

MURDER KNOWS NO BOUNDS



2010 Meeting of the

HOMICIDE

RESEARCH WORKING GROUP

Homicide and Violence: Research Issues
and

Practical Implications for the Coming Decade

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Paper Summaries

2010 Homicide Research Working Group **Paper Summaries¹**

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Homicide Trends for Four New England and Four Ohio Cities with Detailed Examinations of Murders in Two of Them

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Issues

When looking beyond simple counts of murder and non-negligent manslaughter in U.S. cities the most readily available data are the arrest counts, classified by the age, race, and sex of suspected offenders. For victim characteristics researchers usually use SHR files, NIBRS files, or carry out detailed studies of police records, newspaper homicide accounts, or both. For this discussion of homicide victims we use counts of homicides compiled by the National Center for Health Statistics of the Centers for Disease Control and Prevention (CDC) after they have been combined with census data and UCR offense and arrest counts. Combining the UCR, CDC, and census data is part of a larger project with John Jarvis to create an integrated city level homicide file. In addition to the combined data set, we used some information from detailed homicide studies for Cleveland OH and Springfield MA as a way to illuminate the formal reports.

Since the CDC files present counts of deaths attributed to four other external causes of death (accident, suicide, motor vehicle accident, and undetermined), we can compare trends for these five causes for over 150 cities. The first issue that appears when we do this concerns the relationship of accidents, suicides, and homicides. Why are the accident rates and sometimes the suicide rates so high for some cities with low homicide rates? Resolution of this issue will probably require more detailed knowledge of the work of coroners and medical examiners. We need to know the process that is followed when a body is discovered. This issue will be important to anyone working with local police files to develop a detailed homicide data base.

The second issue that arises when we look at the mortality data is the pervasive role of age, race, and sex in most homicides and the vulnerability of 15-29 year old black men. Why do black men constitute the great majority of homicide victims in cities with more than 100,000 residents? Why do we see this over representation in all four Ohio cities and all four New England cities for the 1980 to 2004 period? And why is this issue so consistently ignored by homicide researchers?

Four Ohio Cities

With these issues in mind, we first consider the trends for four Ohio cities. Figure 1 (page 2) shows the UCR and, starting in 1980, the CDC homicide rates and the variation in overall homicide rates for the four cities. While the figure shows that the UCR and CDC homicide rates are generally close for Cleveland and Cincinnati it indicates that these rates are not so close for Akron and Columbus. We expect the CDC rate to be slightly lower than the UCR rate because the UCR rate reflects all homicides in a city and the CDC rate reflects only homicides of city residents. Still, the differences seem quite large for Akron and Columbus. Moreover, the rising CDC homicide rates for Columbus from 2000 to 2004, without a comparable rise in the UCR homicide rate, is puzzling as is the fact that the 1999 to 2000 CDC rates for Akron are higher than the UCR homicide rates.

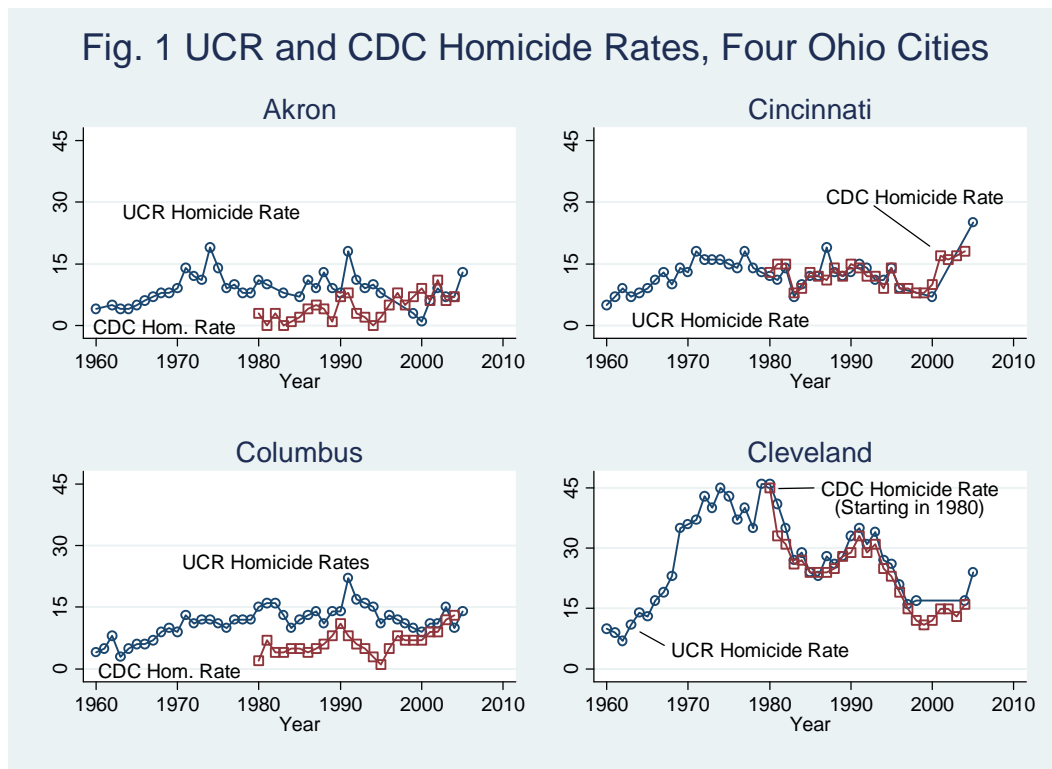


Figure 2 (on page 3) goes beyond the homicide rates and highlights the variation in the classification of externally caused deaths in Cleveland. The rates for motor vehicle accidents, suicides, and undetermined deaths (other) are stable, but why is there so much variation in the accident rate? Is it possible that the classification of some deaths as accidents from 1999 to 2004 is in part responsible for the lower CDC homicide rate for this period? A hypothetical case shows why classification is important. If the body of a young man is found at the base of a four

story building following a rooftop party, the death may be classified as an accident if others saw him trip and fall from the roof. It might be called a suicide if there is testimony that he intentionally jumped from the roof. If there is evidence that he was intentionally pushed from the roof, the death might be classified as a homicide. In such a case we think the medical examiner would have to rely, in part, on information in a police report to make a decision. Before returning to this issue, we consider a different but equally important issue.

Figure 3 (on page 3) shows the vulnerability to homicide of young black men in all four cities. The homicide rates for this category of the population reaches 250 per 100,000 15-29 year old black men in Cleveland and Cincinnati, but even when it is not at such high levels, the rate is between 50 and 100 for many years. No other age, sex, and race category has homicide rates as consistently high. Much of the 1993 to 2000 drop in the Cleveland murder rate was possible because the rate for this group rose sharply from 1987 to 1993 and.

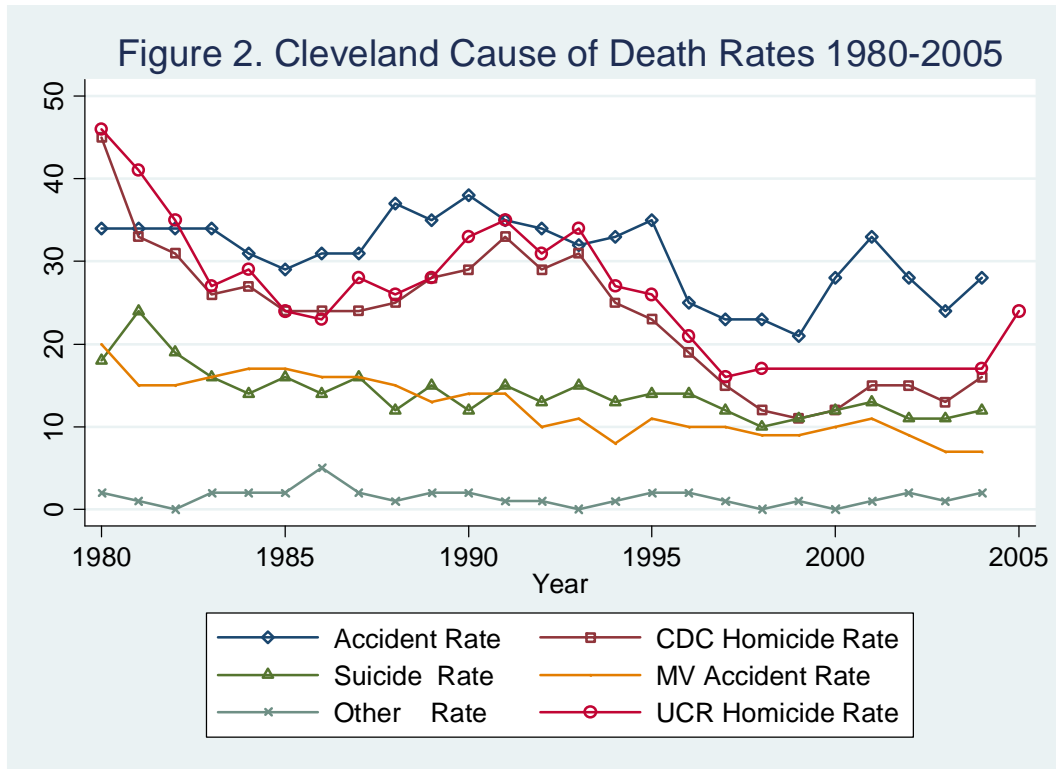
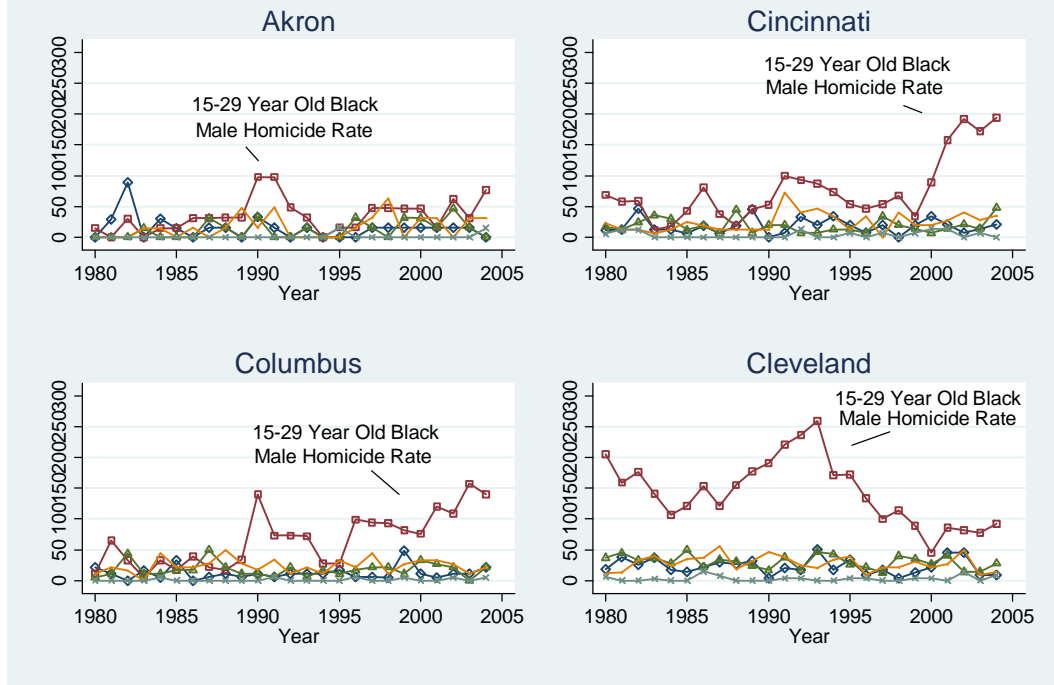


Fig. 3 Black Male, 15-29, Death Rates for Four Ohio Cities



Detailed Information for Cleveland

It would have been nice to have detailed information on Cleveland homicides for 1980 to 1985 and for 1990 to 2000 so that the files might tell us more about the fluctuations in these years. However, the detailed narratives and the corresponding data we have for 1998 through 2002 provide insight into the process for classifying unnatural deaths in Cleveland. For example, the records in one case show that the victim was found unconscious on the street after getting in an argument at a bar in 1978. He was eventually placed in a nursing home where he died twenty years later. The Coroner ruled the death a homicide and it was reported as a 1998 homicide in the police statistics. This tells us something about the impact of decisions by the Cuyahoga County Coroner's Office on Cleveland homicide statistics, and it indicates that the Cleveland police assign homicides to the year in which a decision on the cause of death is made and not to the year in which the injury occurred. This may be one reason for the close correspondence of the UCR and CDC homicide rates for the city.

