporary serial murderers are African American
Serial murderers are insane	Only 2-4% of serial murderers use insanity as a defense
All serial murderers are lust killers	Some cases are purely for profit, revenge, or hate crimes
Serial murderers kill dozens of people	Perpetrators of this type usually kill less than 10 people
Serial murderers kill by themselves	About 1 in 4 have a partner in murder
All serial murderers have high IQ's	Most have average IQ's
Serial murderers travel to kill	Most kill in one local area

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All serial murderers fit a prototype. A common serial killer prototype presented by the mass media is of an intelligent white male between the ages of 20-40 who savagely rapes and murders multiple female victims while evading law enforcement and mocking their failed attempts at apprehension. In fact, however, serial murderers comprise a markedly heterogeneous group, and this prototype is more often the exception than the rule. High intelligence is also far from typical: Whereas some well-known serial murderers have exhibited high IQs, the majority of serial murderers possess only average levels of intelligence (Hickey, 2013; Morton & Hilts, 2008).

Serial murderers are prolific. The tendency of the mass media to focus disproportionate attention on serial murder cases involving large numbers of victims has tended to promote the perception that most serial murderers are prolific in their homicidal acts. However, while some serial murderers do perpetrate large numbers of homicides, most documented cases in recent times have involved few rather than many victims. In this regard, Hickey (2013) reported an average number of 4.4-5.4 victims killed over an average period of 6.8 years for a sample of 146 offenders who murdered from 2004-2011.

All serial murderers are Caucasian. Contrary to popular belief, most individuals in contemporary times who qualify as serial murderers according to the revised definition are not Caucasian, but African American. Between 2004-2011, 57% of male serial murderers were African American (Hickey, 2013). This apparent "increase" in cases of African American serial murderers may be attributable in part to the aforementioned shift in the FBI's definition of serial murder. Another contributor to this perceived increase may be the lesser investigative attention devoted in past decades to the victims of African American serial murderers, who by and large kill intra-rather than inter-racially (Branson, 2013; Doerner & Steven, 2005; Hickey, 2013; Jenkins, 1993). This failure

on the part of the media to publicize news stories about victims from lower socioeconomic groups, including African Americans, may have resulted in cases of African American serial killers being under-reported in the past (Hickey, 2013). None-theless, despite changes in investigative practices over time and emerging evidence for higher rates of serial murder among African American as compared to Caucasian individuals, law enforcement agencies continues to view serial murder as a "white phenomenon," contrary to public health interests of society (Branson, 2013).

All serial murderers are male. Although serial murderers in the U.S. are predominantly male, approximately 16% are female (Hickey, 2013; see Table 2). Male and female serial murderers often differ in distinct ways. For example, women are more likely to kill their spouses or family members, as opposed to unknown non-familial victims more typical of male serial killers. Women are also more apt to use covert methods such as poison as a means for killing (Hickey, 2013). Female serial murderers in particular tend to work in health care professions, acting as "angels of death" (similar to a smaller number of male nurses and orderlies who become serial murderers) by administering poisons or lethal doses of prescription medications to their victims (Hickey, 2013; Yorker et al., 2006). Additionally, female serial murderers are more prone to kill as part of a team than male murderers, although instances of male team killers certainly occur as well (see Table 2). Overall, across both genders, 20% of all documented serial murder cases between 2004-2011 entailed two (or occasionally more) perpetrators operating as a team (Hickey, 2013; see Table 2).

Serial murderers travel to kill. Contrary to popular belief, most serial murderers do not have high mobility, but rather operate locally, with about 74% murdering their victims within a circumscribed geographic area (Hickey, 2013). Urbanization appears to be a key factor contributing to localized serial murder, as it allows for increased

# Table 2. Demographics of Serial Murderers

Solo Male Serial Murderers (2004-2011; N = 111)

Race:

Caucasian: 38%

African American: 57%

Hispanic: 3%

Middle Eastern and East Indian: 2%

Average age of offender at first murder: 30

Average span of murders: 7 years

Average number of victims per offender: 4.3-5.5

Offenders who targeted specific victim types: 91%

Offenders who killed only strangers: 93%

Solo Female Serial Murderers (2004-2011; N=14)

Race:

Caucasian: 93%

African American: 7%

Percentage of females in a team: 50%

Average age of offender at first murder: 40.7

Average span of murders: 7.1 years

Average number of victims per offender: 3.1-4.2

Method of killing:

