

5-2009

Homicides Clearances an Analysis of Arrest Versus Exceptional Outcomes

John P. Jarvis
Federal Bureau of Investigation

Wendy C. Regoeczi
Cleveland State University, w.regoeczi@csuohio.edu

Follow this and additional works at: https://engagedscholarship.csuohio.edu/clsoc_crim_facpub

 Part of the [Criminology Commons](#)

[How does access to this work benefit you? Let us know!](#)

Publisher's Statement

(c) 2009 Sage Publications

Original Citation

Jarvis, J. P., & Regoeczi, W. C. (2009). Homicides Clearances: An Analysis of Arrest Versus Exceptional Outcomes. *Homicide Studies*, 13(2), 174-188. doi:10.1177/1088767909331694

Repository Citation

Jarvis, John P. and Regoeczi, Wendy C., "Homicides Clearances an Analysis of Arrest Versus Exceptional Outcomes" (2009). *Sociology & Criminology Faculty Publications*. 88.
https://engagedscholarship.csuohio.edu/clsoc_crim_facpub/88

This Article is brought to you for free and open access by the Sociology & Criminology Department at EngagedScholarship@CSU. It has been accepted for inclusion in Sociology & Criminology Faculty Publications by an authorized administrator of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.

HOMICIDES CLEARANCES AN ANALYSIS OF ARREST VERSUS EXCEPTIONAL OUTCOMES

John P. Jarvis, *Federal Bureau of Investigation*
Wendy C. Regoeczi, *Cleveland State University*

This article was originally published in:

Jarvis, John P. and Wendy C. Regoeczi (2009). Homicide Clearances an Analysis of Arrest Versus Exceptional Outcomes. *Homicide Studies*, 13(2), 174-188.

Post-print standardized by MSL Academic Endeavors, the imprint of the Michael Schwartz Library at Cleveland State University, 2013



Homicides Clearances

An Analysis of Arrest Versus Exceptional Outcomes

John P. Jarvis

Federal Bureau of Investigation

Wendy C. Regoeczi

Cleveland State University

A number of studies in the homicide clearance literature combine arrest and exceptional clearances into a single category. This study addresses the question of whether these divergent homicide case outcomes are influenced differently by various aspects of the case. Using National Incident-Based Reporting System data on homicides from 1996 to 2002, the authors analyze logistic regression models of cases cleared by arrest and exceptionally cleared. Our results show that although certain factors have similar influences on both arrest and exceptional clearances, victim gender, offender race, weapon use, victim/offender relationship, and circumstances have differing impacts on case outcomes. The findings challenge recent research findings on clearances suggesting that exceptional clearances are almost solely politically motivated, and implications for measuring clearance are discussed.

Keywords: *clearance; arrest; homicide investigations*

Empirical studies have long been devoted to examining the causes and correlates of incidents of homicide. Although theoretical papers, research summaries, and public policy reviews of issues concerning homicide and violence have been thoroughly explored in many of these efforts, one issue has escaped significant attention: law enforcement's efforts to identify and arrest suspects for this criminal offense. Statistically, this is typically reported as a crime clearance in the FBI's Uniform Crime Reports (see Federal Bureau of Investigation [FBI], 1992). The work offered here seeks to further explore our understanding of homicide clearances and to contribute to recent efforts to fill this gap in the literature (see Alderden & Lavery, 2007; Jarvis & Regoeczi, 2007; Litwin & Xu, 2007, Roberts, 2007).

Clearly criminal cases are resolved in differing manners. In terms of homicide (and all other crimes for that matter), cases essentially result in one of three outcomes: following appropriate investigation they are cleared by the arrest of a suspect, they are exceptionally cleared because of specific extraordinary circumstances,

Authors' Note: Please address correspondence to John P. Jarvis, Federal Bureau of Investigation, Quantico, VA 22135; e-mail: jjarvis@fbiaacademy.edu.

