

A Rose by Any Other Name: Problems in Defining and Conceptualising Serial Murder with a New Proposed Definition

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ABSTRACT

The prevalence of serial murder is low; however, it has been the focus of much academic and popular attention. Despite a considerable research base on serial murder, there is still debate as to how it should be defined. This article examines often used definitions of serial murder, followed by a critique of some of the main components of these definitions. From this, a definition is advanced with rationales for the inclusion of the characteristics in the proposed definition. This analysis provides for some clarity in the identification of serial murder and those aspects of the crime used to define it.

KEYWORDS

serial murder, spree murder, mass murder, cooling-off period, dormant period

Despite the understanding that serial murder is uncommon (Schlesinger, 2001), it has been popular among both professional and lay audiences (Knoll, 2006). Serial murder was popularised in the 1980s and 1990s by movies, television shows, and written works by current and former investigators and criminal profilers. In the academic literature, several works, such as the Crime Classification Manual and *Sexual Homicides: Patterns and Motives*, both written by members of the FBI's Behavioural Analysis Unit and their associates, brought this type of multiple murder to the fore.

There is both interest in and an impressive research corpus on serial murder; however, debate remains over fundamental issues such as how the term is defined, how many victims are required before serial murder is identified, and the role of motive. A cursory examination of the literature shows that definitions are as varied as offenders themselves, though there are some commonalities running throughout research and literature. This article canvasses the literature on serial murder, providing an examination into the various definitions provided and critique of the common components of these definitions, before proposing a definition with the accompanying rationale for each component.

History of the Term

Serial murder, similar to murder itself, is likely as old as human criminal interaction although the term and its study is relatively recent. Alongside the contention surrounding definition, there is no universal agreement as to the origin of the term serial murder. While some lay claim, evidence suggests the term, or at least the concepts behind it, have existed for considerably longer. Contributing to the problem is the understanding that claims made regarding origin are uncritically accepted and repeated in the literature, causing further confusion.

One of the most cited sources for the term serial killer is [retired] FBI agent Robert Ressler, who claims this in both of his true crime works. In the first, *Whoever Fights Monsters*:

At Quantico, I taught subjects ranging from abnormal psych to interviewing techniques; and I discovered that I was a pretty good teacher...We got to go on the road for our training sessions, both nationally and internationally. It was at one of those international sessions that I coined the term serial killer, now in much use. (Ressler & Shachtman, 1993, p. 45)

Then, in *I Have Lived in the Monster*, his subsequent memoir:

During my tenure at the FBI, I interviewed more than a hundred murderers in prison and became one of the world's leading profilers of criminals, applying my expertise to hundreds of unsolved crimes, often helping local police forces to identify murderers and bring them to justice. As part of my attempt to understand multiple murderers, in the mid-1970s I coined the term serial killer. (Ressler & Shachtman, 1998, p. 1)

According to his memoirs, Ressler joined the FBI in 1970 (in New Agent Class 70-2) and then moved to the Behavioral Sciences Unit (BSU) in the mid-1970s. His above claim is therefore supported by these dates. In a later publication, Kocsis and Irwin (1998) state "prior to 1980 there was no specific term for serial murders or serial crimes in general" (p. 6). Both of these claims will now be examined through the lens of historical literature.

Throughout the 1970s and 1980s, former Chief of Police Pierce Brooks created a system to help identify and trace serial killers. At the time, computer systems were prohibitively expensive and a nationwide network and database for information sharing was non-existent. In 1981, when such systems became available, Brooks introduced the Violent Criminal Apprehension Program (VICAP) and in 1984 the National Centre for the Analysis of Violent Crime (NCAVC) was established, then VICAP and the NCAVC merged (Geberth, 2006). Regarding Brooks' involvement in the origin of the term serial murder, Egger (1998) suggests:

The term serial murder was first used sometime in 1982 or 1983. The criminal investigative pioneer Pierce Brooks, who conceptualised the Violent Criminal Apprehension Program currently being run by the Federal Bureau of Investigation (FBI), may have been the first to use the term serial. However, others, such as retired FBI agents, claim to have used the term first. No one is certain who coined the term, but it has been with us ever since. (pp. 4-5)

Psychiatrist Donald Lunde published *Murder and Madness* in 1975, and discussed both single and mass murders, providing distinguishing characteristics of the two:

In common usage of the term, mass murder is applied to someone who kills a number of people, usually for no apparent reason or for an apparent but perverse (often sexual) reason. Psychiatric and legal literature sometimes makes a distinction between mass murder and serial murder, with mass murder referring to a crime in which a number of victims are killed, usually by one person in a single episode – for instance, the killing of eight student nurses by Richard Speck in Chicago in 1966 – and serial murder referring to a number of murders by a single person over a period of months – or, occasionally, years. Each killing is usually a discrete episode, but there is usually a common motive, method, and/or type of victim; for instance, the series of murders of prostitutes in England attributed to Jack the Ripper. (Lunde, 1975, p. 47)

A publication date of 1975 does not preclude Ressler reading Lunde, though this would argue against Ressler's claim of ownership. Lunde's citation of the distinction created in the psychiatric and legal literature

at or before his publication's time would indicate that the terms had been utilised for some time prior to the commencement of Ressler's employment in the BSU.

The Meaning of Murder by James Brophy is an earlier source of the term than any of these other works, first published in 1966 in the UK, and in 1967 in the USA. Brophy distinguished between other mass-victim crimes like genocide, stating:

A serial murder is a very different matter. Its essential character is repetition at intervals of time, and as soon as a number of murders are established as a sequence it becomes clear that the community has to reckon with an unidentified murderer, a murderer still at large, and a murderer who has taken on himself the guilt of the supreme crime not upon one occasion and under pressure of circumstance but by deliberate intention, and so will presumably continue the series. (Brophy, 1967, p. 166)

Therefore, Brophy not only utilised the term specifically, but also recognised its "essential character" of repetition over time.