Some of the detailed information from the 1998 to 2002 police files is similar in content to that provided by the mortality reports, although the detailed file excludes justifiable homicides. In addition to the provision of age, race, and sex information for homicide victims, the Cleveland file revealed that in 145 of the 389 homicide incidents victims and offenders were friends or acquaintances. The files suggested that 244 (65 percent) of the victims had prior criminal records and that 31 of the suspects had a prior arrest or conviction for homicide. Although motives were hard to classify, 31 cases (8 percent) involved a drug transaction or a dispute over a drug debt, but these cases often had additional motives or circumstances.

The files also allow an examination of the frequency and variety of family violence in Cleveland. The numbers indicate that it is a serious problem. Forty four (11 percent) of the homicide victims in this five year period were women killed by their husbands or partners. Fifteen other homicide victims were women or girls killed by a family member other than a husband or partner. However, 114 (29 percent) of the homicide victims killed in this five year period were 15 to 29 year old black males and over fifty percent of all homicide victims were black men.

Four New England Cities

Figure 4 (page 5) shows the similarity of the UCR and CDC homicide rates for all four New England cities. It also shows Hartford with higher homicide rates than the other three cities but they seem to drop every five or six years. In general, the two homicide measures for the New England cities seem to follow each other more closely than the same two measures for Columbus and Akron. The basic difference between the Ohio cities and the New England cities is that the New England cities are smaller and some of them report far fewer murders each year.

Fig. 4 UCR and CDC Homicide Rates, Four N.E. Cities

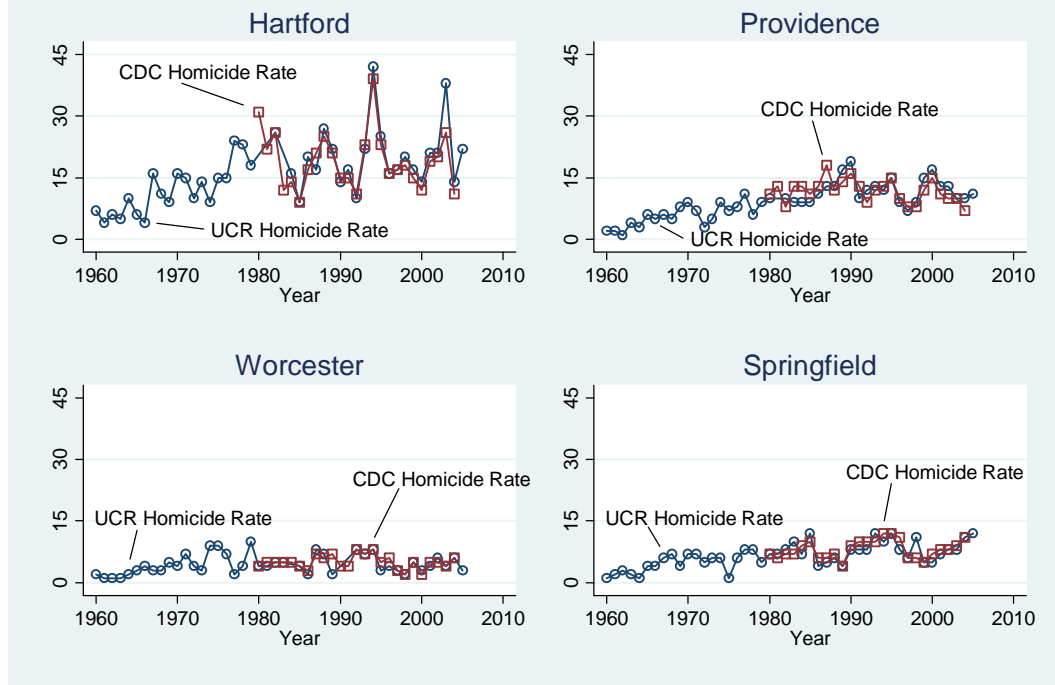
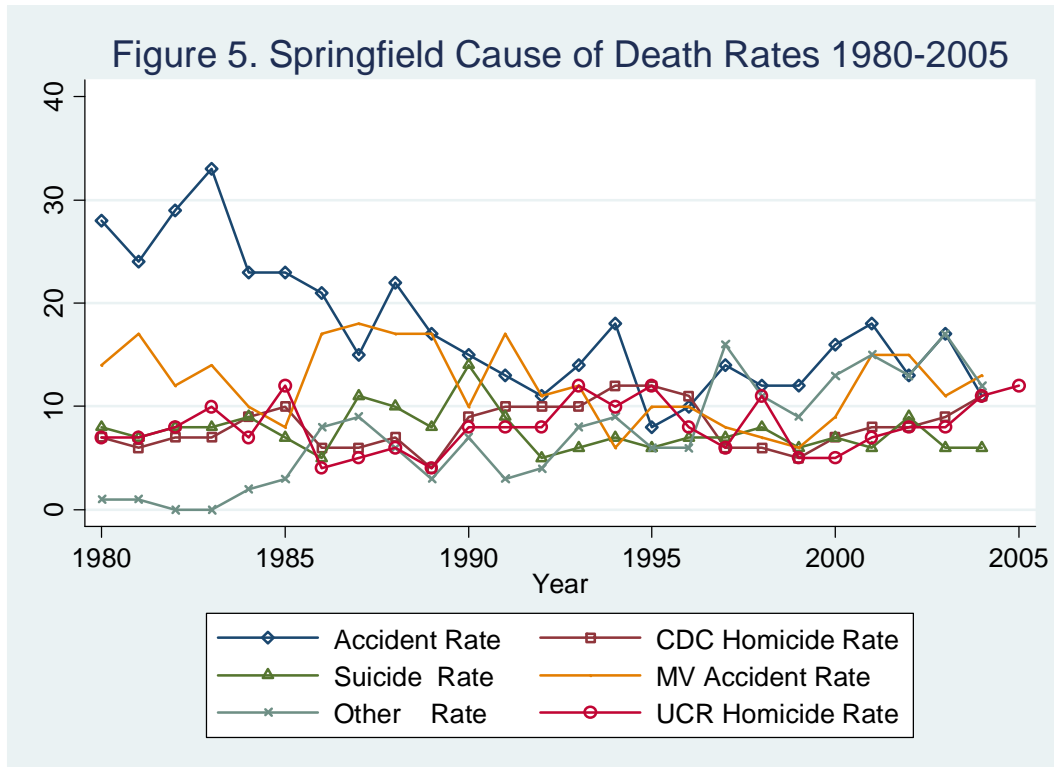


Figure 5 (on page 6) compares trends in the Springfield UCR and CDC homicide rates with the trends for the four other external causes of death reported in the CDC data files. The suicide and motor vehicle accident rates for Springfield show much more fluctuation than the same rates for Cleveland. However, the increase in the undetermined (other) cause of death rate is more interesting. For Cleveland and many other cities this is a residual category with consistently low rates, but for Springfield it shows a steady increase and is higher than the homicide rates by 1997. This suggests that a thorough knowledge of the classification procedures used by the state medical examiner for Springfield homicides and any changes in these procedures will be needed in any attempt to understand these trends.

Figure 6 (page 7) shows the very high homicide rates for 15-29 year old black men for the four New England cities. This rate rises above 250 per 100,000 residents for one or more years for each of these cities. The rate is consistently higher for Hartford and Providence than it is for Worcester or Springfield. However, this rate is over 100 per 100,000 residents for as many as six years for each New England city. This over representation of young black men as homicide victims is not limited to these eight cities and should not be taken for granted or explained away with some facile assumption about the role of drugs or gangs. Detailed information for Springfield tells us why.

Figure 5. Springfield Cause of Death Rates 1980-2005

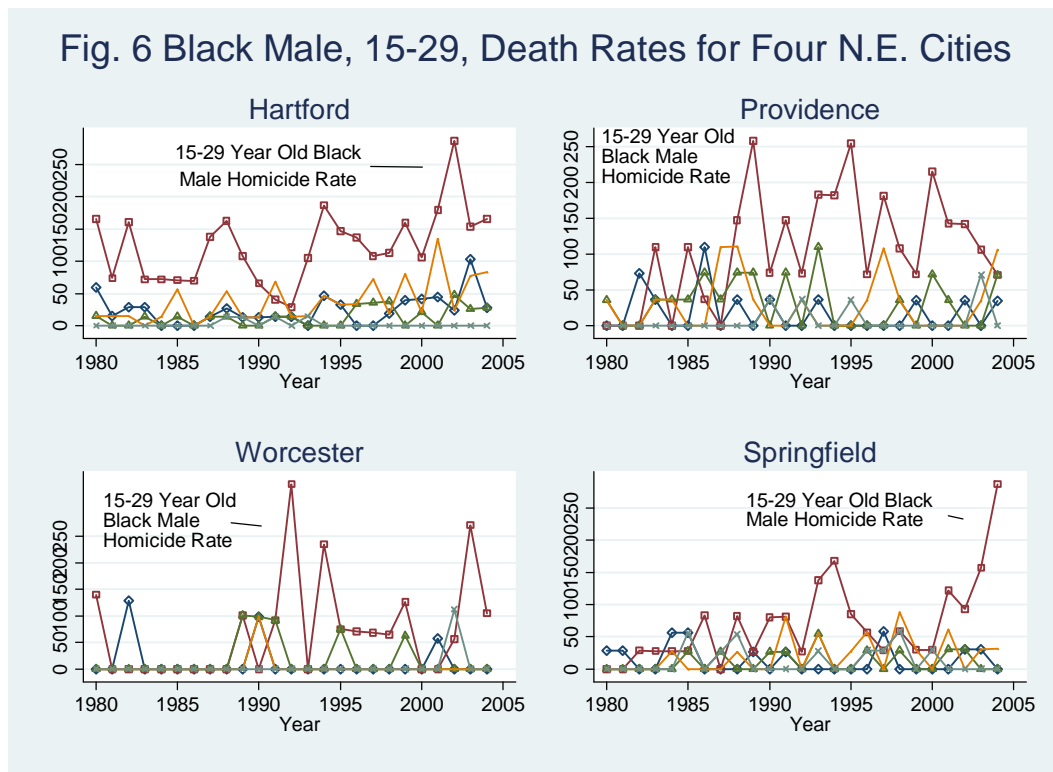


Detailed Information for Springfield

Patrick Johnson’s detailed examination of Springfield homicides allowed him to assign motives to most of the police reported murders in the city from 2000 to 2009. We have used this data to focus on the motives for murders that occurred from 2000-2005. After assigning a four category age code to the 48 homicides thus identified, we found that there were no female victims under 15, and that all five of the boys under age 15 were victims of domestic violence. There was only one female victim over 45 and the motive in that case was robbery. Of the eight male victims over 45, two were robbery victims, two were victims of some kind of dispute, and two were described as victims of a drug encounter. One 47 year old male victim was described as a domestic violence victim, and one 57 year old male victim was described as the target of a “mob hit.”

There were only four homicides of people 30-44, three attributed to drug encounters and one to a domestic dispute. This meant that 60 percent of the homicides in Springfield for which motives were assigned were deaths of persons 15 to 29 years old. Of these only three were women, all domestic violence victims. Of the 26 deaths of 15-29 year old men, 50 percent were victims of some kind of dispute. This is why we need to know more about the reasons for these disputes. In a May 14 issue of the Boston Globe, David Harding says, “Beefs between neighborhoods often go back years before today’s teens were even born, and their exact origins are almost always unknown to the current participants.” While we need to know how many cities have a similar problem, we certainly need to avoid the vague assertion that the deaths are “drug related” and the equally vacuous “gang related” explanation.

Fig. 6 Black Male, 15-29, Death Rates for Four N.E. Cities



Conclusions

We draw three basic conclusions from these results. First, it is clear that we need to know more about the work of medical examiners for each city studied. The process used to classify a medically unattended death, and especially the role of the local police in the classification process, is very important if we are to understand the wide variation in homicide,

accident, suicide, and other cause of death classifications. Second, we need to know more about the apparently persistent reasons for the altercations and disputes that lead to homicide in so many cities. It is especially important to know more about how this operates to keep the homicide rates for young black men so high.