or the case remains unsolved (or uncleared). Most of the research that has been devoted to homicide solvability has focused on the successful arrest of a suspect, or, in the terms used here, the traditional case clearance by arrest. Little research, in contrast, has examined the exceptional clearance outcome (with the exception of Riedel & Boulhanis, 2007, which is explored more later). From the perspective of police practice, homicides resulting in exceptional clearances typically represent a distinct group of cases in terms of what the investigation requires. Although the issue of homicide clearance has garnered increasing attention from criminological researchers over the past decade, the existence of these different forms of clearance—arrest and exceptional—has received little discussion in the academic literature. In fact, as noted earlier, the authors are only aware of one study that examines exceptional clearances as a distinct category of homicide clearance (Riedel & Boulhanis, 2007). That study uses Chicago homicide data and focuses on the exceptional clearance category of “barred to prosecution” (cases that are cleared where no lawful arrest has been made and the suspected offender is not deceased), which constitute 80% of the exceptionally cleared cases in Chicago between 1988 and 1995. In most of the remaining studies on the subject, the issue of exceptional clearances is typically relegated to a footnote indicating whether or not exceptional clearances have been dropped from the analysis or combined with cases cleared by arrest. In fact, in a few studies the issue of exceptional clearances is not addressed at all (e.g., Cardarelli & Cavanagh, 1994; Marché, 1994; Welford & Cronin, 1999).

With the exception of Riedel and Boulhanis (2007), existing research has not recognized the importance of the distinction between case clearance by arrest versus case clearance by exceptional means. We believe this area of research is important for at least four reasons. First, the exceptional clearance case represents a special case outcome in the sense that the homicide is considered solved but no offender is ever arrested, giving the impression that no one is held responsible. Second, existing datasets (including the traditional Uniform Crime Reports) often do not distinguish between these outcomes even though the underlying cases may be substantially different in terms of victim, offender, or offense characteristics. Third, many police agencies report both arrest clearances and exceptional clearances as an aggregate number thereby potentially inflating their reported clearance rates. And fourth, the recent Riedel and Boulhanis (2007) study, as noted above, used the Chicago Homicide dataset to examine the issue of exceptional clearances; we believe it is important to extend this research using a more nationally diverse set of data. For all of these reasons, the current article attempts to directly address the question of whether exceptional clearances are distinct from clearances by arrest and whether case characteristics are predictive of these outcomes. If so, exceptional clearances would represent a distinct category practically and methodologically, thereby having import for any research devoted to defining, measuring, and explaining homicide clearance.

Prior Research

Although a growing number of studies that examine factors affecting the likelihood of homicide clearance are emerging, no consistent manner of accounting for exceptional case clearances has been employed. A number of studies combine them with homicides cleared by arrest (e.g., Addington, 2006; Alderden & Lavery, 2007; Lee, 2005; Mouzos & Muller, 2001; Puckett & Lundman, 2003; Regoeczi, Jarvis, & Riedel, 2008; Regoeczi, Kennedy, & Silverman, 2000), whereas other researchers report or imply that they have been dropped from the analysis (e.g., Borg & Parker, 2001; Litwin, 2004; Roberts, 2007). At least two studies report repeating the analysis with the exceptional clearances returned to the dataset to assess the impact of their removal (Litwin, 2004; Litwin & Xu, 2007).

Factors Affecting Homicide Clearance

A growing body of research on homicide clearances, as well as a larger literature on policing more generally, identifies several factors as relevant to the likelihood of clearing a homicide case.

Felony-Related Homicides

Several studies find that felony-related homicides are more difficult to clear than homicides resulting from other circumstances (Cardarelli & Cavanagh, 1994; Lee, 2005; Mouzos & Muller, 2001; Regoeczi et al., 2000; Riedel & Rinehart, 1996; Rinehart, 1994; Roberts, 2007), which may be the result of a greater involvement of strangers in felony homicides, making it harder to identify a suspect. In contrast, homicides involving expressive-type circumstances are more likely to be cleared (Alderden & Lavery, 2007). Riedel and Boulahanis (2007) found no significant effect for felony-related homicides on the likelihood a case would be exceptionally cleared; however, altercations generally and domestic altercations specifically increased the odds of an exceptional clearance. Following earlier work by Riedel and Jarvis (1998), we predict that gang-related homicides will have a greater likelihood of being exceptionally cleared than cleared by arrest. Gang homicides result in fear that inhibits the cooperation of witnesses with police reducing the likelihood of arrest while at the same time there is a greater likelihood of retaliation, increasing the likelihood the offender will be killed prior to being arrested.

