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Citation

Liem M., E. M. (2020). From Homicide to Imprisonment: Mapping and Understanding the Flow of Homicide Cases. *Homicide Studies*, 24(3), 207-219. doi:10.1177/1088767920917745

Version: Publisher's Version

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Note: To cite this publication please use the final published version (if applicable).

From Homicide to Imprisonment: Mapping and Understanding the Flow of Homicide Cases

Homicide Studies
2020, Vol. 24(3) 207–219
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DOI: 10.1177/1088767920917745
journals.sagepub.com/home/hsx



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Abstract

The likelihood that homicides lead to arrest, conviction, and incarceration of the perpetrators varies widely across world regions. To date, we lack a comprehensive framework that can explain the differences in how homicide cases are processed in different jurisdictions, and how this knowledge can be used to hold perpetrators to account, to advance the rule of law, and to promote equal access to justice. This Special Issue seeks to advance the cross-national and comparative analysis of homicide case flows, from suspicious death to imprisonment. In this Introduction, we outline some analytic priorities that may help in moving the field forward.

Keywords

case linkage, methodology, comparative, clearance, policing, investigation, sentencing, courts, exceptional clearance

Introduction

The likelihood that homicides lead to the arrest, conviction and, eventually, incarceration of the perpetrators varies widely across world regions. Worldwide, about 53 persons are convicted for every 100 homicide victims according to estimates of the UNODC Global Study on Homicide (United Nations Office on Crime and Drugs [UNODC], 2019). At the same time, vast differences exist between countries and sub-national units: In some states of Brazil and Mexico, for example, fewer than 10% of

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all homicides recorded by the police result in the conviction of an offender (Lecuona and Rodríguez, 2016; Ribeiro, 2010; Ribeiro & Silva, 2010). In contrast, in jurisdictions such as Finland and Switzerland, over 95% of all confirmed homicide cases are cleared after a police investigation, and these cases generally result in the conviction of a perpetrator (Liem et al., 2019).

It is important to better understand the mechanisms that influence the processing of homicide cases in different jurisdictions across the globe. To advance knowledge on these mechanisms, it is essential to map the flow of homicide cases through the various criminal justice systems, following cases longitudinally from suspicious death to imprisonment. The fact that this may be easier said than done became apparent in a thematic panel “From murder to imprisonment: Tracking the flow of homicide cases through the health and justice systems” for the 4th International Conference on Governance, Crime and Justice Statistics in Lima, Peru in June 2018. The international participants of this panel—many of them contributing to this Special Issue—reflected on the methodological challenges in obtaining homicide data across stages, yet each found themselves struggling to provide a complete picture of homicide case flows in their respective countries, from the commission of a homicide through the registration of a suspicious death, up to imprisonment and eventual release from custody. Faced with this empirical lacuna, we sought to put together this Special Issue. The objective is to advance the cross-national and comparative analysis of the flow of homicide cases through the justice system.

The Funnel Model as an Organizing Concept

The so-called funnel model is the most influential framework for analyzing the flow of crimes through the criminal justice system. It was initially presented over 50 years ago in the 1967 report “The Challenge of Crime in a Free Society” (The President’s Commission on Law Enforcement and the Administration of Justice, 1967, pp. 8–9). The model charts the movement of cases through the criminal justice system in the United States as a sequence of decision points from initial registration of a crime to exit from the criminal justice system, whereby a certain proportion of cases exit the system at each decision point. In the case of homicides this chain starts with the discovery of the killing, followed by the investigation, clearance, arrest, prosecution, conviction, imprisonment, and eventual release.