Finally, if the murders of young black men in urban areas are to be reduced , and in the process the U.S. homicide rate, homicide researchers will have to focus on the homicide victimization of young black men with the same intensity that is now given to relationship related murders of women. The facts are very clear. Women killed by their husbands or partners constitute about 15 to 20 percent of all U.S. murder victims. Young black and Hispanic men who are not juveniles make up about 50 to 60 percent of all murder victims in these eight Ohio and New England cities. What keeps so many researchers and practitioners from concentrating on this problem?

Murder Rates for Homicide Research Working Group Meeting Cities 1980-2005

Roland Chilton University of Massachusetts Amherst

This presentation is another attempt to show the utility our effort (Chilton, Jarvis, and Regoeczi) to create and archive a set of integrated crime files for U.S. cities. At this point we have combined

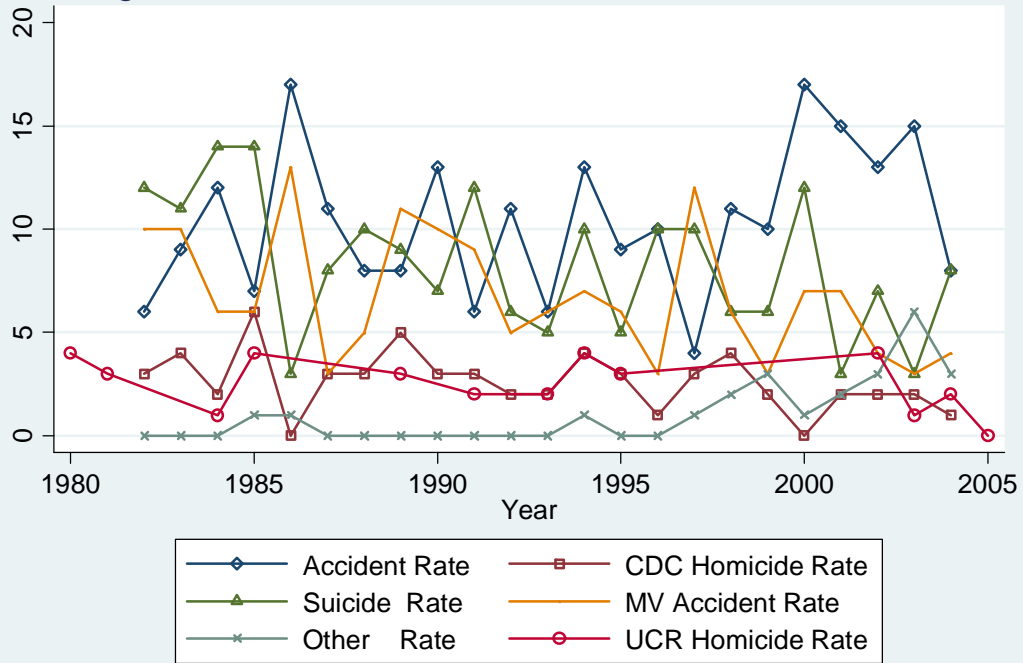
- Census counts and estimates for cities over 100,000 for 1980 to 2005 with
- Uniform Crime Reporting (UCR) offense and arrest counts for cities over 10,000 for 1960 to 2005 and
- External cause of death counts for cities over 100,000 for 1980 to 2004.

To illustrate the utility of an integrated file, I plotted homicide, suicide, accident, and other external cause of death rates for nine of the fifteen different places where HRWG summer meetings have been held since the group started such meetings in 1992. These nine cities are the only places large enough to have the public use mortality data we need. Such data are not available for six other meeting places. Five of them have populations under 100,000 (Quantico, Shepherdstown, Santa Monica, Huntsville, and Amherst) and we have only homicide victim and suspect counts by age and sex for Ottawa.

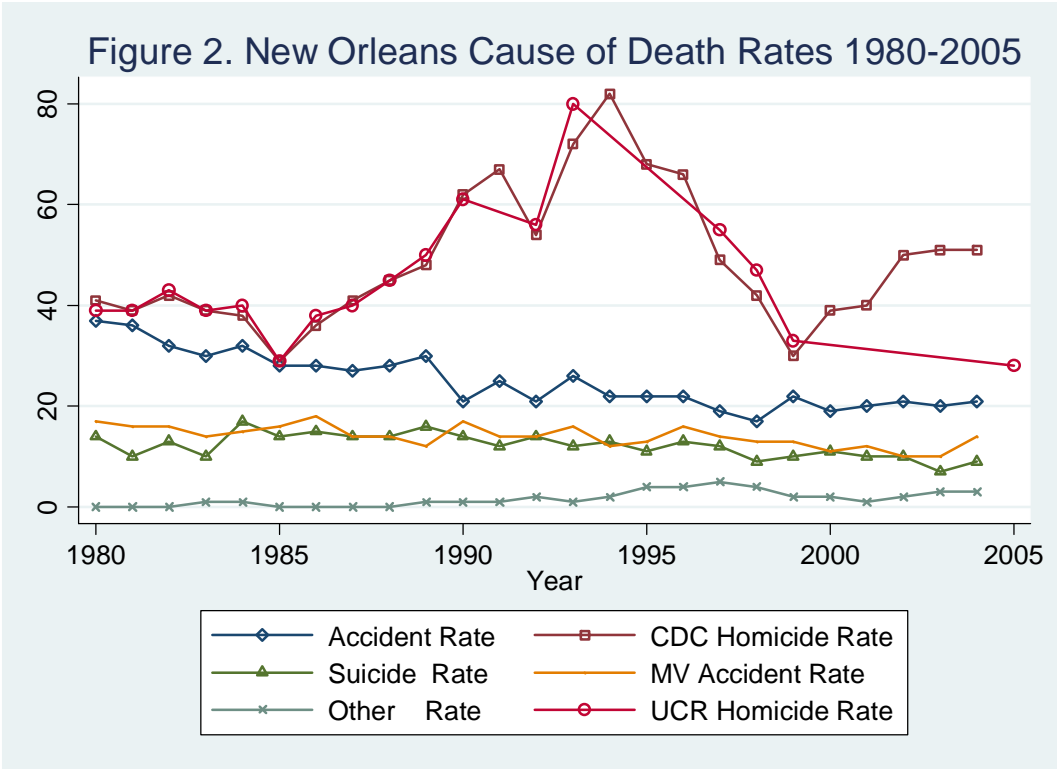
Nevertheless, the charts shown below are for eleven cities because I have added New Orleans, a possible future meeting city, and Ottawa with limited information but very low homicide rates. The comments and questions below each chart are intended to elicit suggestions and possible explanations for some of the trends we see. One of the most important lines in each chart for a U.S. city is the line showing the homicide rate as reported to the Federal Bureau of Investigation's Uniform Crime Reporting program (UCR). Another important line is that showing the homicide rate created using the data presented in the public use mortality files of the National Center for Health Statistics of the Centers for Disease Control and Prevention (CDC).

Since the CDC public use files identify the city of residence of a homicide victim but not always the city in which the death occurred, the two homicide trend lines are not identical. The UCR rate reflects all homicides in a city and the CDC rate reflects only homicides of city residents. This means the UCR rate will normally be higher than the CDC rate. Another line to watch is that showing the trend in rates for accidental deaths. However, for Baltimore, the line showing the trend in "other external causes" of death is intriguing.

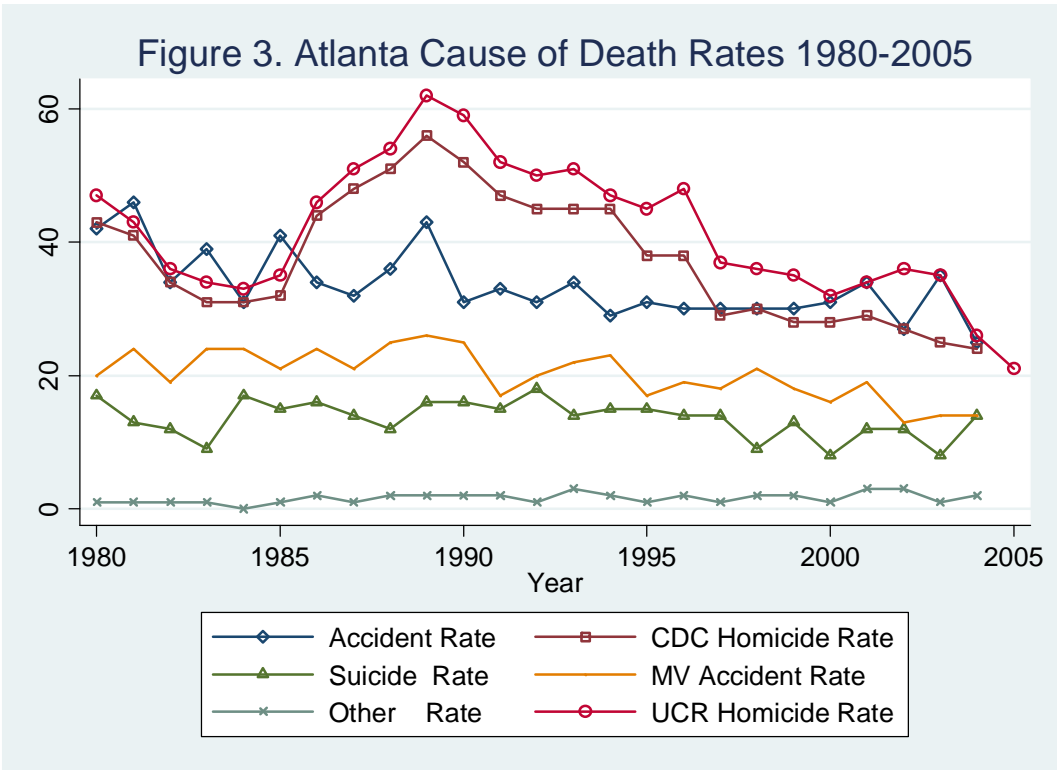
Figure 1. Ann Arbor Cause of Death Rates 1980-2005



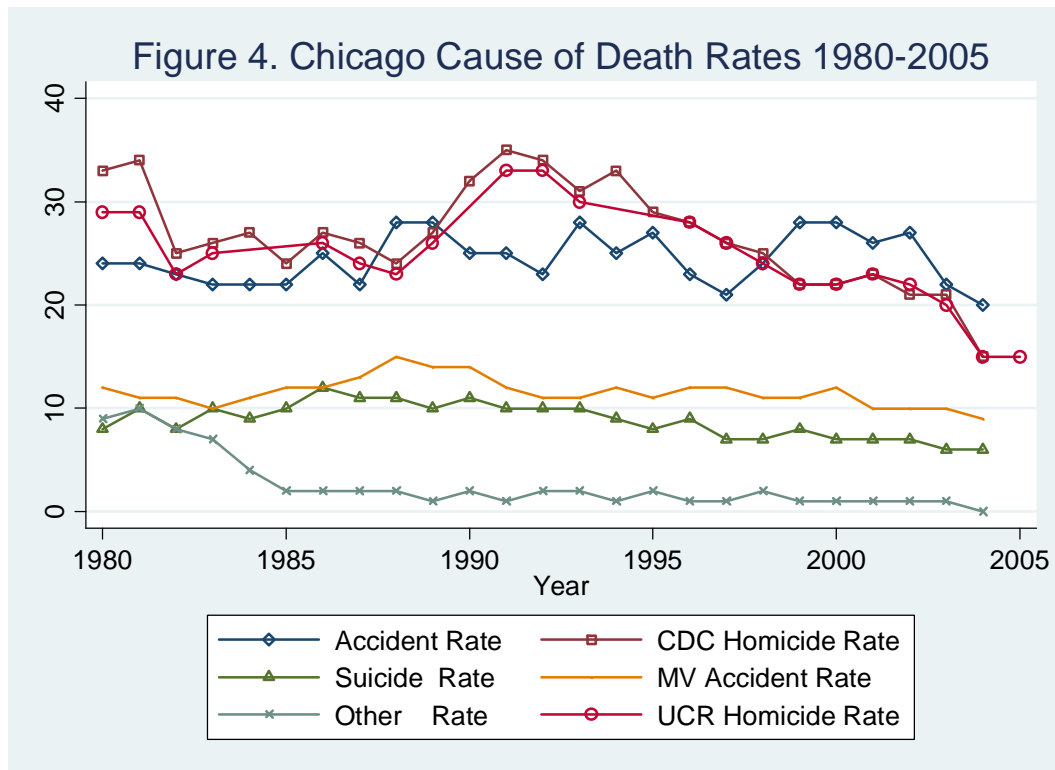
Meeting yrs 1992, 1998, 2004. Mean homicide rate under 3. Why is the UCR rate so often missing? Why does the "Other" rate, normally a residual category, go up after 1996?