Weapons

Homicides committed with weapons such as knives that bring the offender and victim into contact with one another generally increase the likelihood of clearing the

case (Addington, 2006; Mouzos & Muller, 2001; Puckett & Lundman, 2003; Roberts, 2007). The majority of studies find homicides committed with firearms are less likely to be cleared (Alderden & Lavery, 2007; Litwin, 2004; Litwin & Xu, 2007; Mouzos & Muller, 2001; Regoeczi et al., 2000; Regoeczi et al., 2008; Rinehart, 1994). Riedel and Boulahanis (2007) found no significant effects for different types of firearms or sharp instruments on the likelihood of the case being exceptionally cleared. We predict that homicides committed with contact weapons will have a low likelihood of exceptional clearance. If the offender is killed prior to arrest, it is unlikely this would occur with a weapon such as a knife regardless of whether the death occurs as a suicide, shooting by police, or homicide by another offender.

Location

A consistent finding in the literature is the greater likelihood of clearance for cases occurring in homes (Addington, 2006; Litwin & Xu, 2007; Mouzos & Muller, 2001; Regoeczi et al., 2008; Wellford & Cronin, 1999). In one study, public areas such as streets and stores also increased the odds of clearance (Litwin & Xu, 2007). Riedel and Boulahanis (2007) noted that the odds of a case being barred to prosecution (exceptionally cleared) were greater for homicides occurring in private indoor areas and public outdoor locations, which they theorized may be because of a lack of witnesses and/or evidence needed to help build a case strong enough to go forward with a prosecution. We examine whether exceptional clearances produce the same patterns using more geographically diverse data.

Time

Time of day is rarely included in studies of homicide clearance. One study which has examined its influence on homicide clearance does not find a significant effect (Roberts, 2007), whereas a study using Chicago data reports a decreased odds of clearing the case when the homicide occurred during late night hours (e.g., 12 a.m. to 5.59 a.m.; Alderden & Lavery, 2007).

Victim Characteristics

One of the more consistent findings in the literature is the high homicide clearance rates for cases involving child victims, and the greater difficulty of clearing cases involving the elderly (Addington, 2006; Alderden & Lavery, 2007; Cardarelli & Cavanagh, 1994; Lee, 2005; Puckett & Lundman, 2003; Regoeczi, Kennedy, & Silverman, 2000; Riedel & Rinehart, 1996). In contrast, victim age was not found to affect the likelihood the case would be exceptionally cleared (Riedel & Boulahanis, 2007). We predict that homicides involving elderly victims will be more likely to be exceptionally cleared than cleared by arrest, as they may be more

likely to involve a suicide pact with an ailing spouse than homicides involving younger victims.

Studies which look at characteristics such as victim race and gender have produced mixed results. Some studies find that cases involving non-White victims are more likely to be solved (Mouzos & Muller, 2001; Regoeczi et al., 2000), but other research finds the opposite (Lee, 2005; Litwin & Xu, 2007). Homicides of White victims are more likely to be exceptionally cleared (Riedel & Boulahanis, 2007). Several studies report a higher likelihood of clearance for female victim cases (Alderden & Lavery, 2007; Lee, 2005; Regoeczi et al., 2008), whereas, others find no gender differences (Addington, 2006; Mouzos & Muller, 2001) or a greater likelihood of clearance for male victims (Litwin & Xu, 2007). Riedel and Boulahanis (2007) found male victim/male offender homicides were less likely to be cleared exceptionally (barred to prosecution) than cleared by arrest. We predict that homicides of female victims will have a greater likelihood of exceptional clearance as women are much more likely than men to be killed by an intimate partner who may take their own life as part of the event.

Victim/Offender Relationship

Cases where the victim/offender relationship is unknown have lower clearance rates. However, the categorization of a victim/offender relationship as unknown is typically a reflection of the fact that the case is still open and no one has been arrested. For this reason, many studies do not include victim/offender relationship when analyzing case solvability. Because all of the cases in our analysis are deemed solved, we do not have this problem. So we examine the role of victim/offender relationship in distinguishing between cases cleared by arrest and exceptionally.

Although the Riedel and Boulahanis (2007) study begins to fill some of the gap in the literature regarding exceptional clearances as a distinct category, more research is clearly needed. Their study uses data from Chicago, which is one of few datasets that distinguishes between arrest versus exceptional clearances. It is unclear to what extent the findings from Chicago are unique to their jurisdiction. Our preliminary examination of clearance data from the National Incident-Based Reporting System indicates that these national data produce different patterns from that found for Chicago. For example, in Chicago the large majority of exceptional clearances were classified as “barred to prosecution.” In our NIBRS dataset (described below), just 12% were categorized as “prosecution declined.”