As an organizing concept, the funnel model can help to analyze the various components of the processing of homicides across jurisdictions and over time. We suggest to distinguish four analytic dimensions: The first dimension relates to an accurate representation of the *stages, legal frameworks, and decision-making procedures* in a given jurisdiction. While some key stages like police investigation, arrest, and conviction will be similar across jurisdictions, it is important that flow analyses also capture the extent to which decision-making points and procedural law vary between jurisdictions. The second dimension relates to obtaining accurate estimates of the *probabilities* of a given outcome for all cases that entered a particular stage of the process. This includes, in particular, estimates of the probabilities that a case transitions to the next

stage of the funnel. The third dimension relates to understanding the *time* that cases spend in a given stage and the investigative, administrative, and judicial procedures that lead to a next decision point. The fourth dimension relates to comprehensively capturing information on the *legal and extra-legal factors* and case characteristics that may influence the outcome of a case at a given decision point. For example, at each stage, homicide cases may drop out due to misclassification. At the initial police investigation stage, a substantial proportion of cases initially recorded as homicide may turn out to be another type of death, including suicides and accidents (Timmermans, 2006). Similarly, cases may exit the system for several legal reasons, such as no clearance when the evidence is insufficient, or no sentencing when the suspect is not criminally responsible (Baumer et al., 2000). Finally, cases may result in wrongful convictions that are eventually overturned.

The Relevance for Policy-Making

Goal 16 of the United Nations Sustainable Development Goals (SDGs) asks all member states to, among others, promote the rule of law at the national and international levels and ensure equal access to justice for all (UN General Assembly, 2015). With respect to homicide this means that justice systems make sure that all homicides are investigated effectively, that cases are concluded in a timely manner, and that the outcomes of cases are not biased against certain groups of victims or perpetrators. Research on the recording and processing of homicide cases can potentially provide anchors for estimates of the extent to which fairness, equity, and efficiency of the criminal justice system with respect to homicides is achieved (UNODC, 2019). It can also help to identify gaps within the criminal justice system and policy priorities that need to be addressed.

For example, research on national and regional variation in levels of impunity—the proportion of perpetrators who are not held accountable because the crime is not recorded or because the police cannot identify the suspect—can help to draw attention to major failings in the ability of state to impose punishment through the rule of law. If sizable proportions of homicide perpetrators are not held accountable through legal means, vigilante violence and private retaliation may become a likely form of private justice (Adinkrah, 2005).

Also, a better understanding of the factors associated with homicide clearance may help to promote more effective police response and investigation services. Similarly, analyses of the factors associated with the chances that an arrested suspect is convicted can not only help to identify possible sources of discrimination in the justice system, but also to advance our understanding of how justice systems may allow for the wrongfully accused to be detected at an early stage. Furthermore, research is needed that assesses to what extent extra-legal factors influence the processing of homicide cases, and to what extent these factors are suggestive of unequal access to justice. Such unequal access, in turn, can undermine the legitimacy of the justice system (Pierce et al., 2017).

Another set of questions relates to the time it takes to process cases at different levels. So far, with very few exceptions (e.g., Addington, 2007), most studies have approached homicide clearance, prosecution, or sentencing as a dichotomous outcome, rather than assessing the time it takes for cases to flow through the system. Cases become more difficult to solve the more time passes without an arrest. Offenders have long fled the scene, witnesses have forgotten information, and physical evidence has become contaminated (Regoecezi et al., 2008). As the field of knowledge stands right now, a better understanding of the factors associated with the time it takes from initial arrest until a case is tried in court could help to make justice systems more effective and fairer.

Empirical Challenges

As the contributions to this special issue show, documenting and explaining the flow of homicide cases through the justice systems in various countries remains a considerable challenge. In the early 1990s, Farrington and Langan (1992) provided the first national estimates of the number of offenders at different stages of the justice system from the number of crimes committed to the number of convicted perpetrators. The study comprised data on six types of serious crime (including homicide) and compared data in England and the United States. It also presented, for the first time, estimates for core parameters that characterize the system. This includes, for example, the probability of custody per offender and the average number of days served per offender. As the contribution by Farrington to this issue shows, this approach can provide highly valuable insight. However, it is also limited in that the underpinning data are cross-sectional. In other words, they compare different cases at various stages of processing in a given period rather than the sequence of decisions relating to the same cohort of cases. Also, the measures rely largely on official statistics rather than a classification of cases by researchers. Comparisons between countries may hence be affected by different counting rules and variable legal and procedural definitions of outcomes such as what constitutes a police "clearance" (Jarvis & Regoecezi, 2009).