In 1949 Frederic Wertham, a German-American psychiatrist, published *The Show of Violence* and was one of the first to systematically discuss the effects of violent media on children's development. While the first, his work has also been recently criticised for over stating the impact of media on children, and also the focus on potential negative effects while ignoring potential positive effects of media consumption. One such critique of Wertham's book *The Seduction of the Innocent* notes (Tilley, 2012, p. 386):

Ultimately, I found that, despite its accolades and its central role in moving comics further to the cultural sideline's, Wertham's *Seduction* included numerous falsifications and distortions. This article documents specific examples of how Wertham manipulated, overstated, compromised, and fabricated evidence – especially that evidence he attributed to personal clinical research with young people – for rhetorical gain.

More recent research and evidence also suggests that early claims of the negative effects of media violence were overstated (see Drummond et al., 2020 as one such example).

Wertham also discussed mass murders, a term he putatively utilised for what are now called serial murders:

History in textbooks records mostly murders of the type called by the French *magnicides*, meaning murders of "big" people – kings and presidents, rulers and leaders. But the vast majority of murder victims are little people. They are the thirty-odd unemployed and friendless youths of the Haarman case; the socially frustrated women and lonely widows of Landru; the hundred and eighty-odd known peasant children killed by Gilles de Rais; the underprivileged coloured and white children of Albert fish; the outcast acquaintances of Jack the Ripper; Marcel Petiot's sixty-three hounded refugees from Gestapo terror. What is true for such mass murders is less conspicuous but equally true in the aggregate for single murderers. (Wertham, 1949, pp. 259-260)

Haarman was a German serial murderer, Landru and Petiot, French serial murderers, and de Rais a serial murderer and leader in the French military. Jack the Ripper and Albert Fish are both well-known serial murderers from England and America, respectively.

Despite all of the above using the term, its first use actually appeared in the professional literature in 1930, when Ernst Gennat of the Berlin Criminal Police published *Die Düsseldorf Sexualverbrechen in Kriminalistische Monatshafte* (roughly translated as *The Düsseldorf Sexual Criminal in Criminal Monthly*). The article discussed the crimes of Peter Kürten, a German serial murderer known as 'The Düsseldorf Monster' or

'The Vampire of Düsseldorf'. In this article (translated with some assistance from the original "Old German"), Gennat states (1930):

The question of whether the so-called Flehe child murder – the killing of children H. and L. (no. 9) – is to be added to the account of the "serial killer", is difficult to decide. It would remain to be tested whether the circumstances of the killing of A. allow the conclusion that the perpetrator from that case can also be considered as murderer of L. and H. (p. 29)

Notwithstanding possible translation issues, the original German passage states, "auf das Konto des "Serienmörders" zu setzen ist, ist schwer zu entscheiden." Serienmörder translates to series/serial killer or series/serial murderer and indicates that this is most likely the first use of the term in the professional literature. Despite the above evidence, some works today continue to cite Ressler as the original source (see Miller, 2014).

What is Serial Murder?

Serial murder belongs to one of three types of multiple victim homicide (serial, spree, and mass murder); however, this general distinction potentially includes terrorist acts, genocides, professional assassins, and others. Serial murder, spree murder, and mass murder are all crimes involving an individual acting alone or with others to kill more than two victims, either in a single time and place, or in multiple events in different places. Geberth (1996) is usually attributed as the source for the distinction of these types.

One issue in defining a problem is the specificity of the definition used. Specific definitions potentially capture less cases for study and exclude cases that should be included, and broad definitions potentially capture more cases whilst potentially including cases that should be excluded. Specific definitions comprised of numerous variables may be less suitable to serial offender identification early in a series when little is known, or the cases not linked.

It is important to understand the different ways that serial murder is classified as "defining the term determines the problem" (Skrapac, 2001, p. 11). This has implications for investigating and researching serial murder as the definition impacts upon changes to investigative procedures and also the sample size employed by researchers. For example, establishing the threshold at two victims invariably involves a larger sample of offenders than a threshold of three or four victims. According to Hickey (2013), the definition used for serial murder "must clearly be as broad as possible" (p. 32) though as stated this would likely include cases that should not be included.

Kocsis (2000) argues that of all the issues plaguing the study of serial murder, one of the most significant is the definition used. Knoll (2006) elaborates by noting that the study of serial murder has been hampered by the lack of a unified definition, before providing the view that most experts agree "the offender must have killed at least two victims in temporally unrelated incidents" (p. 64). Basic definitions range from one or two characteristics whereby (1) multiple victims are killed (2) over time (see Hickey, 2013; Jenkins, 1994; Mohanty, 2004), through to a more complex array of characteristics (see Adjorlolo & Chan, 2014; Egger, 1998).

Victim Count

One of the greatest sources of variability is the number of victims. Holmes and Holmes (2002) state that victim count is one of the defining characteristics, indeed, "the primary difficulty is the lack of agreement on victim counts, with different researchers use [sic] varying cut off points" (Dowden, 2005, p. 8). Kocsis and Irwin (1998) note that a common understanding of the term serial crime relates to the number of victims, and that the criterion of a minimum victim tally is entrenched in conceptualising serial crime. They state, "a practical limitation of using minimum offence numbers is that for any given offender the number of known offences may

be less than the number of offences actually committed by that person” (Kocsis & Irwin, 1998, p. 199). Indeed, there are numerous examples of investigators discovering more victims once an offender is apprehended.

Burgess (2006) states a “serial murderer kills more than two victims with a cooling-off period between the killings and involves more than one location or crime scene” (p. 437) The definition for cooling-off period is “the state of returning to the murderer’s usual way of life between killings.” While not providing a definition per se, Liebert (1985) weighs in on issues of classification in that:

The problem of definition in serial murder is subject to interpretation of the crime scene for theories regarding motivation for murder. The assumption formulated when conceptualising apparently random events under the term serial murder is that one or more persons are murdering over a span of time and definable space and that there is a common denominator of motivation in otherwise random killings. (p. 188)

Several common characteristics are included including motivation (lust, terrorism, or cultism), which is a common denominator, different physical spaces where the killings occur (“definable space”) and, the span of time over which the killings occur (a cooling-off period), though the actual time between events is not discussed. A span of time implies multiple killings, suggesting at least two.