Method

The data used for this study are drawn from the FBI’s National Incident-Based Reporting System (NIBRS). Like the traditional Uniform Crime Reports (UCR),

NIBRS is based on data supplied by law enforcement agencies in the United States. Unlike the UCR, NIBRS is incident-based, with data collected on each single incident and arrest within “22 offense categories made up of 46 specific crimes called Group A offenses” (FBI, 1992, p. 1). NIBRS data are well suited for our research questions for several reasons. First, although NIBRS data are not yet nationally representative, our analysis uses homicide data as reported by agencies in 20 states and Washington D.C. Although NIBRS reports were primarily submitted by smaller police departments in the early 1990s, in recent years much larger urban jurisdictions (e.g., Austin TX, Fairfax VA, Memphis TN, Cincinnati OH, Nashville TN) have submitted crime data to the FBI according to the NIBRS specifications. Moreover, several studies of homicide and policing have shown remarkable consistency between NIBRS and Supplementary Homicide Report (SHR) data as well as other sources of more nationally representative data (see Chilton & Jarvis, 1999a; 1999b; FBI, 1999). Second, NIBRS data provide the separate delineation of exceptionally cleared incidents as compared to the aggregate reporting of total clearances for all reasons available in the summary UCR reports (FBI, 1984, p. 47).¹ Lastly, the variation in both police practice and the nature and scope of incidents of lethal violence in these data are likely to be superior to any other available sources of data for studying exceptional clearances (which are essentially limited to either a single city or state).

We analyze all incidents of murder and nonnegligent manslaughter reported in NIBRS between 1996 and 2002. We limit our study to cases involving single victims and single offenders because of the overlap of information on incident characteristics for homicides with multiple victims and offenders². We also eliminated 242 cases to which we were unable to assign population data for their jurisdiction³ as required for the creation of one of the independent variables in our analysis (see below).

Dependent Variable

The FBI defines the clearance of a criminal incident as follows: An offense is “cleared by arrest” or solved for crime reporting purposes when at least one person is (a) arrested; (b) charged with the commission of the offense; and (c) turned over to the court for prosecution (FBI, 1984, p. 41).

Consider also the definition of exceptional clearances: In certain situations law enforcement is not able to clear offenses known to them. Many times all leads have been exhausted and everything possible has been done to clear a case. If the following questions can all be answered “yes,” the offense can be cleared “exceptionally” for crime reporting purposes: (a) Has the investigation definitely established the identity of the offender? (b) Is there enough information to support an arrest, charge, and turning over to the court for prosecution; (c) Is the exact location of the offender known so that the subject can be taken into custody now? (d) Is there some reason outside law enforcement control that precludes arresting, charging, and prosecuting the offender? (FBI, 1984, p. 42).

This latter definition is also used in NIBRS (FBI, 2000) and the attendant coding schemes provide for the following relevant outcome codes for an exceptional clearance of a homicide case: (a) death of the offender,⁴ (b) prosecution declined (for other than lack of probable cause), and (c) extradition denied. The dependent variable in our analyses uses these outcome measures and definitions to derive a dichotomous variable: 0 = *cleared by arrest*, 1 = *exceptionally cleared*. Cleared by arrest is the most common outcome, comprising 89.2% of homicides in the dataset (see descriptive statistics in Table 1).

Independent Variables

We selected as predictors those victim and incident characteristics available in NIBRS that have been shown in prior research to influence homicide clearance, regardless of how clearance was measured. We also created a set of offender-related variables for inclusion in the model because we are examining only solved cases.

Victim characteristics. We include measures of victim gender (female victim), victim race (White vs. non-White victim) and victim age (victim under 10; victim 11-64 years; victim 65 years and over). The category of victims under 10 has been examined in prior research on homicide clearances (e.g., Cardarelli & Cavanagh, 1994; Regoeczi et al., 2000; Riedel & Rinehart, 1996). Victims 11 to 64 years are the reference category.

Weapon. We categorize weapons into firearms, contact weapons (knife/cutting instrument, blunt object, personal weapons such as hands and feet, and asphyxiation), and other weapons. Firearms are the reference category.

Location. Locations are categorized as residential locations/homes, other indoor locations (air/bus/train terminal, bank/savings and loan, bar/nightclub, church/synagogue/temple, commercial/office building, convenience store, department/discount store, drug store/doctor's office/hospital, government/public building, grocery/supermarket, hotel/motel, jail/prison, liquor store, rental storage facility, restaurant, school/college, specialty store), outdoor locations (construction site, field/woods, highway/road/alley, lake/waterway, parking lot/garage, service/gas station), and other locations. Homes are the reference category.