A closer understanding of the funnel model requires longitudinal data that track the movement of cases through several stages of the justice system, starting from the discovery of a dead body and/or a report to the authorities that a person died of a suspicious death. Such events trigger a complex process that involves actors in various agencies such as the police, forensic medicine, forensic psychiatry, youth justice, prison service, prosecution services, and the courts. The range of organizations and parties involved in this process creates a huge challenge to collecting longitudinal homicide flow data.

So far, as the systematic review by Liem, Krüsselmann, and Eisner in this issue highlights, prior studies have mostly focused on one particular phase in the homicide case flow. These studies provide highly valuable insight as they pay detailed attention to one particular decision-making stage. Most work has been done on the factors that influence homicide clearance (e.g., Riedel, 2008; Riedel & Rinehart, 1996; Roberts, 2007). To a lesser extent, studies have examined the selection effects in later stages of

the system, such as the likelihood for homicides to be prosecuted as homicides, and homicide sentencing (e.g., Auerhahn, 2007; Baumer & Martin, 2013). Few studies have investigated the initial discovery and classification of suspicious cases (e.g., Matzopoulos et al., 2015; Sorenson et al., 1997).

Studies that track cases across different organizational entities have remained rare (Baskin & Sommers, 2010; Baumer & Martin, 2013; Berz, 1994; Glaeser & Sacerdote, 2003; Grosso et al., 2010; Miller, 2015; Petersen, 2017a), because it is often difficult to follow cases through the various systems. However, such studies can make an important contribution to a fuller understanding of the sequence of decisions across the system.

Furthermore, to date, the vast majority of research on the processing of homicides has been conducted in the United States, with some exceptions of work in Europe (e.g., Granath & Sturup, 2018; Liem et al., 2019; Sturup et al., 2015). In contrast, we note a scarcity of research findings on the processing of homicide cases in low- and middle-income countries (but see, for example, Matzopoulos et al., 2015; Ribeiro & Silva, 2010). Partly, the imbalance of research mirrors gaps in the availability of data. In the United States, research on the processing of homicide cases was facilitated by the introduction, in 1991, of the National Incident-Based Reporting System (Maxfield, 1999). It tracks eight types of serious crimes from the initial recording of the incident to clearance and arrest and has been the basis of pioneering studies on the factors associated with police clearance. Comparable incident-based databases are only available in a few high-income countries such as the Home Office Homicide Index in England and Wales (Office for National Statistics, 2018). In many countries, in contrast, research on the processing of homicide cases is hampered by the lack of reliable and/or available information or has to rely on painstaking coding of records.

A further empirical challenge arises from the limited comparability between studies. Studies on homicide clearance, for example, typically examine a different set of factors compared to studies that examine prosecution or sentencing. In addition, with very few exceptions (Regoeczi & Jarvis, 2013 and see, for an overview, Puckett & Lundman, 2003) prior work in this area has either focused on individual level factors (such as victim and/or perpetrator demographic characteristics) or on aggregate (neighborhood) level factors, rather than combining these levels in multilevel analyses. Such approaches have led to a patchy understanding of which factors exert an effect on what level, on what stage, and how.

Analytic Priorities

To date, we lack a comprehensive framework that can explain the differences in how homicide cases are processed in different jurisdictions, and how this knowledge can be used to hold perpetrators to account, to advance the rule of law, and to promote equal access to justice. In the following section, we outline some analytic priorities that may help to advance the field.

Initial Recording and Classification

The initial recording, by health or police authorities, of all cases that may be homicides constitutes the basis for all further action taken in the justice system. Yet surprisingly little is currently known about the first stage of the funnel, namely the extent to which unlawful killings remain unreported, undiscovered, or classified mistakenly by coroners or police authorities, and the factors associated with misregistration or non-registration of homicide cases (UNODC, 2019, p. 69). Some homicides may not be discovered by the authorities (Fyfe et al., 2015). This may include disappearances, particularly when they include “missing missings” (i.e., missing persons who were never reported as missing and some of whom may be homicide victims) (Quinet, 2007) and killings of individuals who are not registered yet, such as newborn children (Liem & Koenraadt, 2018). Homicides that are misclassified as another type of death include cases of killing through neglect and abuse, or cases in which a *modus operandi* is difficult to detect (e.g., poisoning or murder in the context of a medical profession).