Dietz (1985) suggests that a:

Requirement of 10 murder victims and killing incidents for inclusion in the category of serial killers is good for the purpose of looking at one extreme and conceptually homogenous group of offenders, but it is too high a threshold for certain purposes, such as alerting law enforcement agencies to a series of crimes in progress. (p. 487)

Dietz suggests that killers who kill less than five victims are more heterogeneous than those who kill more than five, with the latter group falling into five different categories: psychopathic sexual sadists, crime spree killers, functionaries of organised criminal operations, custodial prisoners and asphyxiators, and supposed psychotics. Taking this into account, Dietz lowered the victim count threshold to five; however, there was no attempt to explicate the reasons for the chosen threshold.

Pinto and Wilson’s (1990) use of the term includes offenders who kill two or more people in separate events, with a time interval between offences. This definition implies multiple victims, multiple locations, and the passage of time. These authors exclude professional and contract killers, and anyone driven by political motives. Later research by Mouzos and West (2007) used a definition from the Crime Classification Manual that includes a higher victim count. This involves three or more victims that are “repetitive sequential homicides” (p. 1), further noting that serial murderers have a “similarity of subject or purpose” (p. 1), requiring more than three victims that are part of the same pattern, and also the same or similar motive satisfying internal need or desire. Consequently, it may be inferred that the repetitive sequential component of this definition is the separating factor between serial murderer and mass murder, where killings all occur in one event.

Egger (1998) provides one of the most comprehensive definitions in the literature, providing a seven-point classification specifically for law enforcement:

A serial murder occurs when (1) one or more individuals (in many cases, males) commit(s) a second murder and/or subsequent murder; (2) there is generally no prior relationship between victim and attacker (if there is a relationship, such a relationship will place the victim at a subjugated role to the killer); (3) subsequent murders are at different times and have no apparent connection to the initial

murder; and (4) are usually committed in a different geographical location. Further, (5) the motive is not for material gain and is for the murderer's desire to have power or dominance over his victims. (6) Victims may have symbolic value for the murderer and/or are perceived to be prestigeless and in most instances are unable to defend themselves or alert others to their plight, or are perceived as powerless given their current situation in time, place, or status within their immediate surroundings, examples being (7) vagrants, the homeless, prostitutes, migrant workers, homosexuals, missing children, single women (out by themselves), elderly women, college students, and hospital patients. (p. 5)

This exhaustive definition includes several common components and sets the victim count at two. It further identifies the victims as typically strangers who often belong to groups that society views as disposable (homeless, drug addicts, prostitutes), with the murders occurring in different times and in different geographic locations (different times, different places), and with a personal rather than profit-based motive and personal meaning for the offender.

Jenkins (1994) sets the minimum number of victims at four but does not explain why. Taking into consideration that this work was written in the "early days" of serial murder research, it is a reasonable assumption that this is simply a reflection of the uncertainty among researchers at the time of how high (or low) the bar should be set. Like Jenkins, Fox and Levin (1998), in a lengthy treatise, also proposed their minimum victim count to four. These authors acknowledge this distinction is "more than just arbitrary" (p. 408) and will help "distinguish multiple killing from homicide generally. By restricting attention to acts committed by one or a few offenders, our working definition of multiple homicide also excludes highly organised or institutionalised killings" (p. 408). They later added that one or more offenders commit the murders, spanning days, weeks, months, or years, suggesting this higher number is more helpful than victim counts of two or three. As noted above – minimal victim numbers aside – incidents where one offender kills more than one victim are still relatively low. As such, incorporating a higher victim count in the definition to accommodate this may not be necessary.

Keeney and Heide (1995) draw upon Keeney's (1992) definition that serial murder is "the premeditated murder of three or more victims committed over time, in separate incidents, in a civilian context, with the murder activity being chosen by the offender" (p. 7). They note this definition excludes military activities and political assassinations, but includes healthcare workers, parents who murder children, professional assassins, and those who kill multiple spouses or partners. This definition departs from almost all others in which "hits" committed by professional assassins are excluded. Keeney and Heide (1995) use a victim count of three as this was consistent with that used by the FBI at the time.

Skrapec (2001) suggests a return to the original concept of *Lustmörd*, which is killing for its own sake or where the killing is the primary motivation. Serial murder is defined as "three or more forensically linked murders committed by the same person(s) over an extended period of time and where the primary motivation is personal gratification" (Skrapec, 2001, p. 22). This definition excludes some types of killers included by others, such as professional hitmen and terrorists. Importantly, this definition stipulates that the primary motivation for serial murder is personal gratification and that cases are forensically linked. This should limit the murders included through questionable practices (such as offender confessions or dubious behavioural case linkage) but may unnecessarily exclude cases where the offender has been careful or is forensically aware making available evidence inconclusive or absent. This is an important component, however, and will be included in the proposed definition.

Mohanty (2004) provides a rather confusing definition of serial murder, where "killing occurs over a period of time and sometimes for years. Killing tends to be one by one and there may be a pattern or victim trait" (p. 216). No further explanation is provided for any individual components of the definition, and several aspects (including the behaviours representing them) are missing.

The FBI commanded authority status on the definition throughout the 1980s and 1990s, and many sources deferred to the FBI cut-off of three victims. However, it should be noted that the most recent FBI definition (Morton & Hilts, 2008) is that serial murder is “the unlawful killing of two or more victims by the same offender(s), in separate events” (p. 9). It is noted that this definition is based on a gathering of subject matter experts who proposed that the definition should include (Morton & Hilts, 2008, p. 9):

- One or more offenders;
- Two or more murdered victims; and
- Incidents occurring in separate events, at different times.

An original technical work to come out of the FBI study on convicted sexual killers in the 1970s and 1980s (see Burgess & Ressler, 1985) was the Crime Classification Manual (CCM) now in its second edition (Douglas et al., 2006). This was a Diagnostic and Statistical Manual of Mental Disorders type classification system for violent crimes, including a chapter on mass, spree, and serial homicide. Each type includes victimology and crime scene indicators, among others, with examples. In it, Burgess (2006) states that:

Serial murder generally involves three or more victims. What sets this category apart from the two others is a cooling-off period between murders. The hiatus could be days, months, or years. In other words, the serial killer is not killing with frequency. ... A serial killer usually goes after strangers, but the victims tend to share similarities such as gender, age, or occupation. Although he prefers a certain look or background, it does not mean he will not substitute another victim if he cannot find his intended target. (p. 461)

Haggerty (2009) states that “a serial killer is someone who has killed three or more people who were previously unknown to him” (p. 169). The male pronoun is used because “almost all instances of serial killing have involved male perpetrators” (p. 184), though this excludes a number of female offenders who have traditionally bucked the serial killer trend, despite many of them having higher victim tallies than male offenders (see Gurian, 2011; Harrison et al., 2015; Kelleher & Kelleher, 1998).