Possible Meeting city for 2011. Mean homicide rate around 50. Why did N.O. Police stop sending UCR homicide reports after 1999? Was it related to the increase in the CDC homicide rate from 1999 to 2004? Since Katrina was a 2005 event, the chart shows no impact of the storm.

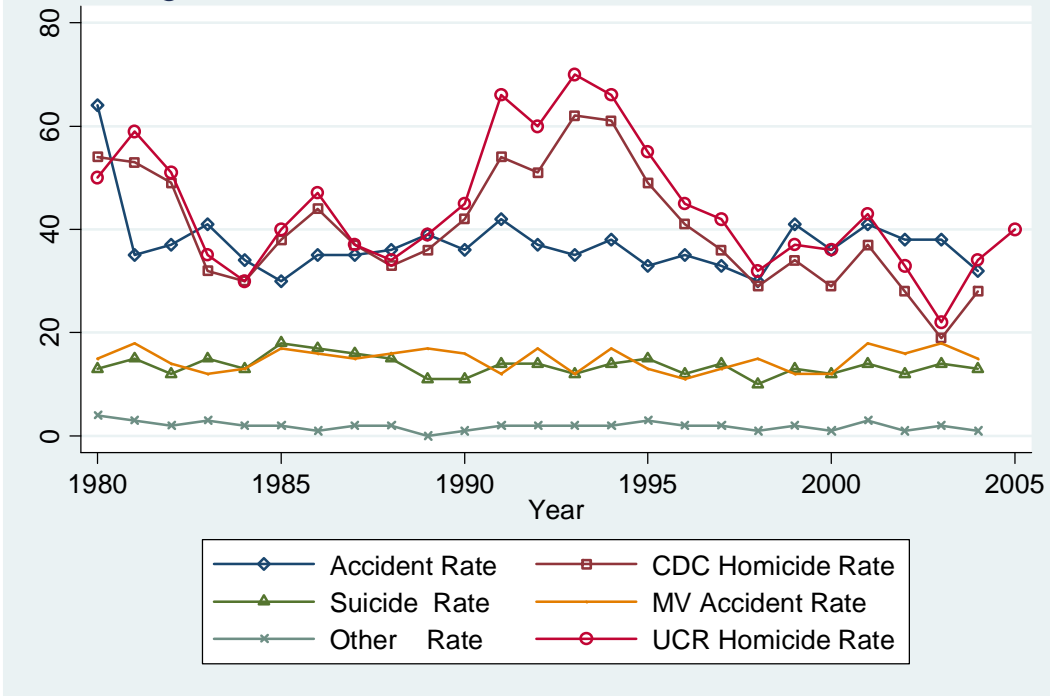


Meeting year 1994. Why are the homicide rates so high? They are between 30 and 60 for most of this period, with a mean of about 40.



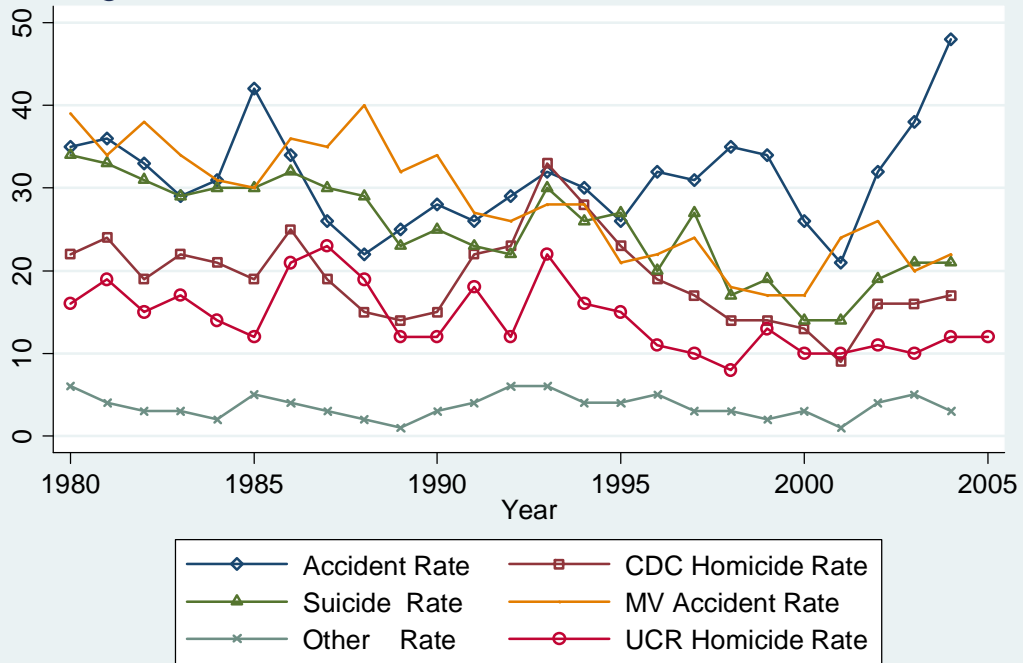
Meeting year 2000. Mean Homicide rate 25. But why are the CDC homicide rates higher than the UCR homicide rates in the late 1980s and early 1990s? And were some suicides classified as "other" before 1983?

Figure 5. St Louis Cause of Death Rates 1980-2005



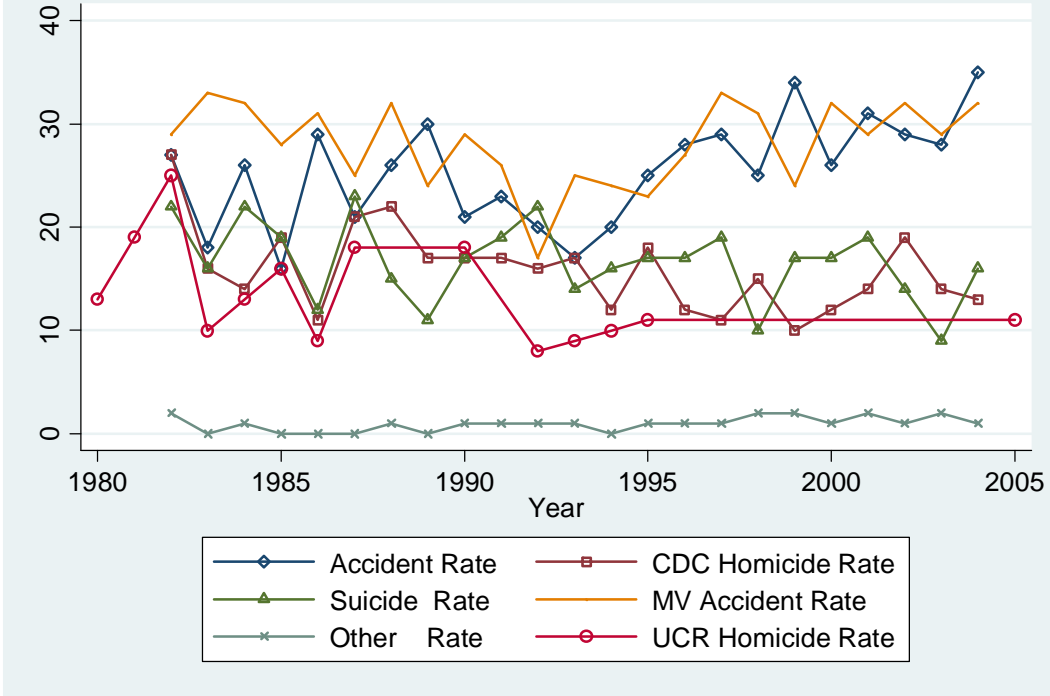
Meeting year 2002. Seems plausible, but why are rates so high? They run from 35 to 65, with a mean of about 40.

Figure 6. Sacramento Cause of Death Rates 1980-2005



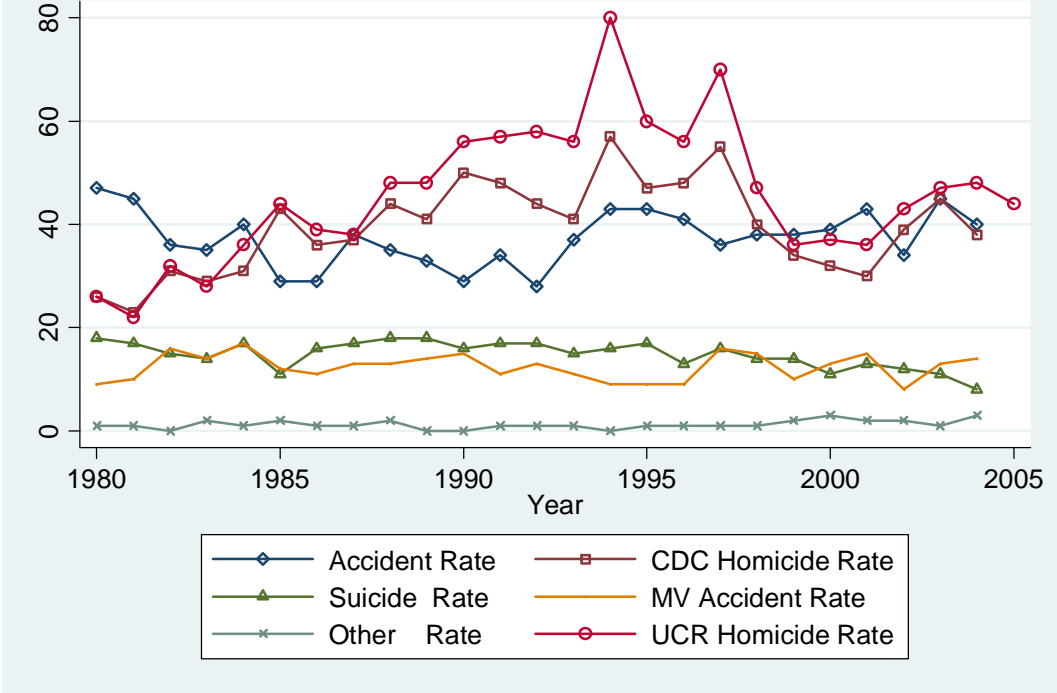
Meeting year 2003. Why are the CDC homicide rates higher than the UCR homicide rates? Why are the suicide rates so high? Is the 2001-2004 sharp increase in the accidental death rate linked to the leveling of the homicide rate for 2002-2004?

Figure 7. Orlando Cause of Death Rates 1980-2005



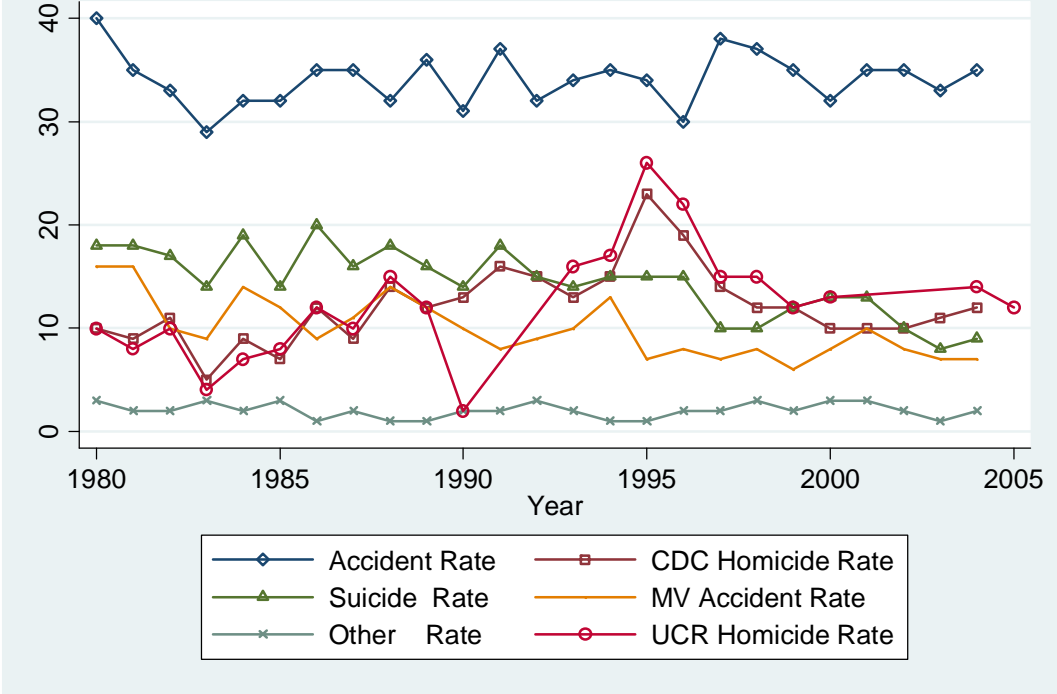
Meeting years 2001, 2005. Mean homicide rate about 15. Why are the CDC homicide rates so often higher than the UCR homicide rates? Why were UCR homicide rates so much lower in 1992 and 1993? Does the rise in the accident rate keep the CDC homicide rate down from 1994-2004?