Research suggests that in some low- and middle-income countries substantial fractions of homicides may not be recorded as such in national statistical systems. In South Africa, for example, an investigation in mortuaries found three times as many homicides as those recorded in vital statistics (Matzopoulos et al., 2015). Similarly, survey data in Nigeria suggest that up to 90% of homicides may not be recorded in national police data (UNODC, 2019, p. 23).

Also, in many parts of the world the distinction between justifiable and unlawful homicides may also be problematic and subject to systematic judicial and statistical bias. This includes killings by the police and private security actors, criminal homicides committed by members of armed forces in the context of civil unrest and war, or homicides considered justifiable as a form of self-defense.

More studies are needed, especially in fragile and low-resource contexts, that help to better understand whether and how homicides are brought to the attention of authorities, and whether they are correctly recorded as homicides. Specific analyses would be useful for the flow and treatment of cases that are particularly unlikely to lead to a successful processing in the criminal justice system such as disappearances, or of cases such as police killings, homicides death squads, and vigilante groups.

Resources and Institutional Capacity

In addition to the widely researched solvability characteristics of homicides (e.g., Coupe et al., 2019; Wellford & Cronin, 2000), organizational resources and institutional capacities influence the outcomes of homicide cases. This includes, among others, technical equipment, case load, management structure, and susceptibility to corruption (Innes, 2003). In particular, the number and expertise of first responders, detectives, crime scene investigators, forensic scientists, and other experts likely plays an important role (Carter & Carter, 2016). Prior work on the likelihood of homicide clearance has shown that scarce police resources (including manpower and technological restrictions) (Roberts, 2015), a high detective workload, and low levels of

experience (Puckett & Lundman, 2003) are associated with lower levels of homicide clearance (Borg & Parker, 2001).

Moving forward, the field would greatly benefit from comparative analyses that assess the extent to which the outcomes of homicide cases are influenced by features of the justice system. Specifically, analyses of the effects of organizational resources and problem-solving capacities at the levels of the police, forensic services, and the court systems could increase our understanding of how impunity can be reduced and the effectiveness of the justice system can be improved. This includes a better understanding of effects of the rights of access to defense lawyers, the division of labor between investigative police and prosecutor offices, varying standards of proof, or the training and caseload of prosecutors. In such assessments, studies could also benefit from qualitative and ethnographic analyses on how professionals collect and interpret a variety of forms of information as they seek to construct plausible and coherent accounts of who did what to whom, when, where, why, and how. In undertaking such research, it will be important to better understand the role that technology advancement, surveillance data, and analyses of digital footprints play in identifying, investigating, and prosecuting homicides in different jurisdictions.

Biases in the Availability of Law

A third bundle of possible factors relates to the victim and offender characteristics. From a Blackian point of view, victims of lower social status receive “less law” than victims of higher status (Litwin, 2004). Black (1976) uses the phrase “less law” to refer to a lower likelihood of police attention, arrest, or conviction, and a lower likelihood of a lengthy prison sentence for the perpetrator (Pastia et al., 2017). Simply put, who the victim is and where they die shape the quality of justice they receive (Cooney, 2009). Prior U.S. studies hinted at such biases, showing that homicide cases involving minority victims, victims involved in gang activities, drug dealing (Braga et al., 2019; Pastia et al., 2017; Roberts & Lyons, 2011; Rydberg & Pizarro, 2014; Wellford & Cronin, 2000), or with a criminal record (Jiao, 2007) are less likely to be cleared compared to cases with White, female, or child victims (Petersen, 2017a). Similar biases are noted at both prosecution (Farrell & Swigert, 1986) and sentencing stages (Baumer et al., 2000). Furthermore, U.S. studies conducted on an aggregate level found that clearance rates are lower in areas with larger Black and Latino populations (Petersen, 2017b; Puckett & Lundman, 2003) and higher levels of social disorganization, economic disadvantage (Mancik et al., 2018), racial conflict, and residential mobility (Borg & Parker, 2001). The latter factor has also been found to negatively impact the likelihood of a suspect to be convicted for the homicide (Regoecki & Jarvis, 2013).