Homant and Kennedy (2014) define serial murder, and provide associated commentary, by stating that “with serial killing, the same person (or persons) commits three or more murders with a cooling-off period intervening” (p. 342). They then suggest:

Our definition...raises two minor issues that should be dealt with here. The first concerns the cooling-off period. Holmes & Holmes (1998) suggest 30 days as the minimum period for distinguishing spree from serial killing. There is sometimes a grey area here, such as, for example, when a serial killer such as Ted Bundy starts to decompensated [sic] and kills with increasing frequency, perhaps with only a few hours separating events...The second issue concerns the number of killings required for someone to be considered a serial killer...Three killings seems to be required in the most popular definition of serial killing since they are enough to provide a pattern within the killings without being overly restrictive. This is not to say that someone who has “only” killed twice does not “qualify” as a serial killer. Indeed, someone who has only killed once may well be a serial killer, psychologically speaking, who has simply not yet acted on his impulses or has lacked the opportunity (perhaps being arrested after the first homicide). Insisting on three separate homicides simply lends more assurance that a given person is a suitable example of a serial killer. (p. 432)

Homant and Kennedy include a propensity caveat, setting their minimum count at three. They identify a problem with arbitrary cooling-off periods like Holmes and Holmes (2009), stating the important point that the offender temporarily satisfies whatever led them to kill.

Siegel (2011) states that “criminologists consider a serial killer, such as Dennis Rader, to be a person who kills three or more persons in three or more separate events. In between the murders, a serial killer reverts to his or her normal lifestyle” (p. 169). Siegel sets the victim count at three and introduces the requirement of three separate events, with the latter not being common to most other definitions. This definition includes the cooling-off period where the offender returns to their normal life. In another criminological text, Brown, Esbensen, and Geis (2010) simply state that “serial killers commit repeat acts of murder over time.” No further information about victim count or other criteria are provided. Andrews and Bonta (2014) state that “serial murderers are usually defined as murderers who have at least three victims over an extended period of time” (p. 488), later suggesting there are no obvious goals to the killings, as with professional killers or those seeking revenge.

Like Egger, Hickey (2013) provides a lengthy definition, stating that:

Serial murderers should include any offenders, male or female, who kill over time. Most researchers now agree that serial killers have a minimum of two victims (FBI, 2008). Usually there is a pattern in their killing that can be associated with the types of victims selected, or the method or motives for the killing...Serial murderers include those men and women who operate within the confines of a city or a state or even travel through several states as they seek out victims...Some victims have a personal relationship with their killers and others do not, and some victims are killed for pleasure and some merely for gain. Of greatest importance from a research perspective is the linkage of common factors among the victims. (p. 33)

Adjorlolo and Chan (2014) examined several research and legal definitions of serial murder before proposing their own with three keys elements (p. 490):

- Two or more forensic linked murders with or without a revealed intention of committing additional murder;
- The murders are committed as discrete event(s) by the same person(s) over a period of time; and
- Where the primary motive is personal gratification.

Adjorlolo and Chan (2014) suggest that this definition departs from previous attempts and includes “the legal and scientific requirements for associating murders to suspects” (p. 490), though this was previously suggested by Skrapec (2001).

As observed from these definitions, there is considerable disparity between authors on such factors as victim count which ranges from two to four, which groups to include or exclude (for example, professional killers), and the aspect of motive. Only Skrapec (2001) and Adjorlolo and Chan (2014) propose that the killings must be forensically linked. This paper now turns to the various problems with each aspect of the definitions, focusing on the problems with victim count, cooling-off period, and motives.

Problems with Victim Count

In the investigative domain, establishing the actual number of victims is paramount because it dictates investigative resources, such as the number of investigative personnel assigned or establishing a task force or major incident room (Petherick, 2014). Leaving the decision too late in the series will have the adverse side-effect of an increased victim count, which presents a community safety issue.

Community safety has many facets including not only keeping the victim count to a minimum, but also catching an offender in a timely manner, and processing them through the Criminal Justice System (CJS) such that the potential for justice is maximised while potential error is minimised. This latter is important because public

safety and public confidence in the CJS are linked (Keane & Bell, 2013). The identification of a serial offender will also assist in developing a clear picture of how and which victims are targeted. This information can be disseminated to the public through briefings and the media in order to educate and inform the public comprising the victim pool.

In research, establishing the number of victims is crucial as this establishes a threshold at which to include or exclude cases in any study population. The set-point dictates the study's sample size, whereby two victims' leads to a larger sample size than a victim count of three, which leads to a larger sample size than four, and so on.

Arguments of seriality rest, at least in part, on the confidence one can have in discerning or determining a pattern of sameness. In this instance, sameness stems from the base understanding that there is the same cause (same offender(s)) and the same effect (more than x number of victims). While the most valid way of ascribing a number of victims to a single offender or offending group is through a thorough investigation where linking is done by forensic evidence though this may be more of an ideal than a reality. Therefore, accounts given by offenders themselves may be a way to establish victim count though this is a less-than-ideal way to establish how many are killed by each murderer. Henry Lee Lucas claimed to have killed as many as 400 victims, though he was convicted of substantially fewer, with many questioning the accuracy of his claims. Any offender can misrepresent their actual number of victims owing to the fallibility of memory; being glorified in the media; the celebrity that comes with assisting police with their inquiries; or prolonging capital crimes' charges by offering new or better information on open cases. Any claimed victim count must be tempered with more tangible means to establish the number of victims.

Definitions involving high victim counts may be counterproductive by prohibiting the correct classification of an offender who is prone to reoffend. If the victim count is set at three or more less cases will be captured by excluding those offenders that only murder two prior to being caught. Such a threshold ignores a critical feature of the serial offender: the crimes are prone to repetition.