Figure 8. Richmond Cause of Death Rates 1980-2005

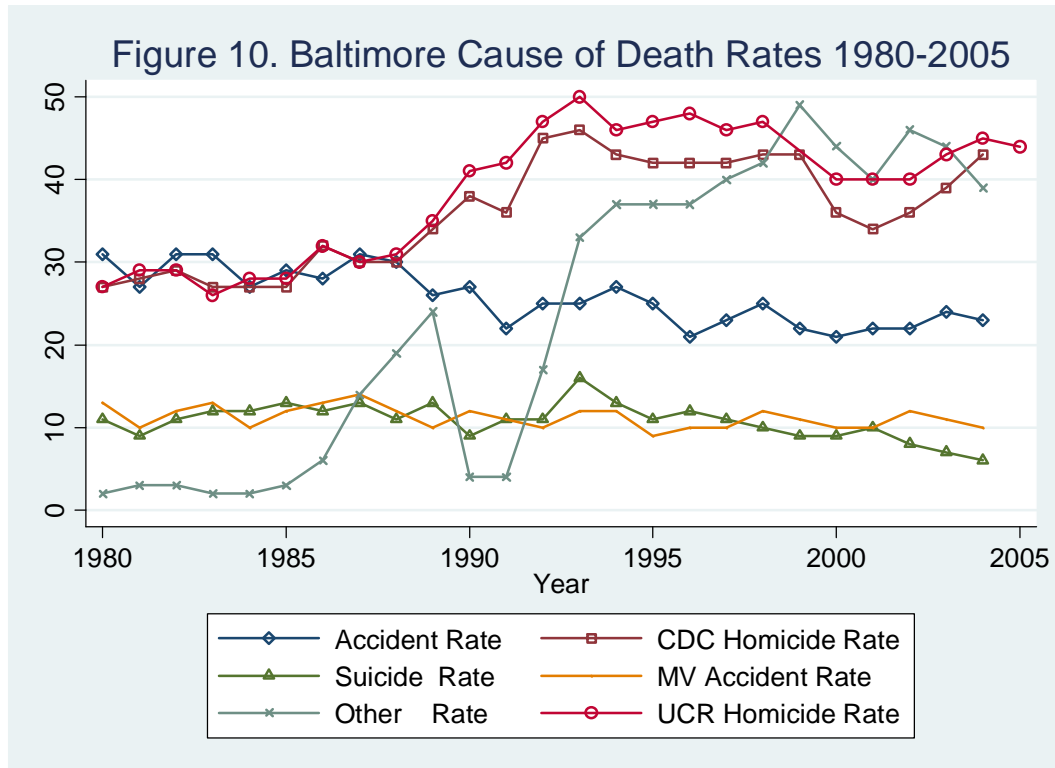


Meeting year 2006. Mean homicide rate about 45. Why are the homicide rates so high, especially in 1994 and 1997?

Figure 9. Minneapolis Cause of Death Rates 1980-2005

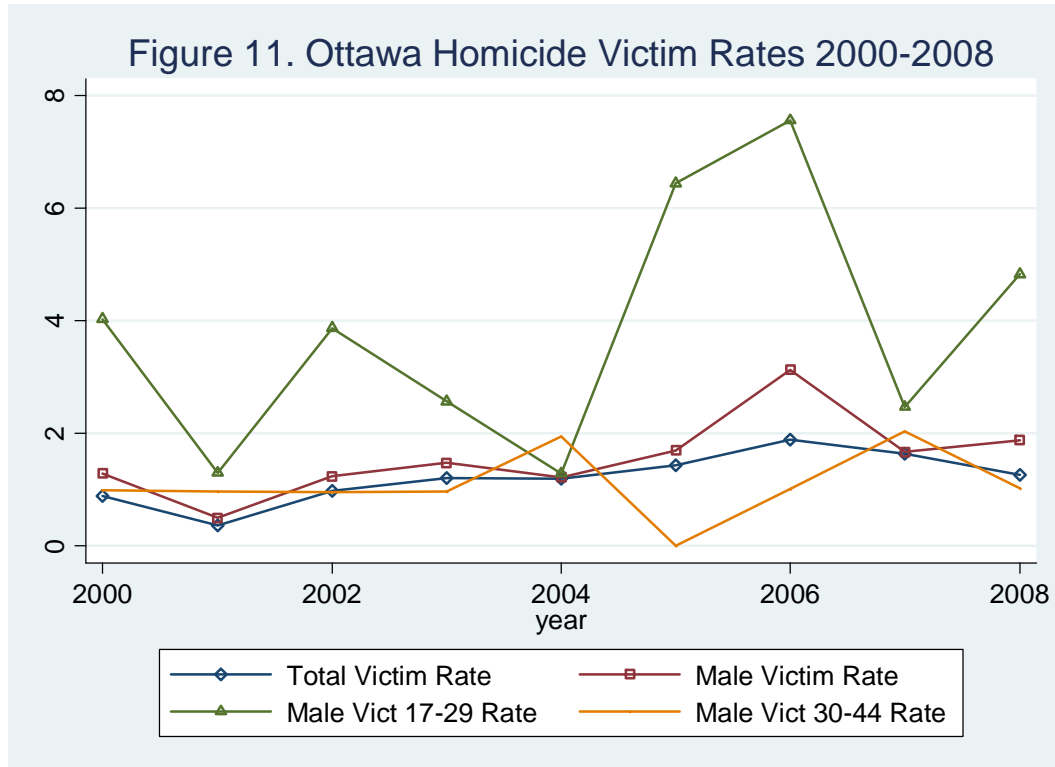


Meeting year 2007. Mean homicide rate 12. Why is the accidental death rate so high for the whole period? Why are the suicide rates so high? What happened to the UCR homicide rate in 1990?



Meeting year 2010. Mean homicide rate about 38. Why does the “Other external causes of death” rate go up from 1985 to 1989, drop from 1990 to 1991, and then increase to the level of the homicide rate after 1990?

The Ottawa chart is last because it lacks suicide, accident, and other unattended death rates and is limited to 2000 to 2008. The overall homicide rate (Total Victim Rate) never rises above 2 per 100,000 in these years. The homicide victimization rate for 17-29 year old men never reaches 8. Ottawa was a little larger than Baltimore in 2000. Why are these rates so low.



Meting year 1995. Mean homicide rate 1.2.

If I have not made some serious mistakes in constructing these charts, they show that the mortality reports are a useful supplement to the police homicide reports. If they are not flawed, they show why it is inaccurate to say that homicides announce themselves when a body is discovered. However, we need to remember that the mortality reports are linked the police reports when the medical examiner depends on a police investigation to decide if a specific death was intentional or unintentional.

The Uniform Crime Report data were provided by the UCR Section of the FBI. The 1980, 1990, and 2000 U.S. Census data and the information needed to create annual counts of the five external causes of death are taken from the archive of the Inter-University Consortium for Political and Social Research (ICPSR). The Ottawa data were compiled by the Demography Division and Sara Beattie of Statistics Canada. The mortality files are listed in the ICPSR index as "Multiple Cause of Death" files, usually with one file for a specific year. Until 2005 these files contained geographic identifiers that made assignment of a UCR agency identifier (ORI) possible. Starting in 2005, these important codes are not presented in the public use files archived at ICPSR. While the historical record remains, this CDC decision makes the mortality files less useful than they might be as an ongoing measure of urban homicides.

Pregnancy-Associated Lethal and Non-Lethal Intimate Partner Violence: The Importance of Wilson and Daly's "Sexual Propriety" in Theoretical Framing and Interpretation.

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Within the study of non-lethal intimate partner violence and intimate partner homicide, Margo Wilson and Martin Daly's concept of *sexual proprietariness* is a cornerstone to the theoretical approach commonly used in research. Referring to the tendency for men to believe they own women, particularly their sexuality and reproductive abilities, Margo Wilson, Martin Daly (1988) and others have argued that this concept has been institutionalized and woven into the structure of society, both in historic and modern times. In the case of pregnancy, abusive men often direct these jealous tendencies toward the paternity of the child, jealousy over the mother's attention to the baby, and in a loss of control over the woman's body.

The prolific and compelling work of Wilson and Daly, as well as others, has been a constant source of inspiration for my research, teaching, and activism since I was first introduced to it in 2000. The study to be presented is but one example of the use of their work to frame the theoretical underpinnings and methodology for my research in femicide. In this study, data from the Chicago Women's Health Risk Study (CWHRS) are analyzed to compare pregnant and non-pregnant victims of both lethal and non-lethal intimate partner violence. The CWHRS offers the unique advantage of combining both lethal and non-lethal samples. Further, the nature of the variables in the dataset allow for measuring not only effects of sociodemographics and family dynamics, but also power and coercive control tactics, physical, stalking, sexual, and other violent and threatening behavior, which are all components of sexual proprietariness.

Methods

Using the variable to measure whether a woman was abused (the screening variable used by interviewers to determine if a respondent was abused or not), and the variable to measure whether she was pregnant at the time of the interview, at the time of her death, or at any point within the past year, a new variable was created from the two to measure abuse and pregnancy status of each woman in the two samples. The variable was designed to measure four possible groups of women in the hospital-clinic sample: not abused/not pregnant, abused/pregnant, abused/not pregnant, and pregnant/not abused, and two groups for lethal violence victims: pregnant or not pregnant at the time of death or within the past year.

Next, a series of variables were created to measure several dimensions of abuse provided in the CWHRS data for both the non-lethal and lethal samples, including physical abuse, harassment, sexual abuse, threats of death, and power and control. In addition, Campbell's Danger Assessment (1993) was used to compute a lethality risk score. Continuous variables provided in the CWHRS dataset were used to measure levels of physical abuse, harassment, power and control, and lethality risk. Dichotomous variables were created for death threats and sexual abuse from variables provided. Identical abuse victimization variables were created for the non-lethal and lethal samples. Additionally, a dichotomous variable for each dimension of abuse was created to measure whether or not each woman had experienced any of the types of abuse or not.

Univariate and bivariate analyses were conducted for each of the groups of women for each of the study variables to address the following questions: 1) what characteristics of victims and perpetrators, including age, race, educational attainment, employment status, and

income are associated with pregnancy-associated IPV and femicide; 2) how the relationship status and state of a couple interact with pregnancy to increase risk for pregnancy-associated IPV and femicide; 3) how the presence of children in the home, including children not sired by the male partner, affect the risk for pregnancy-associated IPV and femicide.

Next, a series of multivariate analyses were conducted to test the effects of sociodemographics, family dynamic variables, and pregnancy on the amount of physical violence, power and control, harassment, and lethality risk, and to test effects on the likelihood of experiencing threats of death or sexual violence in the hospital/clinic (i.e. non-lethal) sample of women, and to assess risk for lethality.

Findings

While pregnancy was not a significant predictor of any form of abuse within the regression analyses for the lethal and non-lethal samples, analyses on the univariate and bivariate level do support the notion that there is indeed a correlation warranting further investigation with more representative data. The examination and comparison of mean scores for each continuous level of abuse indicated very similar scores for pregnant women and those who were not pregnant, with women who were pregnant when killed by an IP scoring higher on every dimension of abuse except one (harassment). Perhaps the lack of significant findings regarding pregnancy as a predictor at the multivariate level can be attributed to the purposeful oversampling of abused women by 70%, or due to the extremely low median income, which could mitigate the significance of pregnancy as a risk factor.