As a first step, future work in this field should acknowledge that testing these and other theories involves the complexity of a well-controlled model, which includes measures reflecting the complexity of cases, availability of key evidence, such as eye witnesses, recordings, and physical evidence. Good quality flow data, in addition to good quality data on bias-related indicators and measures of complexity, will allow scholars to face this issue in the future. Eventually, this will allow for data-driven

insights to inform policy, with the aim to ensure that the outcomes of cases are not biased against certain groups of victims or perpetrators.

The Social Context

We finally suggest that there is a need to advance knowledge on how the wider social and institutional context influences the processing of homicide cases at all stages. This includes, for example, the possible effects of the readiness of community members to share information on disappearances or extrajudicial killings with the authorities, the fear of homicide witnesses of reprisals by gangs or organized crime members if they cooperate with investigators, and the wider organizational cultures that shape the ability of police departments, forensic services, prosecution offices, and courts to process homicide cases effectively. For example, fear and distrust of the police and the fear of reprisals from criminals appear to reduce the willingness of citizens to cooperate with police investigators in Trinidad and Tobago (Maguire et al., 2010). More recently, Regoeczi and Jarvis (2013) have developed a conceptual model based on social disorganization theory on the role of neighborhood context on clearance rates. It proposes that the very neighborhood conditions that lead to high homicide rates—concentrated disadvantage and residential instability—also negatively affect the identification, apprehension, and prosecution of suspects (Regoeczi and Jarvis, 2013). While the authors found evidence in support of this model in a U.S. city, in future work it would be important to extend this framework to other jurisdictions worldwide, as well as to other homicide processing stages including, for example, the timely reporting of homicide incidents, pretrial detention, or jury decisions.

Contributions to This Issue

The four articles in this special issue all contribute to advancing our understanding of the flow of homicide cases through health, police, and justice systems, and the mechanisms that shape the processing of cases.

The first article, authored by Marieke Liem, Katharina Krüsselmann, and Manuel Eisner, provides the first systematic review of what is currently known about the factors that affect the flow of homicide cases through administrative and judicial systems. The search identified 71 research articles that examined some stage in the flow of homicide cases. The synthesis revealed large gaps in our current knowledge. First, the vast majority of studies has been conducted in the United States, while only one study examined processes in low- and middle-income contexts where most homicides occur. Second, only one study was found that follows cases longitudinally through the entire system. The authors note that this may partly reflect the challenges to tracking cases through the multitude of different systems and actors. Also, the majority of studies focus on factors that affect police clearance, respectively, the legal and extra-legal factors that affect the severity of sentencing. In contrast, only three studies in the systematic review examined the classification of suspicious deaths. This suggests a large gap in our understanding of the extent to which homicides may be classified in other

cause-of-death categories such as accidents (ICD-10, V01-X59), intentional self-harm (X60-X84), events of undetermined intent (Y10-Y34), or legal intervention and operations of war (Y35-Y36). Overall, the authors conclude that many important questions cannot currently be answered, despite some progress relating to the factors that influence police clearance and sentencing severity.

The second article, authored by Ludmila Ribeiro, presents results from a study on the flow of a stratified random sample of homicide cases shelved between 2003 and 2013 in Belo Horizonte, the capital city of the state of Minas Gerais in Brazil. As Brazil is the country with the largest number of homicides worldwide, this study is particularly important. Using documents by the civil police, prosecution, defense, and judiciary entities, the present analysis includes 613 cases of homicides that were tracked through the entire system. The author uses Cox Proportional Hazard models to estimate the transition to two important stages in the process, namely clearance and conviction. Only 12% of cases resulted in an eventual conviction, and the average time to conviction was 13.3 years. The author argues that these low conviction rates and long delays undermine potential deterrent effects of the justice system. The study identifies a cluster of factors that account for variation in case outcomes. In particular, she finds that attributes of the crime that are associated with solvability as well as characteristics of the police investigation influence the chances for a police clearance. Moreover, the paper argues that characteristics of the wider social context, including the willingness of citizens to co-operate with the police, play an important role.