Knoll (2006) suggests that "while serial murder is a universally terrifying concept, it is an extraordinarily rare event" (p. 64) and Dietz (1985) suggests part of the lack of understanding of serial murder is because of its extremely low base rate. After conducting a comprehensive review of all attempts to estimate the size of the problem, Gresswell and Hollin (1994) conclude that "estimating the current prevalence of multiple murder is...fraught with peril" (p. 6).

In Australia from 2012-2014, a total of 510 homicides across the country were recorded with a total of 512 victims and 549 offenders (Bryant & Bricknell, 2018). The authors of this report note that "in 24 incidents multiple victims were killed—23 incidents involved the death of two victims and one incident involved three victims (n=24; 5%)." This 5% figure not only includes serial murder, but also includes the related types of spree and mass murder. This means that within this data set, serial murder is an exceptionally rare event. The importance of this will be discussed in the proposed definition at the end of this paper.

For the United States, Schlesinger (2001) suggests specific serial murder data were not collected in US statistics at the time of his article's publication, but that serial murder is still rare despite claims to the contrary. Studying the incidence of serial murder over a ten-year period in the US state of Virginia, Morton and McNamara (2004) show that the prevalence of serial murder was only 0.5%, while Jenkins (1994), studying serial murder between 1940 and 1985 in the United Kingdom (UK), suggests that the small number of cases makes worthwhile statistical analysis difficult. Jenkins also claims "there is usually at least one and occasionally two of these very unusual offenders pursuing a career of serial murder at any given time" (p. 5). Burgess suggests that there are about 35 serial killers in operation in the USA, and that this is a conservative

estimate. No source for this estimate is provided, though other authors point to an unidentified FBI source from the 1980s (Miller, 2000).

Estimates of serial murder prevalence are usually predicated on an examination of preferred targets (females as the most typical victims), or serial murder victims as a proportion of the total number of victims of homicide, or as a proportion of missing persons. One such estimate by Quinet (2007), drawing upon existing databases, unidentified dead, and misidentified dead, suggests there are an additional 182 to 1832 victims of serial killers in the USA each year. Of course, these estimates are based on the belief that these missing persons are murder victims and not just missing persons.

Due to the relative infrequency of multiple murder, an offender is said to demonstrate a tendency to kill more victims once a second victim has been killed. This side of the argument implies the victim count should be set low to two victims so as to properly include those who are identified early in their career but were prevented from committing further offences. This also allows for the appropriate allocation of law enforcement resources and accompanying public safety notifications.

Case Linkage

It may not always be possible to attribute all of the offences committed to the responsible offender, with Kocsis and Irwin (1998) stating that “the definition of serial crime in terms of (known) offence numbers could therefore be said to be potentially under inclusive” (p. 199). Despite the reality that some offenders confess to all of their crimes, some will be reluctant to confess to crimes that have not been definitively linked unless there is some incentive to do so, such as a reduced sentence, or being able to serve concurrent sentences for all offences committed. It is also a reality that police will often suspect an offender of having committed more offences, but for one reason or another, they cannot be charged with them. For example, Francis Michael Fahey, a serial murderer in the state of Queensland, Australia, was convicted of only two crimes despite being suspected of having killed more, with some crimes dating back many years and in different locations. In a definition requiring three or four or more victims, Fahey would not be classified as a serial killer.

Cooling-Off Period

Throughout much of the literature, the idea of a cooling-off period has been treated as if self-evident. That is, it requires no definition or explanation, nor any description of what a cooling-off period may involve or require, nor indeed any idea of how this came to be a part of the definition for serial murder. This problem persisted from the first use of the term, seemingly introduced by the FBI in their early definition of serial murder and was only more recently defined. Considering that the cooling-off period is integral to the majority of definitions used with serial homicide and is a core distinction between different types of multiple murder, it is not unreasonable to expect that the origins and meaning of cooling-off be reasonably explicated in the literature. To date, this has not been the case.

Skrapec (2001) suggests that a cooling-off period was first introduced into the definition by Ressler and colleagues (1986), who referred to time breaks between offending “as minimal as two days to weeks or months” (p. 79, cited in Skrapec, 2001, p. 16). Skrapec then suggests that the cooling-off period is not necessarily helpful, being of questionable utility in helping us understand serial murder:

If “cooling off” is intended to connote a kind of psychological refractory period through which the killer must cycle before he can kill again, it does not make sense to stipulate a period of time (e.g., two days to weeks or months) since this would vary even within the same individual depending upon internal factors and external circumstances. That is, in addition to the biological and psychological makeup of the offender, circumstances operate to render him ready – or not – for his next killing.

The essential point of distinction would appear to be that the killings occur as discrete events over an extended period of time, and not as part of a more limited crime spree. (Skrapec, 2001, p. 16)

Turvey (2012) implies that he is the first author to operationalise the cooling-off period, despite it having existed for some time, ostensibly without precise definition until this point:

What precisely constitutes a cooling-off period has been ill defined in the literature. That ends now. A cooling-off period, or cooling interval, refers to the psychological component that makes serial murderers so horrible to the imagination; it refers to the interval during which the offenders psychologically disconnect, separate, or compartmentalise themselves from the behaviours and motives that led to, or culminated in, homicidal behaviour and then reintegrate back into their non-criminal lives and activities. ... It should be noted that the cooling interval does not refer to the entire time between offences, only the time it takes to psychologically extract and reintegrate. Once reintegrated, serial offenders may enter an extended period of dormancy, or they may go back out and engage in victim-seeking behaviour the very next day – all depending on how they feel. There's no predicting which will be the case. (p. 543)

Problems with the Cooling-Off Period

There are several problems with the cooling-off period as currently used though most notable is that a cooling-off period was introduced to distinguish serial from spree murder and was not the product of research or data. This means that the cooling-off period was brought into the literature and uncritically accepted, then repeated and incorporated into various definitions over the last three decades. Essentially, it is not possible to know whether offenders actually cool-off or whether they simply do not offend for periods, for any number of reasons. It is just assumed that they do.