The differences between the women in this sample who were abused and those who were killed are minimal. Further, the differences between pregnant women and those who were not with regard to IPV are also very minimal. While pregnancy did not emerge as a predictor of higher levels or odds of IPV, it also did not emerge as a predictor of lower levels or

odds of victimization. From lower level analyses, pregnancy was determined as not only associated with IPV, but very little difference exists between women who were pregnant and those who were not pregnant in this sample. Therefore, pregnancy should not be seen as a protective period for this population of women or those populations with similar characteristics.

These findings underscore the importance of providing information and training on the correlations of pregnancy and IPV and appropriate intervention measures to medical professionals, social service providers, law enforcement and other criminal justice personnel, and victim advocates who may encounter pregnant women in the course of their work. The results from this study indicate a particular urgency with regard to populations of women from areas plagued by IP homicides, and which are predominantly Black, lower income, lower educated, and un/underemployed. In addition, as with women in general, being divorced or separated from an IP presents an additional element of risk for lethal and non-lethal IPV.

Sources

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*“Margo Wilson’s Influence Continues;
Spousal Sex Ratios of Killing (SROKs)
in Texas’ Six Largest Cities”*

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College of Criminal Justice
Sam Houston State University

Homicide Research Working Group
June, 2010

Background:

I first met Margo Wilson at the Second Annual Workshop of the Homicide Research Working Group in 1992, on the FBI’s Quantico, Virginia campus. She and her life partner and collaborator, Martin Daly, presented a paper entitled “A Lifespan Perspective on Homicide Violence: The Young Male Syndrome.” As an early Ph.D. student in Sociology, this was my first exposure to Daly & Wilson’s seminal work on the evolutionary psychological perspective of violence. I then discovered their 1988 book, *Homicide* and have found their work and this explanation of lethal violence compelling ever since. From this first meeting, I considered it a privilege to be professionally acquainted with Margo.

I was particularly interested in the work that Margo Wilson and Martin Daly published on (1) the elevated risk of uxoricide (wife-killing) for women with co-residing minor children who were not the biological offspring of their current partners (Daly, Wiseman, & Wilson, 1997) and (2) the spousal sex ratios of killing (SROKS) in the United States (Wilson & Daly, 1992). Margo was extremely helpful to me with both substantive and editorial advice as I and my co-author struggled to replicate the Hamilton-Wentworth, Ontario analysis of uxoricide for the city of Houston, Texas. We were ultimately successful in doing so (Brewer & Paulsen, 1999) and I felt quite beholding to Margo for her willingness to serve as an informal mentor for the project. She was always exceptional in her attentiveness to the “new-kids-on-the-block” as well as her seasoned colleagues.

In the same year that I met Margo Wilson, she and Martin Daly published what is now recognized as an important first attempt to explain the exceptional sex ratio of killing (SROK) in spousal homicides in the United States (Wilson & Daly, 1992). They observed that in the U.S., there were 75 females killing male intimate partners for every 100 male-perpetrated intimate partner killings. This SROK was not only very high in relation to women’s representation as homicide offenders in other relationship types but was also more than twice that of the spousal sex ratio of killing of any other country in Wilson & Daly’s investigation.

Since the publication of Wilson & Daly’s 1992 paper, at least three other studies on the U.S. spousal SROKs have been published. This includes the 1997 analysis by Gauthier and Bankston of 191 U.S. cities for the period of 1988-1992. These researchers analyzed the influence of varying degrees of gendered economic equality upon SROKs, within economic and regional cultural contexts. They found a significant negative influence of female economic equality on the spousal SROK, within the context of general economic well-being and more traditional cultural orientations to gender roles of the communities being studied.

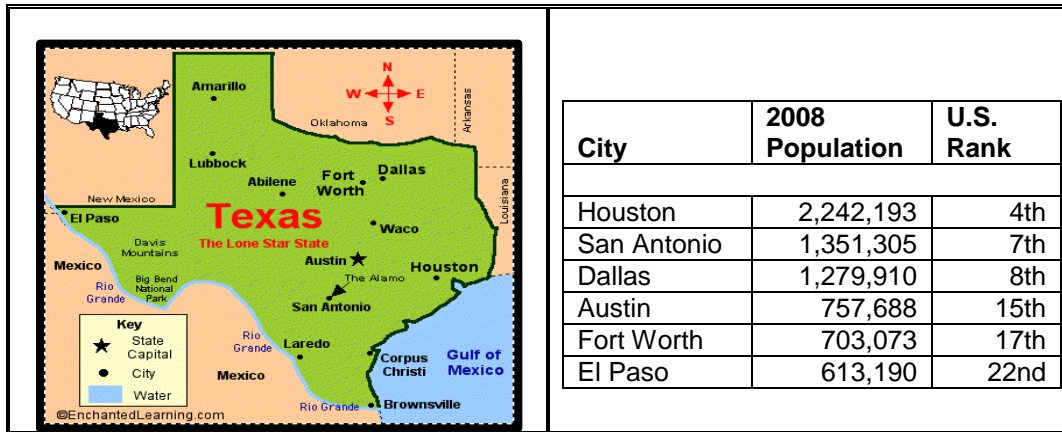
A descriptive study of the spousal SROKs for the cities of Chicago and Houston was also generated by Wilson and Daly’s work on this subject. Paulsen & Brewer’s (2000) comparison of the general characteristics of spousal killing in the nation’s 3rd and 4th largest cities indicated that the relative proportions of females and males killing intimate partners were similar along three dimensions. This analysis indicated that the sex ratios of killing were only high for the killing of spouses and children, that men’s relative risk of intimate partner homicide victimization in both cities decreased dramatically when the two parties were estranged and that the high spousal SROKs were primarily a Black phenomenon.

A more recent extension of Daly & Wilson’s (1992) study was also conducted by Gauthier & Bankston (2004), wherein they applied a self-help social control perspective and looked at sex-specific motives to

explain the high U.S. spousal SROK as well as the variation of spousal sex ratios of killing across 157 U.S. cities. Their research revealed that the sociological variables that significantly changed the SROKs across communities (e.g. mandatory arrest laws and mean levels of public assistance) did so by lowering the proportion of female offenders. Their analysis also showed that the proportion of city populations that are Hispanic and Black significantly affected the spousal SROK. The effect of a large Hispanic population was a lowering of the volume of female offending, thus lowering the SROK. By contrast, the SROK was significantly increased by a large Black population through an increase in the rate of female spouse killers. This was in keeping with Wilson & Daly's (1992) interpretation of the findings within their original SROK study and the general distribution of spousal killings in Paulsen & Brewer's (2000) investigation.

The Present Study

This is yet another extension of Wilson and Daly's work, describing the overall and spousal SROKs over a 31-year period for Texas' six largest cities: Austin, Dallas, El Paso, Fort Worth, Houston and San Antonio. During this 1976-2007 time period, 10.1 percent of all U.S. homicides occurred in Texas. In turn, these six cities are among the 25 most populous in the U.S., with a combined 2008 population of over 6.9 million. Since 1993, these cities have constituted the Executive Issues Major Cities Program of the Police Research Center (PRC) within the College of Criminal Justice of Sam Houston State University. The PRC generates research, consultation and training with these six cities and their chiefs of police.



The profiles of SROKS in these six major U.S. cities are derived from the *Uniform Crime Reports: Supplementary Homicide Reports with Multiple Imputation, Cumulative Files 1976-2007*. This file consists of all homicide and non-negligent manslaughters reported to the police. Additionally, it adjusts for missing incident data through a multiple imputation process and a weighting with pooled files, as is recommended for analyses of city- or state-level data. While recognizing the limitations of SHR data, it continues to be the best single source of homicide data that includes the victim-offender relationship for the six cities of interest in this study. What is gained by the exploratory analysis is a more complete estimate of victim-offender relationships, victim and offender sex, age and race and weapon used. What is lost is the detail regarding intimate partner forms (e.g. registered or *de facto* relationships), victim and offender ethnicity and circumstantial details of the killing. Still, the data generated herein are useful in covering a longer time span and city-specific SROK profiles for a specific state than have heretofore been explored.

Table 1 is a display of the overall and relationship-specific sex ratios of killing (SROKs) for the U.S., Texas and Texas' six largest cities for the period from 1976 through 2007. Based upon this SHR imputation accounting for all reported homicide and non-negligent manslaughter victims, it is first remarkable that for the U.S., the state of Texas, and the six largest cities within this state, the overall SROKs range from only 10-14 (table 1). But the picture changes considerably when the SROKs are disaggregated by victim-offender relationship. For the U.S. overall during this 30+ year period, approximately half as many women as men killed intimate partners, as indicated by the SROK of 48

(table 1). This ratio is lower than that reported for shorter time periods within previous research but is almost four times the overall SROK. Compared to this national figure, it is also the case that women's representation as intimate partner homicide offenders is significantly higher for Texas, with a statewide spousal SROK of 62. However, though all six of the cities in this analysis are within a state with historically high homicide rates, the range of spousal SROKS varies considerably, ranging from a low of 24 in El Paso to a high of 82 in Houston.

Table 2 provides a closer look at the distribution and characteristics of spousal SROKS specifically for Texas' six largest cities over this 31-year time period. As seen in table 2, five of these six cities have significantly higher spousal SROKS for Black offenders than Whites (including Hispanic Whites) or Others. In Dallas and Houston more Black females than Black males committed lethal violence against their intimate partners, with Black spousal SROKS of 104 and 109, respectively. The other notable feature seen in table 2 is the significantly higher SROKS when the weapon was a knife. There was an excess of female- over male-perpetrated spousal SROKS committed with a knife in Dallas, Fort Worth, Houston and San Antonio. When guns were used, the spousal SROKS were near parity in Dallas, Fort Worth and Houston. A range of 86-97 percent of these spousal SROKS were classified as intra-racial, though Hispanic and non-Hispanic Whites are not disaggregated in this data file. As of 2000, approximately 60 percent of the San Antonio's population was of Hispanic or Latino origin and this was the ethnic classification for over 80 percent of El Paso's residents (U.S. Census Bureau, 2009). This is a likely explanation for the low White spousal SROK in El Paso.

Figure 1 illustrates changes in the spousal SROKS for the U.S., Texas and Texas' six largest cities over the 31-year time frame of this investigation. These disaggregated data reveal a significant reduction in men's risk of intimate partner homicide victimization from the 1976-1985 to the 1996-2007 time period across all of these geographic units. The spousal SROK was reduced by 48 percent for the U.S. overall and by over 67 percent for the state of Texas. Across Texas' six largest cities, the reduction in spousal SROKS has been 34 to 82 percent, with the largest decreases in Fort Worth, Houston and San Antonio. Recognizing differential effects of policy aimed at protecting women and men from intimate partner violence, as well as potential influences of social-cultural factors, it is clear that these findings call for closer investigation.

Next steps in exploring these city-specific spousal SROKS will be to recapture details regarding the types of intimate partner relationships, as well as victim and offender age and ethnicity, albeit for a reduced number of cases within this 31-year SHR file. These findings will be discussed at the November meeting of the American Society of Criminology.