The third article, authored by David Farrington, examines and compares national data on completed homicides at key stages of the process, from initial recording to time served in prison. The analyses cover up to eight high-income countries and assess trends across three time points, that is, around 1980, 1990, and 2000. The data are based on cross-sectional information. However, they provide valuable estimates of various system characteristics. In particular, Farrington proposes several key indicators for the comparative analysis of the flow of offenders through the system. These include, for example, the probability that a (suspected) homicide offender is convicted, the average time served per conviction, and the average time served per offender. These indicators suggest substantial variation between countries and over time in, for example, the likelihood of conviction and average sentence length. The author emphasizes the need for comparative longitudinal analyses that track cases through the system. In his assessment, such studies could help to better understand the functioning of the criminal justice system and to assess possible links between trends and levels in homicide rates and the effectiveness of the justice system.

The fourth paper, authored by Helen Jones, Fiona Brookman, Robin Williams, and James Fraser, draws upon data relating to the flow of 44 homicide cases through the criminal justice process in Britain. In their contribution, the authors adopt an interpretive approach. This approach helps them to highlight the complex processes that lead from the initial discovery or suspicion of a dead, missing, or seriously injured person to a major case investigation, arrest, trial, and conviction. Empirically, they focus on an in-depth analysis of two case studies of (suspected) homicide cases. The analyses reveal how the interpretation of what happened changed during the course of the

investigation. More specifically, the authors unravel the processes by which actors try to make sense of ambiguous information, and how investigators take decisions in their efforts to reduce ambiguity and to determine that a homicide has taken place and who was responsible. In particular, they emphasize the importance of “critical moments” within the homicide trajectory—the points in time and space when something important happens that determines whether cases proceed, stall, or are discontinued. They also highlight that a funnel model is often an oversimplification as cases may iterate through some stages.

The contributions to this Special Issue provide new insight into the multiple mechanisms that shape the fate of homicide cases in different jurisdictions, at different time points, and at different stages in the complex decision-making processes within the criminal justice system. At the same time, they draw attention to an exciting research agenda in an area characterized by a conspicuous lack of consolidated knowledge. We very much hope that colleagues will join us in continuing this pioneering work, jointly moving the field forward by bringing in new theoretical and methodological insights.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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References

- Addington, L. A. (2007). Hot vs. cold cases: Examining time to clearance for homicides using NIBRS data. *Justice Research and Policy*, 9(2), 87–112.
- Adinkrah, M. (2005). Vigilante homicides in contemporary Ghana. *Journal of Criminal Justice*, 33(5), 413–427.
- Auerhahn, K. (2007). Just another crime? Examining disparity in homicide sentencing. *The Sociological Quarterly*, 48(2), 277–313.
- Baskin, D., & Sommers, I. (2010). The influence of forensic evidence on the case outcomes of homicide incidents. *Journal of Criminal Justice*, 38(6), 1141–1149.
- Baumer, E. P., & Martin, K. H. (2013). Social organization, collective sentiment, and legal sanctions in murder cases. *American Journal of Sociology*, 119(1), 131–182.
- Baumer, E. P., Messner, S. F., & Felson, R. B. (2000). The role of victim characteristics in the disposition of murder cases. *Justice Quarterly*, 17(2), 281–307.
- Berz, C. B. (1994). *Homicide defendants' paths through the Tennessee criminal justice system: The impact of prosecutorial discretion as a social justice issue* [Doctoral dissertation]. University of Tennessee.
- Black, D. (1976). *The behavior of law*. Academic Press.