Time. Time of the homicide is broken down into those incidents occurring between 8 a.m. and 3.59 p.m. or what is commonly the first policing shift, 4 p.m. and 11.59 p.m. or what is commonly the second shift, and midnight and 7.59 a.m. or what is commonly the third shift.

Circumstances. Circumstances are categorized as those that are felony-related (drug dealing, other felony involved), arguments (argument, lovers' quarrel), other

circumstances (assault on law enforcement officer, gangland, juvenile gang, mercy killing, other circumstances), and unknown circumstances. Arguments are the reference category.

Jurisdiction size. We control for the size of the jurisdiction by generating a 3-category variable that was created by dividing the population covered by the reporting police agency into three equal intervals. Small jurisdictions have populations up to 29,747, medium jurisdictions cover populations between 29,753 and 126,351, and large jurisdictions have populations greater than 126,351. Small jurisdictions are the reference category.

Offender characteristics. We include measures of offender gender (female offender), offender race (White vs. non-White offender) and offender age (as a continuous variable because there is insufficient prior research to identify particular age categories as being important for distinguishing between the two types of clearances).

Victim/offender relationship. The relationships between the victim and offender were grouped into four categories: family (spouse, ex-spouse, common-law spouse, parent, sibling, child, grandparent, grandchild, in-law, stepparent, stepchild, stepsibling, homosexual relationship, other family), friend/acquaintance (friend, acquaintance, neighbor, babysitter, boyfriend/girlfriend, child of boyfriend/girlfriend, employee, employer, otherwise known relationship), stranger, and unknown relationship.

Analysis

Using these operationalizations, we employ logistic regression analysis to examine the impact of these independent variables on the outcome variable of cases cleared by arrest or exceptionally cleared. By doing so, we aim to show that these clearance outcomes are not only distinct but that the predictor variables play differing roles in explaining these outcomes.

Missing data on the independent variables are handled using multiple imputation. Given that the amount of missing data is small, we created four datasets with imputed values for missing victim and offender characteristics (none of the incident variables had missing values) using the ICE (Imputation by Chained Equations) procedure in STATA (Royston, 2004). The results of the logistic regression analyses on these multiple imputed datasets were combined using the STATA procedure MICOMBINE.

Results

Descriptive statistics for all of the variables included in the analysis are displayed in Table 1. Although NIBRS data are not collected from all police departments in the country, these data replicate many national patterns. For example, the majority of

Table 1
Descriptive Statistics, Homicides Reported to the National
Incident-Based Reporting System 1996–2002 (N = 3,372)

Variable	Frequency	Percentage
Case outcome		
Cleared by arrest	3009	89.2
Exceptionally cleared	363	10.8
Victim Age		
Under 10 years	242	7.4
11–64 years	2778	85.5
65 years and over	231	7.1
Missing	121	
Victim gender		
Female	1248	37.2
Male	2106	62.8
Missing	18	
Victim race		
White	2900	88.7
Non-White	1372	41.3
Missing	52	
Weapon ^a		
Firearm	1747	51.8
Contact weapon	1245	36.9
Other weapon	483	14.3
Location		
Residence/home	2227	66.0
Other Indoor location	277	8.2
Outside location	672	19.9
Other location	196	5.8
Time		
First shift	874	25.9
Second shift	1358	40.3
Third shift	1037	30.8
Circumstances ^b		
Argument	1594	47.3
Felony-related	221	6.6
Other circumstances	722	21.4
Unknown circumstances	903	26.8
Offender age		
Under 17 years	174	5.2
18–29 years	1382	41.4
30–59 years	1610	48.2
60 years and over	171	5.1
Missing	35	
Offender gender		
Female	460	13.7
Male	2900	86.3

(continued)

Table 1 (continued)

Variable	Frequency	Percentage
Missing	12	
Offender race		
White	1851	55.3
Non-White	1496	44.7
Missing	25	
Victim/offender relationship		
Family	1022	30.3
Acquaintance	1634	48.5
Stranger	251	7.4
Unknown relationship	465	13.8

a. Percentages add up to more than 100 because of multiple weapons used in a single incident

b. Percentages add up to more than 100 because of multiple circumstances being identified in a single incident

homicide victims in these data are male, between the ages of 18 and 35, and are killed with a firearm. Argument is the largest circumstance category, followed by unknown circumstances.