Another longstanding problem is that cooling-off has been ill-defined, with no useful definitions or understanding of exactly what was meant by, or to be included in, any given cooling-off period. As noted above this has been partially remedied with attempts made to better understand what this term may mean. Additionally, among authors discussing the concept, the actual time frame for a cooling-off period can range from virtually zero (Turvey, 2012) to hours, days, weeks, months, or years (Burgess, 2006; Fox & Levin, 1998; Hickey, 1986; Keeney & Heide, 1995) or just through the use of a broad term "over a period of time" (Geberth, 2006; Hickey, 2013).

As Skrapec (2001) notes, this differs according to the offender's inner psychological and biological drives, and there is no "set period" that demarcates one offence from the next. It may be inferred that this time period therefore ranges from nothing to virtually anything. Because of this, cooling-off periods will be unhelpful in identifying a serial murderer and will only become clear after any given murderer has been identified and the crimes fully investigated and linked. Until that point, the time interval between offences will be of limited utility in identifying the crime series, in fact, we would argue it may be misleading.

A fourth problem with the cooling-off period as dictated by a period of psychological or emotional disconnect is that this is a subjective process relative to the observer. If an offender does not commit an offence for a period of 30 days, returning to work and family, this may appear to a third party to be an emotional disconnection in the offender; a separation of his criminal and non-criminal self. He has, for all intents and purposes, cooled-off. However, as Egger (1998) notes, serial murderers spend a great deal of time fantasising about, and preparing for, future crimes. During this time, they may have been trolling for victims while driving children to school or going to work, buying items in preparation for their next crime while doing family grocery shopping, reliving sexual assaults while with an intimate partner, or like David Berkowitz, psychologically reliving their crimes by returning to past crime scenes. It is difficult to ascertain to what degree this offender has really cooled-off, if at all.

During this time, offenders may be actively searching for victims but are prevented from doing so by circumstances beyond their control such as not having access to a victim pool, relationship and work commitments occupying the offender's time, investigative pressure bringing about new leads and clues about the offender's identity, and media coverage alerting the victim pool to danger. These are just a few reasons why offenders may not be able to acquire new victims. The point is this: the non-offending period may not be dictated by a cooling-off from their offending self, but rather an enforced period of dormancy by factors outside of their control.

This period may also be characterised by general fantasy behaviour, which itself may be employed as a coping mechanism. For example, Dogra et al. (2012) provide a case report of a serial killer in Delhi, India. Historical information on the offender suggests that he engaged in "masturbation since age of 14-15 years" and "had thoughts about cutting and eating someone since adolescence" (p. 306). They also note that "Mr. Koli had difficulties in dealing with emotional situations and tended to use denial, avoidance, and escape into fantasy (i.e., escaping from the real situation), mainly lethal ones" (p. 309). It is implied that Koli engaged in fantasy behaviour throughout his period of offending, from 2005 – 2007 when he was 30 to 32 years of age. Therefore, even when not offending, Koli was not cooling-off.

Consequently, definitions for serial murder implying a disconnect may be a misrepresentation of what the offender did during this time, based on incorrect assumptions made by external observers about an offender's mental state and behaviour. At the least, this requires a faulty assumption that because the offender has not committed a crime that he has psychologically removed himself from them. In fact, quite the opposite could be true during this time. The psychological preparation during this time may be a rising arc culminating in a higher victim count.

Skrapec (2001) argues not that offenders do cool off but that they can. That is, some offenders will spend time disconnecting while others will not, with most spending some of their time thinking about and planning for offending, while at other times returning to a normal semblance of life as a father, husband, employee, and otherwise gainful citizen (for example, BTK, Dennis Rader). Before they are apprehended it is not possible to know what they have been doing, and this has not been studied systematically to date. Only two studies were identified in the research for this paper.

The first was by White (2016), who hypothesised that the "duration of the dormant periods in serial homicide cases could potentially demonstrate a quantifiable pattern to predict future offences" (p. 6). The second was by Osborne and Salfati (2015), who examined factors influential to the cooling-off period and the actual period between offending ($M = 186.12$ days, $N = 90$). It should be noted that in both of these publications the authors do not critically examine the theoretical basis of cooling-off periods, they simply use them as a basis for determining factors that may influence this time period.

Apart from issues of validity and reliability associated with delineating and interpreting cooling-off periods, there is another problematic reality. Skrapec (2001) uses the example of Ted Bundy, who killed two victims on the same day, seemingly without cooling-off between homicides. Committing clusters of offences at sometimes and spreading offences out over others presents a conundrum for definitions that stipulate cooling-off periods. Would there then be a need to distinguish murder sprees within series of murders?

With a cooling-off period, it may not be the time itself (that is, the duration between offences), but rather what that duration represents or its significance to the offender. If, during this time, the offender is able to disconnect from the murders and return to a semblance of non-offending life, then it may be argued that he has "cooled-off". This period will be, as identified in the myriad of definitions, idiosyncratic and peculiar to individual offenders sometimes being short, sometimes being long.

If a cooling interval is utilised in a definition for serial murder, the issue that arises is period of time. Most definitions incorporating a time of disconnect provide a span of days, weeks, months, or years, whilst others provide a discrete time such as a specific number of days. Until now, few researchers have examined how long the average cooling-off is though there has been little further exploration as to the best time period for this. This is likely to differ both within and between offenders with some returning to their non-offending life quicker than others or not at all. As such, it is suggested herein that the term cooling-off period and what it is alleged to represent be abandoned. This will be further discussed in the proposed forthcoming definition.

Perhaps the most fundamental question to be asked is why an offender would have to cool-off or somehow emotionally detach from his crimes at all. Little attention has been paid to this issue beyond a few authors who dedicate some small space to it: that is Turvey (2012), Fox and Levin (1998), and Levin and Fox (2008).