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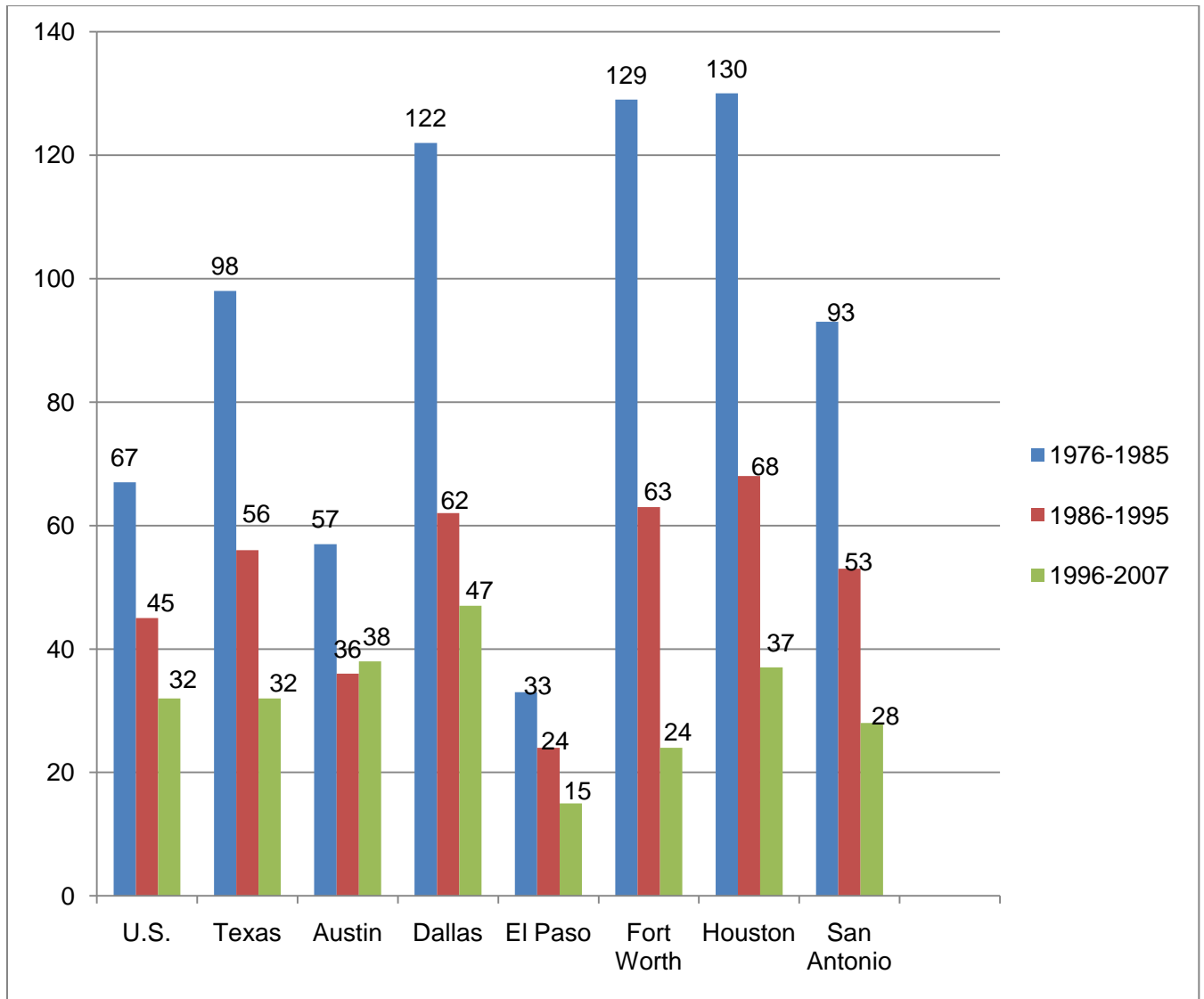
**Table 1. Overall and Relationship- Specific Sex Ratios of Killing (SROKS)
For the U.S., Texas and Texas' Six Largest Cities, 1976 – 2007**

U.S.				Texas			
SROK	Offender			SROK	Offender		
	Man	Woman			Man	Woman	
Intimate	53,335	25,846	48	Intimate	5,264	3,242	62
Family	50,931	13,628	27	Family	5,316	1,313	25
Acquaintance	265,725	19,777	7	Acquaintance	26,207	2,066	8
Stranger	133,145	5,739	4	Stranger	13,354	591	4
Overall	503,136	64,990	13	Overall	50,141	7,212	14
Austin				Dallas			
SROK	Offender			SROK	Offender		
	Man	Woman			Man	Woman	
Intimate	111	49	44	Intimate	550	433	78
Family	85	27	32	Family	691	176	25
Acquaintance	599	48	8	Acquaintance	4,011	378	9
Stranger	240	11	5	Stranger	2,677	132	5
Overall	1,035	135	13	Overall	7,929	1,119	14
El Paso				Fort Worth			
SROK	Offender			SROK	Offender		
	Man	Woman			Man	Woman	
Intimate	111	27	24	Intimate	243	166	68
Family	92	34	37	Family	244	65	27
Acquaintance	391	19	5	Acquaintance	1526	125	8
Stranger	250	8	3	Stranger	765	28	4
Overall	844	88	10	Overall	2778	384	14
Houston				San Antonio			
SROK	Offender			SROK	Offender		
	Man	Woman			Man	Woman	
Intimate	801	659	82	Intimate	321	180	56
Family	805	209	27	Family	386	100	26
Acquaintance	5,249	410	8	Acquaintance	2,273	142	6
Stranger	3,724	146	4	Stranger	1,196	52	4
Overall	10,579	1,424	13	Overall	4,176	474	11

Table 2. The Spousal SROKs by Offender Race and Weapon for Texas' Six Largest Cities, 1976 - 2007

Austin				Dallas			
SROK	Offender			SROK	Offender		
	Man	Woman			Man	Woman	
Offender Race				Offender Race			
White	88	32	36	White	257	135	53
Black	22	17	77	Black	286	297	104
Other	1	0	0	Other	7	1	14
Weapon				Weapon			
Gun	72	31	43	Gun	345	288	83
Knife	14	12	86	Knife	82	117	143
Other	25	6	24	Other	123	28	23
El Paso				Fort Worth			
SROK	Offender			SROK	Offender		
	Man	Woman			Man	Woman	
Offender Race				Offender Race			
White	98	24	24	White	124	64	52
Black	11	3	27	Black	119	102	86
Other	2	0	0	Other	0	0	0
Weapon				Weapon			
Gun	70	15	21	Gun	154	118	77
Knife	11	10	91	Knife	29	32	110
Other	30	2	6	Other	60	16	27
Houston				San Antonio			
SROK	Offender			SROK	Offender		
	Man	Woman			Man	Woman	
Offender Race				Offender Race			
White	382	214	56	White	248	121	49
Black	404	440	109	Black	72	59	82
Other	15	5	33	Other	1	0	0
Weapon				Weapon			
Gun	485	444	92	Gun	196	99	51
Knife	148	187	126	Knife	42	59	140
Other	168	28	17	Other	83	22	27
Notes:				<i>Circumstances</i> were previously recoded to felony, argument and other. Arguments were the stated circumstance in a range from 58% of incidents in San Antonio to 82% in Houston. 2-4% of cases across the six cities were classified as felony-related intimate partner homicide.			
<p><i>Intraracial</i> incidents ranged from 86% of cases in Fort Worth to 97% in Austin.</p> <p>A range from 94% in Fort Worth and San Antonio to 98% in El Paso was <i>heterosexual</i> incidents.</p>							

Figure 2. Spousal SROKs Over Time for the U.S., Texas and Texas' Six Largest Cities, 1976 - 2007



Margo Wilson's Contributions to the Chicago Homicide Dataset:

Sexual Rivalry and Sexual Jealousy

Carolyn Rebecca Block and Richard Block

HRWG "Five-Page Summary"

June, 2010

Margo Wilson's research and support was crucial to the development of the Chicago Homicide Data Set. Our long collaboration with Margo Wilson and Martin Daly began with a chance meeting at the American Society of Criminology in 1987. Becky was presenting about intimate partner homicide (Block, 1987), and Margo and Martin were presenting analysis that would soon be published in their book, *Homicide* (Daly & Wilson, 1988). Margo and Martin caught Becky and Dick's excitement about the potential of the Chicago Homicide Dataset, and wrote a proposal for a Harry Frank Guggenheim Foundation grant that supported data collection through 1989. For two years, Margo Wilson traveled from Hamilton, Ontario, to Chicago to stay with Dick and Becky for a week or two and collect CHD data. During this data collection, Margo was able to access the complete police file for each homicide. This allowed her to more fully investigate the relationship of victim and offender.

It was a fruitful collaboration. Margo Wilson was author or co-author of over 40 books and articles that used the Chicago Homicide Data Set as a test for her ideas and theories. Margo contributed both a different theoretical orientation to the Chicago Homicide Data set and financial support for a continuation of data collection.

Her collaboration occurred at a time when Dick and Becky were discovering many questions that could be answered by the CHD, but were not coded. Conterminously, computer capabilities were rapidly expanding. The funding that Margo sponsored permitted the expansion of the CHD in new directions. Computer mapping permitted the spatial analysis of homicide patterns. The demise of punch cards allowed for the coding of specific gang involvement and a very detailed coding of the relationship of victim and offender.

At Margo's suggestion, we added variables to the CHD that previously had not existed in the CHD or in most homicide datasets, such as co-reside, sexual jealousy, and sexual rivalry. In most homicide datasets, then and now, only the address of the incident and possibly the home address of victim and offender are collected, not whether or not the offender lives with the victim. Then and now, "Love Triangle" is commonly collected as a motive. Margo and Martin insisted, however, that the offender's motive is very different in different "Love Triangle" circumstances. When the offender is trying to eliminate a rival or a perceived rival ("sexual rivalry"), the circumstances, people most at risk, and possible prevention strategies are not the same as when the offender is angry at his or her intimate partner because of a suspected infidelity ("sexual jealousy").

In the CHD, we since have fine-tuned these variables, and consistently coded them from 1965 through 2000. For example, based on the “stories” of the homicides as reflected in the narratives, we added a “sexual jealousy – offender being accused” category to account for cases in which the victim accuses the offender of infidelity. The following tables, based on an analysis of the CHD data from 1965 to 2000, show the characteristics of these three sub-categories of “Love Triangle” and a residual Love Triangle variable containing other and unidentified kinds of jealousy, compared to the characteristics of non-love-triangle homicides. The characteristics of sexual rivalry homicides tend to reflect the characteristics of all non-love-triangle homicides. The characteristics of the two types of sexual jealousy homicides tend to be similar to each other and very different from the characteristics of all non-love-triangle homicides.

The percent of cases in which the victim was a woman is highest (59%) when the offender is accusing the victim of infidelity, compared to 18% of non-love-triangle homicides (table 1); when the offender is being accused, the percent female victim is lower (33%) but still higher than non-love-triangle homicides. Thus, as Margo and Martin would expect, jealousy is a common motive in femicide, whether the woman is accusing the man or the man accusing the woman. In contrast, the percent of sexual rivalry homicides with a woman victim is the lowest of any category (8%). In most sexual rivalry homicides, the gender of victim and offender are the same, and sexual rivalry homicide is more common for males.

Offenders who accused a woman victim of infidelity committed suicide after killing her almost 10% of the time, while none of the of the 169 homicides where the offender accused a man of infidelity was followed by a suicide (table 2). Since suicide is much more common when a woman is killed, Table 2 is divided by the victim’s gender. Aside from the “offender accusation jealousy” type, however, all other types of love triangle homicides (except the residual category) have low offender suicide proportions compared to the general population. This points out a key difference between the dynamics of jealousy homicides of women where the offender is accusing versus those where the offender is being accused. When the offender is accusing, he¹ may feel, as Margo and Martin argue, that he owns his intimate partner; he cannot separate himself and his existence from her. She must be punished for her (perceived) infidelity, but without her he cannot live. On the other hand, the offender being accused of infidelity may attack the victim not so much to defend himself or herself against the accusation, but to re-establish power and control.

Although a quarter of CHD homicide victims were killed by more than one offender, the proportion for all types of Love Triangle victims tends to be much lower (table 3). Once again, however, sexual rivalry homicides stand apart from jealousy homicides in their characteristics. This is not surprising, since partner jealousy is usually a conflict between two people. In about 10% of sexual rivalry homicides, however, the offender

¹In the three cases of offender-accusation jealousy where a woman killed a woman, none of the offenders committed suicide.

who is the rival gathers a group of supporters to help perpetrate revenge. In Table 4, one percent stands out – of homicides in which offenders accused the victim of infidelity, 16% had formerly lived together but were now separated, compared to only 1% of non-love-triangle homicides. Here again, the characteristics of sexual rivalry homicides are much more similar to non-love-triangle homicides than they are to jealousy homicides.

In the location of the homicide incident, sexual rivalry homicides are also much more similar to non-love-triangle homicides than to jealousy homicides (table 5). Thirty-one percent of sexual rivalry homicides and 29% of non-love-triangle homicides took place in a home, compared to 67% of offender-accusing jealousy and 69% of offender-being-accused jealousy. Thirty-two percent of sexual rivalry homicides and 34% of non-love-triangle homicides took place on the street, compared to 10% of offender-accusing jealousy and 14% of offender-being-accused jealousy. Sexual rivalry homicides are more likely to occur in a tavern or liquor store than are non-love-triangle homicides (7% versus 4%). Sexual rivalry homicides contain a large group in which the offender stalks the victim. Location, like many other characteristics of sexual rivalry homicide, reflects the same dynamics as other lethal conflicts between male peers.