Table 2 displays the results of the logistic regression analysis comparing arrest versus exceptional case outcomes. We find that the impact of victim and incident characteristics on the two forms of clearances differ in a number of ways. For example, cases involving females, other circumstances (versus arguments), and those occurring in large jurisdictions increase the odds of an exceptional clearance compared to an arrest clearance. Relative to homicides committed with firearms, the odds of an exceptional clearance are reduced in cases involving contact weapons and other weapons. Three offender characteristics also influence the likelihood the case will be cleared exceptionally rather than by arrest. Cases involving White offenders and older offenders are more likely to be exceptionally cleared than cleared by arrest. In contrast, cases involving acquaintances and those where the victim/offender relationship is unknown are more likely to be cleared by arrest than exceptionally.

Discussion

This study uses logistic regression analysis to examine whether the two different homicide case outcomes of clearance by arrest versus clearance by exceptional means are truly distinct. Overall, the results suggest that although some incident and victim characteristics have a similar impact on the odds of clearing a case by arrest or exceptionally and/or do not distinguish between the two forms of clearance, there are a number of factors that influence the clearance categories differently.

Table 2
Logistic Regression Model Comparing Exceptional vs. Arrest
Clearances for Homicides Reported to the National
Incident-Based Reporting System, 1996-2002 (N = 3,372)

Predictor	<i>B</i>	Exp(<i>B</i>)
Victim under 10 years	0.142	1.153
Victim aged 65 & over	0.154	1.167
Female victim	1.714**	5.552
White victim	0.362	1.436
Contact weapon ^a	-2.102**	0.122
Other weapon ^a	-1.638**	0.194
Other indoor location ^b	0.371	1.449
Outdoor location ^b	-0.194	0.823
Other location ^b	-0.483	0.617
Second shift ^c	-0.146	0.864
Third shift ^c	-0.212	0.809
Felony-related ^d	-.353	0.703
Other circumstances ^d	0.350**	1.419
Unknown circumstances ^d	-0.188	0.828
Female offender	0.009	1.009
White offender	0.591*	1.806
Offender age	0.020**	1.020
Acquaintance ^e	-0.576**	0.562
Stranger ^e	-0.658	0.518
Unknown relationship ^e	-1.164**	0.312
Medium jurisdiction ^f	-0.069	0.933
Large jurisdiction ^f	0.324*	1.383
Intercept	-3.265**	

a. Reference category = Firearm

b. Reference category = Residential location

c. Reference category = First shift

d. Reference category = Argument

e. Reference category = Family

f. Reference category = Small jurisdiction

*p < .05. **p < .01.

Homicides of females are more likely to result in exceptional clearances. These cases likely involve women murdered by intimate partners who then kill themselves. Our finding that homicides are more likely to be exceptionally cleared than cleared by arrest when they involve older offenders may reflect cases of elderly couples who enter into a pact to end their lives together (Lester & Tallmer, 1994). It is perhaps not surprising that exceptional clearances are less likely than arrest clearances to involve contact weapons or other weapons, or alternatively, they are more likely to involve firearms. Many of these cases involve the death of the offender, some of which are likely to

be murder-suicides committed with guns, facilitating the desire of the perpetrator to end their own life as part of the incident. Cases of offenders killed by the police or in retaliatory violence by other offenders are also likely to involve guns.

Our results show that compared to family related homicides, acquaintance and unknown victim/offender relationship homicides are more likely to be cleared by arrest than exceptionally. One might expect that homicides where the relationship is difficult to determine are not going to involve murder-suicides, gangs exchanging retaliatory violence, or killings of suspects by police, and thus would be less likely to be exceptionally cleared. Furthermore, in the case of both acquaintance and unknown relationship homicides, police may have more difficulty exceptionally clearing cases where prosecution has been declined given the greater possibility of a new suspect emerging compared to family homicides. That cases involving other circumstances are more likely to be exceptionally cleared than those involving arguments may be the result of the classification of both gang-related and mercy killings as “other” in this analysis. As noted above, mercy killings can involve suicide pacts, and gang-related killings can result in retaliatory homicides, both leading to the death of the offender, and thus exceptional clearances.