According to Turvey (2012), it is the cooling-off period that renders serial murder such a horrible crime to contemplate, and the rationale for this is contained within his definition, which again states:

A cooling-off period, or cooling interval, refers to the psychological component that makes serial murderers so horrible to contemplate; it refers to the interval during which the offenders psychologically disconnect, separate, or compartmentalise themselves from the behaviours and motives that led to, or culminated in, homicidal behaviour and then reintegrate back into their non-criminal lives and activities. (p. 543)

Fox and Levin (1998) further this argument by stating that this cooling-off period is linked to offenders being able to kill without the associated psychological dissonance:

The compartmentalisation that allows for killing without guilt is actually an extension of an ordinary phenomenon used by normal people who play multiple roles in their everyday lives. An executive might be heartless and demanding to all his employees at work but be a loving and devoted family man at home. Similarly, many serial killers have jobs and families, do volunteer work, and kill part-time with a great deal of selectivity. Even the cruelest [sic] sexual sadist who may be unmercifully brutal to a hitchhiker or a stranger he meets at a bar might not even consider hurting family members, friends, or neighbours. (p. 422)

Levin and Fox (2008) simply restate their previous position. The cooling-off period then is about guilt mitigation or elimination.

Motive

Definitions that focus on victim count or cooling intervals may be missing a large part of the picture. Victim count and cooling-off periods alone can capture any number of other types of murder such as killings during time of war, acts of terrorism, genocide, and professional killings. To differentiate serial murder from these other types, some suggest that motive should also be a factor in any definition (Ferguson et al., 2003; Skrapec, 2001).

Jenkin's (1994, p. 23) notes that "excluded are cases where the offender acted primarily out of political motives or in the quest of financial profit." These homicides are usually excluded from consideration of being serial murders because the motives are perceived to be different, and serve primarily personal (thrill, control, and power among others) or sexual motives. For this reason, professional hitmen and war criminals are excluded from being labelled serial murderers. According to Skrapec (2001), it is the personal gratification derived from the killings (whether through financial gain, sexual orgasm, or domination of others) that underlies their

motivation and distinguishes them from killings expected as part of some professional role. This issue, however, will be revisited in another paper by the first and third author.

Problems with Motive

While it is acknowledged that motive is a necessary component of any definition, two problems are noted. The first is that motive is poorly understood (Leonard, 2001; Petherick, 2015; Turvey, 2012). This means that any attempt to understand motive in an open offence series may not be fruitful in terms of classifying crimes. By extension, where the motive is poorly understood or unclear, the classification of a serial crime may be confounded until such a point as more information becomes available, or where other evidence points to the possibility that a serial criminal is in operation, in which case the motive is a moot point. For example, the assertion that the motive in any case was sexual will assume that the sexual gratification was a motive in itself, and not just a behaviour that may represent an underlying psychological state such as anger or the desire to establish a relationship (see Groth, 1979; Groth et al., 1977; Petherick, 2015; and Petherick & Sinnamon, 2014 for a discussion on the different offence motives).

Similarly, the motive is not always clear or readily apparent (Muller, 2000). This means that even when an appropriately qualified individual is trying to understand the motive, there may not be enough information on which to assess it. This is either because the investigation and forensic examination of evidence are in the early stages or because the offender has been careful not to leave evidence that may reveal the motive. Further, those sources of information that may be most fruitful (such as a victim who can testify as to what was said and done) will be absent as the victim is deceased.

The second issue with motive is what is known as behavioural consistency (Bateman & Salfati, 2007; Harbers et al., 2012; Hazelwood & Warren, 2003; Petherick & Ferguson, 2012; Salfati & Bateman, 2005). That is, the behaviour will remain relatively consistent across an offence series, and if not, the motive may appear between offences. If the offender has different motives or should his motive change, the crimes may appear to be the work of different offenders. As stated by Gresswell and Hollin (1994), typologies used to understand serial murder fail “to pick up interactions between the killer, the victims, and the environment, and do not appear to be flexible enough to accommodate a killer who may have different motives for different victims or changing motives over time” (p. 5).

Propensity

In this regard, propensity refers to the innate likelihood of repeating a behaviour; specifically, committing another murder. It could be argued that once a second offence is linked through valid means, the propensity requirement is met. As previously stated, because the rate of serial murder is low, once an offender has committed that second offence, he has not only met the minimum victim count, he has demonstrated a propensity to reoffend. As such, criteria for this would be redundant and therefore not needed within a definition.

Another issue with a propensity requirement is that, should they be apprehended before committing another offence, the propensity will never be fully realised, along with victim count and most other criteria. As such, the propensity will be an unknown until the second offence, which as stated above, makes this requirement redundant. It is therefore suggested that, as with the cooling-off period, the idea of a propensity to reoffend be abandoned. This will also be discussed in the proposed definition below.

Proposed Definition

This paper examined a number of widely used definitions of serial murder in the academic and law enforcement literature. It is acknowledged that it does not include every single definition in the literature, though we believe those discussed represent a healthy cross-section. A number of problems with these definitions and their formulations were identified and discussed.

Based upon the review of previous definitions in conjunction with a systematic examination of problematic issues, the following definition of serial murder is proposed, after which the rationale for each of the criteria will be provided:

1. Serial murder involves the killing of two or more victims by the same offender(s);
2. In separate offences with a non-offending period between offences;
3. The offences have been reliably linked;
4. The motive for these offences is personal, rather than corporate, organisational, or institutional in nature.

Two or More Victims

The number of victims should be set low at two, which is consistent with the standard now employed by the FBI (Morton & Hilts, 2008). This is because once two offences have been identified there is a need to change the investigative strategy and adopt measures conducive to increasing public safety. This allows for the accurate classification of a serial murderer who is likely to repeat offend but may be apprehended before they kill subsequent victims.

Committed by the Same Offender(s)

This criterion should be self-evident. The same offender(s) must be involved in at least two of the murders to be considered a discrete serial murder event.

In Separate Offences with a Non-Offending Period

The crimes must be committed as separate offences or they would be more accurately described as spree or mass murders, depending on victim count. We are also the first to suggest discarding the notion of a cooling-off period or cooling interval in favour of a more neutral non-offending period. This has been adopted for the reasons stated previously in this paper about the problems with the cooling-off period. This still satisfies the requirement that the offender departs from his offending behaviour, and that the offences occur over a period of time but places no judgement on what they are doing during this time.