- Borg, M. J., & Parker, K. F. (2001). Mobilizing law in urban areas: The social structure of homicide clearance rates. *Law and Society Review*, 35(2), 435–466.
- Braga, A. A., Turchan, B., & Barao, L. (2019). The influence of investigative resources on homicide clearances. *Journal of Quantitative Criminology*, 35(2), 337–364.
- Carter, D. L., & Carter, J. G. (2016). Effective police homicide investigations: Evidence from seven cities with high clearance rates. *Homicide Studies*, 20(2), 150–176.
- Cooney, M. (2009). *Is killing wrong? A study in pure sociology*. University of Virginia Press.
- Coupe, R. T., Ariel, B., & Mueller-Johnson, K. (eds.) (2019). *Crime solvability factors: Police resources and crime detection*. Cham: Springer Nature.
- Farrell, R. A., & Swigert, V. L. (1986). Adjudication in homicide: An interpretive analysis of the effects of defendant and victim social characteristics. *Journal of Research in Crime and Delinquency*, 23(4), 349–369.
- Farrington, D. P., & Langan, P. A. (1992). Changes in crime and punishment in England and America in the 1980s. *Justice Quarterly*, 9(1), 5–46.
- Fyfe, N. R., Stevenson, O., & Woolnough, P. (2015). Missing persons: The processes and challenges of police investigation. *Policing and Society*, 25(4), 409–425.
- Glaeser, E. L., & Sacerdote, B. (2003). Sentencing in homicide cases and the role of vengeance. *The Journal of Legal Studies*, 32(2), 363–382.
- Granath, S., & Sturup, J. (2018). Homicide clearance in Sweden 1990–2013 with special reference to firearm-perpetrated homicides. *Journal of Scandinavian Studies in Criminology and Crime Prevention*, 19(1), 98–112.
- Grosso, C. M., Baldus, D. C., & Woodworth, G. (2010). The role of intimacy in the prosecution and sentencing of capital murder cases in the US Armed Forces, 1984–2005. *NML Rev.*, 40, 273.
- Innes, M. (2003). *Investigating murder: Detective work and the police response to criminal homicide*. Clarendon Studies in Criminology. Oxford University Press.
- Jarvis, J. P., & Regoezi, W. C. (2009). Homicides clearances: An analysis of arrest versus exceptional outcomes. *Homicide Studies*, 13(2), 174–188.
- Jiao, A. Y. (2007). Explaining homicide clearance: An analysis of Chicago homicide data 1965–1995. *Criminal Justice Studies*, 20(1), 3–14.
- Lecuona, G. R. Z., & Rodríguez, P. G. J. (2016). *Impunidad frente al homicidio doloso en México* [Impunity related to intentional homicide in Mexico]. *Este País*, 308, 13–22.
- Liem, M., & Koenraadt, F. (2018). *Domestic homicide: Patterns and dynamics*. Routledge.
- Liem, M., Suonpää, K., Lehti, M., Kivivuori, J., Granath, S., Walser, S., & Killias, M. (2019). Homicide clearance in Western Europe. *European Journal of Criminology*, 16(1), 81–101.
- Litwin, K. J. (2004). A multilevel multivariate analysis of factors affecting homicide clearances. *Journal of Research in Crime and Delinquency*, 41(4), 327–351.
- Maguire, E. R., King, W. R., Johnson, D., & Katz, C. M. (2010). Why homicide clearance rates decrease: Evidence from the Caribbean. *Policing & Society*, 20(4), 373–400.
- Mancik, A. M., Parker, K. F., & Williams, K. R. (2018). Neighborhood context and homicide clearance: Estimating the effects of collective efficacy. *Homicide Studies*, 22(2), 188–213.
- Matzopoulos, R., Prinsloo, M., Wyk, V. P. V., Gwebushe, N., Mathews, S., Martin, L. J., . . . Bradshaw, D. (2015). Injury-related mortality in South Africa: A retrospective descriptive study of postmortem investigations. *Bulletin of the World Health Organization*, 93, 303–313.
- Maxfield, M. G. (1999). The national incident-based reporting system: Research and policy applications. *Journal of Quantitative Criminology*, 15(2), 119–149.