Before discussing the importance of these findings for the understanding of homicide case outcomes, at least two important limitations relating to the data used here should be noted. First, NIBRS data are subject to some of the same limitations as other secondary datasets on crime. In particular, these data lack detailed information on some of the investigative and procedural aspects of homicide investigations (i.e., the availability of witnesses, police response times, number of detectives assigned to the case, and other details). Such data would improve efforts to understanding homicide solvability. Second, although NIBRS provides for more geographically diverse incident reporting than the single previous study of exceptional clearances that focused on Chicago, NIBRS data continue to be commonly viewed as overrepresenting rural and small jurisdictions so generalization of these findings may be somewhat limited. However, as noted earlier (see p. 8), this criticism may be tempered somewhat by recent reporting by some larger jurisdictions.

Our findings diverge considerably from those reported by Riedel and Boulahanis (2007). There are several possible reasons why we did not replicate their findings. One is that we used slightly different measures and different reference categories than Riedel and Boulahanis employed. But a more important reason may be the differing nature of exceptional clearances in Chicago compared to what is found in the National Incident-Based Reporting System data. Chicago’s exceptional clearance category is dominated by cases deemed to be “barred to prosecution” whereas the majority of exceptional clearances in NIBRS are because of the death of the offender. Homicide cases that may be closed by police because there is not enough viable evidence available to support an adequate case for prosecution to proceed certainly present much different investigative issues than cases that are closed because the suspected offender is no longer alive. Thus, we might expect that the factors influencing these different types of exceptional clearances may differ as well.

It is interesting to note that the two studies that combine arrest and exceptional clearances as the dependent variable but report that the results remain the same when the exceptional cases are removed both involve Chicago data (Litwin, 2004; Litwin & Xu, 2007). In other words, they both analyzed clearance data that are dominated by barred to prosecution cases in the exceptional category. These cases likely entail some degree of police investigation and likely involve an arrest or at least the identification of a likely suspect, much like cases that are cleared by arrest. In other words, in Chicago the exceptional clearances may share similarities to arrest clearances that may not be seen in other jurisdictions because of the rather unique makeup of the exceptional clearance category in Chicago. An interesting avenue to explore would be to see whether studies of homicide clearance in other jurisdictions yield the same results with and without the exceptional clearances included in the cleared category to get a sense of whether Chicago is something of an anomaly regarding this pattern.

The findings of the current study support the contention that exceptional clearances are not simply a residual category of clearance outcomes that may be either included or excluded at the discretion of the policing agency or the researcher. In short, exceptional clearances are not the same as clearances by arrest. As such, the extent to which these exceptional clearances occur and whether or not these cases are systematically handled effectively is a matter for further research. Future research should also take advantage of the detailed information provided by NIBRS to study clearances of not just homicides but also other violent and property offenses, particularly as more and more urban areas join the jurisdictions already represented in the NIBRS program.

Notes

1. Because many studies rely on UCR and SHR data for some analyses of homicide and violence, this historical lack of specificity may help to explain why few studies have attempted to examine clearances of homicide or other crimes across a large number of jurisdictions heretofore.

2. Single victim/single offender cases comprise the overwhelming majority of cases reported in NIBRS. Enumerations of both single victim cases and single offender cases reveal these cases comprise approximately 80% of the total incidents reported. NIBRS does provide for reporting of multiple victims and multiple offenders in homicide incidents. However, in addition to concerns about overlapping incident data, we also chose to restrict this analysis to single victim/single offender cases to avoid violating assumptions of independence in the statistical modeling of these data.

3. No population values are assigned to these law enforcement agencies by policy of the NIBRS Reporting Program of the Federal Bureau of Investigation (see Lynch & Jarvis, 2008; Maltz, 1999). These agencies are typically state police agencies or other law enforcement entities that have statewide jurisdiction.

4. Unfortunately, NIBRS does not provide further detailed information that would allow us to determine whether the offender's death was the result of being killed by the police, another offender, or a suicide. Although some of the "death of offender" cases in our dataset are likely suicides, separate analyses of these death of offender incidents suggest that many are not. For example, nearly half (46.4%) of these death-of-offender exceptional clearances do not occur the same day as the homicide. Furthermore, a third of them involve friend/acquaintances, strangers, or other nonfamily relationships, which does not fit the scenario of a family homicide/suicide incident.