Reliably Linked

Cases must be reliably linked by an appropriately qualified expert. Case linkage is one such practice and is defined as “a police practice whereby crimes that may be the work of the same offender(s) are identified from an analysis of crime scene behaviours” (Woodhams & Bennell, 2015, p. 1). Two types of links can be made: the investigative link is defined as a “general class connection between one or more cases that serves to inform the allocation of investigative resources” (Turvey, 2012, p. 657), while a probative link is considered court-worthy and is defined as “evidenced by either a unique offender behaviour, or a unique offender signature that is shared across two or more cases, with limited behavioural dissimilarity” (p. 659).

Without embarking on an entirely separate treatise on the various types and utilities of linkage measures, it is sufficient to say that the linkage must be made using generally recognised and acceptable means of connecting the crimes. This could include commonly accepted scientific means such as DNA and fingerprints, behavioural case linkage by the appropriately qualified individual, or the belief of an experienced detective coupled with a low base rate of occurrence in their jurisdiction.

This discussion begs the question “who exactly is an appropriately qualified individual”? This would depend largely on the type of linkage being done and the qualifications of the individual doing the linkage. We arbitrarily identify two main types of case linkage and have labelled them “hard” and “soft”. Hard case linkage is that done through the examination of physical evidence, with the two most notable examples being DNA analysis and fingerprinting. Thus, an appropriately qualified individual would be a forensic or other scientist who is an expert in DNA or fingerprint analysis. On the other hand, a “soft” linkage is that done through an analysis of behaviour to determine the similarities and differences in *modus operandi* (what the offender did that was necessary to successfully complete the crime) and so-called signature (those ritual or fantasy elements that are not necessary for the successful completion of the crime). This type of linkage is far more problematic in terms of identifying who may be qualified though it is suggested that, at a minimum, the individual possess advanced degrees in the behavioural sciences complimented by studies or training in the physical sciences including many aspects of crime reconstruction. Further bolstering one’s qualifications in this area would be admission as an expert in case linkage in a court of law, though this is not without its own set of problems (as one example, see Justia US Law (2001) in *State v. Steven R Fortin*, where the Court identified the testimony of retired FBI profile Roy Hazelwood as problematic despite Hazelwood originally being admitted as an expert).

Further consideration must be given as to the purpose of the case linkage. If the purpose is to assess two or more crimes to determine whether they are the work of the same offender to argue for the allocation of more resources, then it could be argued that the threshold for qualifications is less than expert testimony in a court of law.

The Motive is For Personal Gratification

It may be inferred that the propensity to reoffend is inherently linked with the motive to reoffend. That is, one must be motivated to commit subsequent offences, with the implication that the physical or psychological need that drove the initial offence has not been satisfied, resurfaces, or changes over time. This would exclude cases of homicide committed by soldiers during war, genocide (and other religious and/or political murders committed over time), gang members, and those by professional assassins. This latter type of homicide can be problematic in terms of this definition and most others, in that it excludes the professional killer who, in between his contracts, may kill simply for gratification. Two of the authors (AM & WP) are currently investigating this issue, which will be the subject of a future publication. This latter type of homicide can be problematic in terms of this definition and most others, in that it excludes the professional killer who, in between his contracts, may kill simply for gratification. The definition proposed by the authors above suggest that professional killers such as Richard Kuklinksi can be included within the broader definition of serial murder as they meet each criterion:

1. Kuklinksi killed two or more victims.
2. The murders occurred in separate offences, in different locations with non-offending periods in between.
3. Kuklinksi’s offences have been reliably linked by an appropriately qualified individual.
4. Kuklinksi killed for personal profit, which can otherwise be known as personal gratification.

That research is being undertaken in Australia (1960-2021) and, is testing the premise that hit-men, gangland killers, professional killers or contract killers could be classified as serial murderers, as per the definition in this article.

As with case linkage, the authors suggest motivational analysis be performed only by those who are appropriately qualified using accepted typologies and methodologies that have been derived empirically or are based on rigorous theories. Again, foundational and advanced degrees in the behavioural sciences combined with further studies in crime reconstruction are suggested. Suggested considerations for determining motive are provided by Petherick(2015) and include examining all available physical evidence,

conducting a thorough victimology, and crime scene considerations such as evidence of planning and preparation, crime scene type and location, and whether the crime scene was selected or opportunistic, among others.

Generally speaking, the crimes of gangs and terrorist organisations are not considered serial murder because their acts advance the group by establishing ideological dominance (as in the case of terrorism) or geographic or commercial dominance (as in the case of gangs fighting over “turf” or establishing control of an area to monopolise drug trade in the region). These differ fundamentally from “typical” serial murders who kill for personal reasons such as enjoyment, control, or thrill. That is not to say that gang members do not also occasionally kill for these reasons, we argue that is not the primary reason for the killings.

Conclusion

This article provided a systematic review of the history of the term serial murder and deconstructed the various definitions over time according to victim count, the linkage of serial crimes, a cooling-off period, motivation, and propensity. Problems with the various definitions have been discussed. Subsequent to this examination, the authors proposed a definition that bypasses theoretical and practical issues with the definitions to date and provides a more realistic and useful definition of serial murder. The authors feel that the most problematic component of previous definitions has been the idea that offenders cool-off between crimes. This is something that was accepted uncritically and integrated into many definitions of serial murder until recent times. One interesting aspect of future research, therefore, would be to conduct a study of serial offenders to determine to what degree the idea of a cooling-off period actually happens, or whether offenders spend much of their non-offending time reliving prior offences, as well as fantasising about and planning for future offences.

Beyond the academic merits of being technically accurate, the correct identification of a case as serial relies entirely on a valid definition capturing the most cases possible while accurately excluding cases which should be classified in other ways. Not only does this set the stage for valid research to be carried out where the definition sets the goal posts for inclusion and exclusion criteria, there are other investigative and legal benefits also. When law enforcement is confident that a serial murderer is active, they can change the strategy of investigation to incorporate experts on serial crimes, establish task forces and major incident rooms, and provide public safety notifications regarding such things as victim targeting. From a legal standpoint, the identification of a murder series may provide for an aggravating factor to be used during sentencing, thus allowing for more dangerous offenders to be removed from society. For these reasons and those discussed elsewhere in this paper, the authors believe that a good definition is not just one important factor, it is the most important factor in the discourse of serial offenders.

Author Note: *We acknowledge that there are female serial murderers. For the sake of consistency and ease of reporting, we use the terms he/his throughout.*

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