Poison only: 21%

Strangle/smother only: 21%

Shoot only 7%

Stab only 7%

Blunt force only: 7%

Combination of above methods:37%

Offenders who killed only adults: 93%

Team Serial Murderers (2004-2011; N = 29)

Race:

Caucasian: 55%

African American: 38%

Hispanic: 7%

Gender:

Male: 76%

Female: 24%

Average age of offender at first murder: 30.6

Average span of murders: 3.1 years

Average number of victims per offender: 2.5-3.1 Offenders who targeted specific victim types: 100%

Offenders who killed only adults: 100%

anonymity and larger victim pools in comparison with rural areas. However, some serial murderers prefer to travel in search of victims. Between 2009 and 2011, for example, the FBI's Highway Serial Killing Initiative identified over 275 suspects, most of them employed as long-haul truck drivers, suspected in the serial murders of over 500 victims (Federal Bureau of Investigation, 2011). In some cases, traveling serial murderers may perpetrate homicides in multiple countries (e.g., individuals in the military who kill in differing assigned locations of duty; Hickey, 2013; Federal Bureau of Investigation, 2011).

Serial murderers are mentally ill and unable to control the impulse to kill. While the crimes of serial murderers appear 'crazy' and unfathomable to many in society, serial murderers tend not to be legally insane (i.e., most are able to distinguish fantasy from reality at the time of committing their crimes and recognize their actions as legally wrong). Indeed, true cases of insanity are rare among criminal cases of all types (Hickey, 2013; Morton & Hilts, 2008), and only a small minority of serial murderers claim insanity as a legal defense (2-4%; Hickey, 2013). Further, many serial murderers take active steps to avoid detection, in some cases discontinuing their homicidal acts for years (Hickey, 2013; Morton & Hilts, 2008).

A further point of confusion is that the public often conflates the terms 'psychopathic' and 'psychotic' when describing serial killers. The term psychosis, which encompasses the disorder of schizophrenia and related diagnostic conditions, refers to a category of mental illness in which the defining feature is a loss of contact with reality (American Psychiatric Association, 2013). Most serial murderers do not suffer from psychotic disorders or other debilitating clinical conditions, but are instead more likely to be diagnosed with personality-related conditions such as antisocial personality disorder or psychopathy (Hickey, 2013). In contrast with individuals suffering from psychoses, psychopathic individuals do not suffer

from a loss of contact with reality in the form of hallucinations, delusions, or grossly distorted thought. Rather, psychopathy is characterized by features including shallow emotions, lack of empathy, narcissism, interpersonal manipulativeness, and persistent impulsive or antisocial acts (Hare, 2011; Patrick, 2005; Patrick, Fowles, & Krueger, 2009). Additionally, while serial murderers often exhibit some psychopathic tendencies, many would not be diagnosable as true psychopaths. For example, notorious cannibal killer Jeffrey Dahmer lacked the grandiose sense of self-worth, superficial charm, and history of disruptive behavior problems in childhood that characterize most psychopathic offenders (L. Dahmer, 1994). For these reasons, caution is clearly warranted in application of labels such as 'psychotic' or 'psychopathic' to serial murderers.

Serial murder is an American phenomenon. Although the above-mentioned characteristics pertain specifically to data on serial murder cases occurring in the United States, serial murder is by no means limited to America. Cases of serial homicide in fact occur worldwide, with rates increasing faster over the past century for non-European than European countries (Gorby, 2000). Across nations, women account for approximately 25% of documented serial murderers (Gorby, 2000). Whereas sexual gratification is the most common motive for killing among American serial murderers (Hickey, 2013), other motives such as financial gain are more common for perpetrators in other countries (Ulrich, 2000).

# Typologies of serial killers

As shown in Table 3, efforts have been made to create classification schemes of differing types for serial murderers. Categorization is often based on the perpetrator's modus operandi (MO; method by which the crime is committed), signatures left by the killer at the crime scene (i.e., distinctive objects, markings, body posing, staging

of the scene, etc.), or other observable features of the murders (Hickey, 2013). Typologies are far from exhaustive in describing the heterogeneous nature of serial homicide; however, they raise important questions regarding the motivations and etiology of serial murderers. Nevertheless, concerns have been raised with regard to each of these classification schemes. For example, most typologies are framed in terms of mutually exclusive categories; however, serial murderers themselves often display characteristics within more than one category. Also, rather than being entirely distinct from one another, alternative typologies sometimes share common characteristics. Additionally, the best-known existing typologies for serial murder were developed years ago, and as such do not incorporate current social and behavioral research findings. Further, some have argued that existing typologies are limited in their ability to successfully aid in investigations and research and instead encourage serial murder to continue to be investigated from a number of different perspectives (Hickey, 2013).