References

- Addington, L. A. (2006). Using National Incident-Based Reporting System Murder Data to Evaluate Clearance Predictors: A Research Note. *Homicide Studies 10*, 140-152.
- Alderden, M. A., & Lavery T. A. (2007). Predicting homicide clearances in Chicago: Investigating disparities in predictors across different types of homicide. *Homicide Studies 11*(2), 115-132.
- Borg, M. J., & Parker, K. F. (2001). Mobilizing law in urban areas: The social structure of homicide clearance rates. *Law & Society Review*, 35, 435-466.
- Cardarelli, A. P., & Cavanagh D. (1992, November). *Uncleared homicides in the United States: An exploratory study of trends and patterns*. Paper presented at the annual meeting of the American Society of Criminology. New Orleans.
- Chilton, R. & Jarvis J. (1999a). Using National Incident-Based Reporting System (NIBRS) to Test Estimates of Arrestee and Offender Characteristics. *Journal of Quantitative Criminology*, 15, 207-229.
- Chilton, R. & Jarvis J. (1999b). Victims and Offenders in Two Crime Statistics Programs: A Comparison of the National Incident-Based Reporting System (NIBRS) and the National Crime Survey (NCVS). *Journal of Quantitative Criminology*, 15, 193-206.
- Federal Bureau of Investigation. (1984). *Uniform Crime Reporting Handbook*. U.S. Government, Washington, DC.
- Federal Bureau of Investigation. (1992). *Uniform Crime Reporting Handbook: NIBRS Edition*. U.S. Government, Washington, DC.
- Federal Bureau of Investigation. (1999). *Crime in the United States 1998*. U.S. Government, Washington, DC.
- Federal Bureau of Investigation. (2000). *National Incident-Based Reporting System Volume 1: Data Collection Guidelines*. U.S. Government, Washington, DC.
- Jarvis, J. P., & Regoeczi, W. C. (2007). Murder clearance rates: Guest editors' introduction. *Homicide Studies 11*(2), 79-81.
- Lee, C. (2005). The value of life in death: Multiple regression and event history analyses of homicide clearance in Los Angeles County. *Journal of Criminal Justice 33*, 527-534.
- Lester, D. & Tallmer, M. (Eds.). (1994). *Now I lay me down: Suicide in the elderly*. Philadelphia: Charles Press.
- Litwin, K. J. (2004). A multilevel multivariate analysis of factors affecting homicide clearances. *Journal of Research in Crime and Delinquency 41*, 327-351.
- Litwin, K. J., & Xu. Y. (2007). The dynamic nature of homicide clearances: A multilevel model comparison of three time periods. *Homicide Studies 11*(2), 94-114.
- Lynch, J. P., & Jarvis J. P. (2008). Missing data and imputation in the Uniform Crime Reports and the effects on national estimates. *Journal of Contemporary Criminal Justice*, 24, 69-85.
- Marché, G. E. (1994). The production of homicide solutions B an empirical analysis. *American Journal of Economics and Sociology 53*, 385-401.
- Maltz, M. (1999). *Bridging Gaps in Police Crime Data*. Office of Justice Programs: Bureau of Justice Statistics, Washington, DC.
- Mouzos, J., & Muller D. (2001). Solvability factors of homicide in Australia: An exploratory analysis. *Trends and Issues in Crime and Justice* No. 216. Canberra: Australian Institute of Criminology.
- 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, 171-193.
- Regoeczi, W. C., Jarvis J., & Riedel, M. (2008). Clearing murders: Is it about time? *Journal of Research in Crime and Delinquency*, 45, 142-162.
- Regoeczi, W. C., Kennedy, L. W., & Silverman, R. A. (2000). Uncleared homicide: A Canada/United States comparison. *Homicide Studies 4*, 135-161.
- Riedel, M., & Boulahanis, J. G. (2007). Homicides exceptionally cleared and cleared by arrest: An exploratory study of police/prosecutor outcomes. *Homicide Studies 11*, 151-164.

- Riedel, M. & Jarvis, J. (1998). The decline of arrest clearances for criminal homicide: Causes, correlates, and third parties. *Criminal Justice Policy Review* 9, 279-306.
- Riedel, M. and Rinehart, T. A. (1996). Murder clearances and missing data. *Journal of Crime and Justice*, 19, 83-102.
- Rinehart, T. A. (1994). *An analysis of murder clearances in Chicago: 1981-1991*. Southern Illinois University.
- Roberts, A. (2007). Predictors of homicide clearance by arrest: An event history analysis of NIBRS incidents. *Homicide Studies* 11, 82-93.
- Royston, P. (2004). Multiple imputation of missing values. *Stata Journal* 4, 227-241.
- Wellford, C., & Cronin, J. (1999). *An Analysis of Variables Affecting the Clearance of Homicides: A Multistate Study*. Washington, DC: Justice Research and Statistics Association.