- Miller, J. M. (2015). *Sentencing disparities in Arkansas: A multiple year study*. (Doctoral Dissertation, University of Arkansas at Little Rock).
- Office for National Statistics. (2018). *Homicide in England and Wales: Year ending March 2018*.
- Pastia, C., Davies, G., & Wu, E. (2017). Factors influencing the probability of clearance and time to clearance of Canadian homicide cases, 1991-2011. *Homicide Studies*, 21(3), 199–218.
- Petersen, N. (2017a). Examining the sources of racial bias in potentially capital cases: A case study of police and prosecutorial discretion. *Race and Justice*, 7(1), 7–34.
- Petersen, N. (2017b). Neighbourhood context and unsolved murders: The social ecology of homicide investigations. *Policing and Society*, 27(4), 372–392.
- Pierce, G. L., Radelet, M. L., & Sharp, S. (2017). Race and death sentencing for Oklahoma homicides committed between 1990 and 2012. *Journal of Criminal Law & Criminology*, 107, Article 733.
- President's Commission on Law Enforcement and Administration of Justice. (1967). *The challenge of crime in a free society*. U.S. Government Printing Office.
- Puckett, J. L., & Lundman, R. J. (2003). Factors affecting homicide clearances: Multivariate analysis of a more complete conceptual framework. *Journal of Research in Crime and Delinquency*, 40(2), 171–193.
- Quinet, K. (2007). The missing missing: Toward a quantification of serial murder victimization in the United States. *Homicide Studies*, 11(4), 319–339.
- Regoeczi, W. C., & Jarvis, J. P. (2013). Beyond the social production of homicide rates: Extending social disorganization theory to explain homicide case outcomes. *Justice Quarterly*, 30(6), 983–1014.
- Regoeczi, W. C., Jarvis, J. P., & Riedel, M. (2008). Clearing murders: Is it about time? *Journal of Research in Crime and Delinquency*, 45(2), 142–162.
- Ribeiro, L. (2010). *A produção decisória do sistema de justiça criminal para o crime de homicídio: análise dos dados do estado de São Paulo entre 1991 e 1998* [Decision making in the criminal justice system for the crime of homicide: Analysis of data from the state of São Paulo between 1991 and 1998]. *Dados*, 53(1), 159–194.
- Ribeiro, L., & Silva, K. (2010). *Fluxo do sistema de justiça criminal brasileiro: um balanço da literatura* [Flow of the Brazilian criminal justice system: an assessment of the literature]. *Cadernos de Segurança Pública*, 2(1), 15–26.
- Riedel, M. (2008). Homicide arrest clearances: A review of the literature. *Sociology Compass*, 2(4), 1145–1164.
- Riedel, M., & Rinehart, T. A. (1996). Murder clearances and missing data. *Journal of Crime and Justice*, 19(2), 83–102.
- Roberts, A. (2007). Predictors of homicide clearance by arrest: An event history analysis of NIBRS incidents. *Homicide Studies*, 11(2), 82–93.
- Roberts, A. (2015). Adjusting rates of homicide clearance by arrest for investigation difficulty: Modeling incident-and jurisdiction-level obstacles. *Homicide studies*, 19(3), 273–300.
- Roberts, A., & Lyons, C. J. (2011). Hispanic victims and homicide clearance by arrest. *Homicide Studies*, 15(1), 48–73.
- Rydborg, J., & Pizarro, J. M. (2014). Victim lifestyle as a correlate of homicide clearance. *Homicide Studies*, 18(4), 342–362.
- Sorenson, S. B., Shen, H., & Kraus, J. F. (1997). Undetermined manner of death: a comparison with unintentional injury, suicide, and homicide death. *Evaluation Review*, 21(1), 43–57.

- Sturup, J., Karlberg, D., & Kristiansson, M. (2015). Unsolved homicides in Sweden: A population-based study of 264 homicides. *Forensic Science International*, 257, 106–113.
- Timmermans, S. (2006). *Postmortem: How medical examiners explain suspicious deaths*. University of Chicago Press.
- UN General Assembly. (2015, October 21). *Transforming our world: The 2030 Agenda for Sustainable Development* (A/RES/70/1). <https://www.refworld.org/docid/57b6e3e44.html>
- United Nations Office on Crime and Drugs. (2019). *Global study on homicide 2019*.
- Wellford, C., & Cronin, J. (2000). Clearing up homicide clearance rates. *National Institute of Justice Journal*, 243, 1–7.

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