# Causal Factors and Predictors

Researchers and law enforcement agents have long been interested in developing accurate predictors of who will become a serial killer, and why. At one time, investigators believed that the presence of a distinct set of maladaptive behaviors in childhood, termed the 'MacDonald Triad' (MacDonald, 1963), predisposed an individual toward serial murder in the future. This Triad of behaviors consists of enuresis (bedwetting), fire-setting, and animal cruelty. While some evidence exists for a correlation between the fire-setting and animal abuse (but not bedwetting) elements of the Triad and violent behavior in adulthood, a causal relationship with serial murder has not been supported (Hickey, 2013). Some serial murderers have been known to exhibit these behaviors as children, but most children who abuse animals, set fires, and wet the bed do not go on to become murderers. Thus, while destructive-aggressive tendencies in childhood are important to recognize and address, they do not appear to be dis-

Table 3.

Serial Murder Typologies.

#### Holmes and DeBurger (1988)

Visionary Type: kills in response to either auditory or visual hallucinations usually thought to be derived from good or evil. These killers are typically suffering from a form of psychosis.

Mission-Oriented Type: kills because they believe it is their mission in life to rid the community of a particular sect of people in the population.

Hedonistic Type: kills in order fulfill a "thrill" and can be subdivided in those who kill for "creature comforts" which involve killing to gain a physical benefit to themselves, such as cash, and "lust murderers" who are sexually involved with their victims.

Power/Control-Oriented Type: kills in order to feel powerful.

## Levin and Fox (1985)

Thrill motivated killers: killings are sexual and sadistic in nature

Murders of expediency or profit: kills for a type of primary gain

Family slayings: killing of one's family

#### FBI (Ressler, Burgess, & Douglas, 1988)

Organized: Killer is not psychotic, is of high intelligence, and in control of their emotions during their crimes.

Disorganized: Killer may be psychotic, is of low intelligence and is socially awkward.

#### Hickey (1986)

Traveling Serial Killers: kills in many different states/countries.

Local Serial Killers: kills within one state.

Place Specific Serial Killers: kills victims in one place, such as their home or place of employment.

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tinctly prognostic of serial murder.

Another factor that appears to play a prominent role in sexual crimes committed by many serial murderers is the presence of criminal paraphilia (sexual arousal via deviant fantasies and behaviors) entailing the attainment of sexual gratification through behaviors involving harm to another person, or a desire for sexual contact with persons unwilling or unable to give legal consent (e.g., pedophilia, entailing sexual attraction to children; necrophilia, entailing sexual attraction to lifeless bodies. Hickey's (2013) Relational Paraphilic Attachment (RPA) model posits that violent fantasies involving women and children can develop over time into nonconsensual sexual relationships (RPAs), which may be a crucial component in the progression toward homicidal action. Along this line, a prominent perspective is that serial murderers initially fantasize about murder, and then act it out. Because the actions fail to perfectly match the fantasy, the serial murderer repeats them again and again in order to more closely approximate the fantasy (Prentky, Burgess, & Carter, 1986). Another factor that appears to contribute to the emergence of homicidal action is the desire to exert complete control and power over another human being. As evidence of this, 31% of offenders from 1800-2004 cited control as a motive for their murders, while 47% cited sex as a primary motive (Hickey, 2013). The lust for the ultimate exercise of power - over life and death itself - is common to many if not most serial murderers (Hickey, 2013).

# Conclusion and Future Directions

Crucially, any discussion of the topic of serial murder must acknowledge the paucity of empirical research available on this topic. Notwithstanding this important limitation, some important take-home points can be highlighted. First, serial murderers comprise a heterogeneous group of individuals, many of whom differ starkly from standard portrayals in the popular media. Second, as a function of limits in existing research. understanding of this extreme form of behavior is lacking and a variety of misconceptions persist in the popular media. Additionally, while typologies have been developed for identifying subgroups of serial murderers, new classification systems are needed that incorporate findings from contemporary social and behavioral research. Along related lines, systematic research is needed to clarify risk factors and causal influences contributing to acts of serial murder, including the importance of psychopathic traits and paraphilic preferences in differing expressions of serial murder. Finally, advances in factual understanding of serial murder need to be readily and effectively disseminated to law enforcement agents, researchers, media outlets, and members of the general in order to dispel persisting and potentially harmful misconceptions surrounding this grave topic.

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