In general, Love Triangle homicides are not distinguished from other homicides by their weapon or cause of death. There is some difference in the likelihood that sexual jealousy victims were strangled, but this disappears when controlled for the victim's gender and whether the offender was an intimate partner. Like other intimate partner homicides Love Triangle homicides are more likely than others to be cleared. Compared to 23% of non-love-triangle homicides being uncleared, less than 1% of sexual jealousy homicides and 3% of sexual rivalry homicides are uncleared. However, the types of Love Triangle homicides were not distinguished by the time of day or the day of the week of the incident.

Margo Wilson brought a different point of view to the study of homicide in Chicago. Her psychological vision augmented the legal and sociological foundations of the Chicago Homicide Dataset. Her insight led to the inclusion of variables such as sexual rivalry and sexual jealousy. Understanding of the dynamics of sexually motivated homicide is clarified by their differentiation. They are both different from each other and from other homicides. Margo Wilson was a great colleague, a tireless collaborator in the study of the dynamics of homicide, and a friend who will be sorely missed.

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TABLES

Table 1

Sexual Jealousy/Sexual Rivalry by Victim's Gender

			Recorded Jealousy vs. Rivalry					Total
			not indicated	Jealousy - O accusing	Jealousy - O being accused	Sexual rivalry	Other "triangle"	
GENDER OF VICTIM	MALE		21412	173	58	724	17	22384
			82.3%	41.4%	67.4%	91.8%	54.8%	81.9%
	FEMALE		4608	245	28	65	14	4960
			17.7%	58.6%	32.6%	8.2%	45.2%	18.1%
Total			26020	418	86	789	31	27344
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 2

Offender's Suicide by Victim's Gender and Sexual Jealousy/Sexual Rivalry

			Recorded Jealousy vs. Rivalry					Total
			not indicated	Jealousy - O accusing	Jealousy - O being accused	Sexual rivalry	Other "triangle"	
MALE	Number of offender(s) who committed suicide at scene.	0	16486	169	58	693	17	17423
			99.7%	100.0%	100.0%	99.7%	100.0%	99.7%
		1	50	0	0	2	0	52

			.3%	.0%	.0%	.3%	.0%	.3%
	Total		16536	169	58	695	17	17475
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
FEMALE	Number of offender(s) who committed suicide at scene.	0	3347	209	26	65	12	3659
			94.0%	90.1%	96.3%	100.0%	92.3%	93.9%
		1	212	23	1	0	1	237
			6.0%	9.9%	3.7%	.0%	7.7%	6.1%
	Total		3559	232	27	65	13	3896
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3

Sexual Jealousy/Sexual Rivalry by Number of Offenders

		Recorded Jealousy vs. Rivalry					Total
		not indicated	Jealousy - O accusing	Jealousy - O being accused	Sexual rivalry	Other "triangle"	
number of offenders in incident, recorded	one	16564	410	83	705	26	17788
		75.3%	98.1%	96.5%	89.8%	83.9%	76.3%
	more than one	5423	8	3	80	5	5519
		24.7%	1.9%	3.5%	10.2%	16.1%	23.7%
Total		21987	418	86	785	31	23307
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4

Sexual Jealousy/Sexual Rivalry by Co-Residence

		Recoded Jealousy vs. Rivalry					Total
		not indicated	Jealousy - O accusing	Jealousy - O being accused	Sexual rivalry	Other "triangle"	
Do V and O co-reside?	no	15494 83.6%	99 30.8%	22 26.8%	491 97.6%	13 44.8%	16119 82.8%
	Yes	2231 12.0%	152 47.4%	47 57.3%	7 1.4%	9 31.0%	2446 12.6%
	sometimes, on-and-off	23 .1%	0 .0%	0 .0%	0 .0%	0 .0%	23 .1%
	maybe, unclear	529 2.9%	18 5.6%	7 8.5%	2 .4%	5 17.2%	561 2.9%
	formerly lived together	266 1.4%	52 16.2%	6 7.3%	3 .6%	2 6.9%	329 1.7%
	Total	18543 100.0%	321 100.0%	82 100.0%	503 100.0%	29 100.0%	19478 100.0%

Table 5

Sexual Jealousy/Sexual Rivalry by Location of Incident

Recoded Jealousy vs. Rivalry		Total
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		not indicated	Jealousy - O accusing	Jealousy - O being accused	Sexual rivalry	Other "triangle"	
Location, recoded	HOME	7632 29.3%	280 67.0%	59 68.6%	246 31.2%	19 61.3%	8236 30.1%
	HOTEL, GROUP HOME	392 1.5%	7 1.7%	3 3.5%	12 1.5%	0 .0%	414 1.5%
	OTHER RESIDENTIAL, INDOOR	1408 5.4%	15 3.6%	5 5.8%	46 5.8%	0 .0%	1474 5.4%
	OTHER RESIDENTIAL, OUTDOOR	1294 5.0%	14 3.3%	3 3.5%	65 8.2%	0 .0%	1376 5.0%
	TAVERN OR LIQUOR STORE	930 3.6%	12 2.9%	0 .0%	53 6.7%	2 6.5%	997 3.6%
	INDOOR PUBLIC, OTHER	1362 5.2%	9 2.2%	0 .0%	22 2.8%	0 .0%	1393 5.1%
	VEHICLE (not public transportation)	1948 7.5%	16 3.8%	4 4.7%	38 4.8%	7 22.6%	2013 7.4%
	PUBLIC TRANSPORTATION	112 .4%	0 .0%	0 .0%	1 .1%	0 .0%	113 .4%
	STREET, ALLEY, SIDEWALK	8939 34.4%	57 13.6%	9 10.5%	250 31.7%	1 3.2%	9256 33.8%
	OTHER OUTDOOR	1756	6	3	55	2	1822

	6.7%	1.4%	3.5%	7.0%	6.5%	6.7%
ABANDONED, VACANT PLACE	248	2	0	1	0	251
	1.0%	.5%	.0%	.1%	.0%	.9%
Total	26021	418	86	789	31	27345
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Exploring Risk Factors in GLBT Homicide

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Homicide and its correlates have been scrutinized by criminologists, sociologists, victimologists, psychologists and a host of other social scientists for decades, yet the exploration of homicides impacting specific marginalized groups has been slow in coming. It is only quite recently that research has started to explore the significant and different relationships, if they exist, between sexual orientation and homicide (McClennen, 2005). Understanding and exploring the specific risks associated with homicide cases where sexual orientation, of either the victim, the offender, or of both parties, becomes increasingly important in today's social climate, especially with the controversy surrounding the proposal, and eventual defeat, of Proposition 8 (Fitzpatrick, 2010; Lindenberger, 2009; Trende, 2009) in the state of California in November 2008 and, more recently, the state of Iowa's Supreme Court decision in Iowa that civil marriage rights cannot constitutionally be denied to any one class or group of citizens (Daily Times Herald, 2009; Lindberger, 2009; Eckhoff & Schulte, 2009).

Quickly following the decision in Iowa, several other states and/or municipalities, including the District of Columbia and Vermont, began to show signs of adopting a favorable stance to gay marriage or civil partnerships (Lindenberger, 2009; Steinmetz, 2010). Yet, while it appears that progress in recognizing the civil rights of same-sex couples is being made, it may be a two steps forward, one step back, situation. The day after Washington D.C.'s Civil Marriage Act went into effect (Steinmetz, 2010), the Attorney General for the Commonwealth of Virginia, Kenneth T. Cuccinelli II, distributed a letter to all public colleges and universities stating that sexual orientation or gender identity were not considered to be protected groups in

discrimination policies and that the inclusion of these groups in such policies is beyond the authority of college boards (Cuccinelli, 2010).

As Stanko (1990), McClennen (2005), Miller, Forest and Jurik (2007) and Drake (n.d.) suggest, there is a strong undercurrent of homophobia operating in modern society and, given that the degree of activism in the gay, lesbian, bisexual and transgendered (GLBT) community has increased and sought to bring about equality in social institutions, such as marriage and adoption, the conflict between the so-called “in group” of heterosexuals and the “out group” of people who embrace other sexual orientations may produce an increase in emotional, psychological and physical acts of aggression and violence. Additionally, due to their marginalized status as a group, homosexuals and bisexuals are placed in a position where assaults and homicides involving GLBT community members impact the entire community. These events increase stress and fear of victimization and, when not handled with the appropriate amount of empathy and diplomacy, can also act to further entrench distrust of social services, such as the police and domestic violence shelters (Drake, undated).

This study aims to explore GLBT homicides in the United States, and, specifically in this paper, victim risk factors associated with these cases. The Center for Homicide Research (CHR), based in Minneapolis, Minnesota, has compiled the only database to date that looks solely at GLBT homicide. While the data set includes homicides where the victim, offender, both the victim and offender or the homicidal event itself indicate that membership in the GLBT community may be significantly involved in the death, Drake (2004) provides several factors that indicate a “gay” homicide: the victim acknowledging engaging in same-sex sexual behavior or self-identifying as gay, a family member or close personal friend identifies the victim as being gay, the murder is reported in gay or lesbian news sources, Gay Crime Victim Advocates receive

information that the victim was gay, or the victim was last seen at a gay event or location. Additionally, there are several elements identified as being “typical” of a gay homicide, including a partially clothed or nude male victim, death occurring outside the domain of the offender, signs of overkill or arson are present but a firearm was not the cause of death, and the victim is found in a sleeping area of a home that shows no signs of forced entry (Drake, 2004).

Kuehnle and Sullivan (2001) also discuss anti-gay violence, finding that white or Latino gay males and transgendered individuals who are older, approximately aged 46 to 64, were more likely than other members of the GLBT community to be the victims of personal violence, with strangers being the offender approximately in half of the incidents where gay males were victimized and only in one-fifth of the cases where transgendered individuals were victims. Although little empirical research regarding GLBT homicide has been published, some literature has been published about risk factors that increase the potential for victimization in the GLBT population, namely a history of domestic violence, engaging in prostitution and the use of alcohol and drugs.

Methodology

The Data

The data for this study was provided by the Center for Homicide Research (CHR), located in Minneapolis, Minnesota, USA. The data utilized in this research was the 1996-2006 subset, containing 274 cases of gay, lesbian, transgender and bisexual homicide where either the victim was identified as gay, lesbian, bisexual or transgendered; the victim was engaged in same-sex behavior at or during the homicidal event; or where there was any indication that same-sex behavior was a significant factor in the homicidal event. Due to missing data, 59 cases and the vast majority of offender-related variables were excluded from this study. Additionally, 21 cases were excluded due to missing inclusion concept in cases where there did not seem to be a clear

connection to GLBT status, or in cases where there were mitigating factors, such as pedophilia with inclusion being based on the fact that the child victim was of the same sex as the offender, or where the GLBT element did not seem to have direct bearing on the homicidal event, such as victims who died in the September 11, 2001, terrorist incidents. Once these cases were excluded, there were 187 GLBT homicides remaining to be examined in this research.

Method of Statistical Analysis

As this data set is the only one in the United States examining GLBT homicides exclusively and has not been previously studied, this research is both deductive and exploratory in nature. Combined with the fact that almost all of the data is categorical in nature, the statistical methods used to examine the data were frequencies and chi squares, with Phi and Cramer's V summary statistics run to assess the magnitude of significant correlations. All variables examined were run in crosstabs with chi squares against each other.

Once significant correlations were identified, and victim risk factors were identified as an area of interest, control variables—victim age, gender, sexuality and economic status—and victim risk variables, such as alcohol and drug use, prostitution, previous history of domestic violence or previous legal intervention, and provocation, were used to determine their predictive value on outcome variable of homicide syndrome. The categories for homicide syndrome were collapsed and then recoded as yes or no for each category so that binary logistic regression could be used.

Discussion

Although additional studies and larger samples are needed, the results of this study are supported, for the most part, by the literature. The significant relationships between domestic

violence and inclusion concept, domestic violence and previous legal intervention and domestic violence and victim as a previous offender are all grounded in the literature cited in the literature review, as are the prominence of a previous history of domestic violence as a predictor for intimate partner homicide. However, the tendency for homosexual victims to avoid reporting domestic violence, either due to a lack of community support available, a fear of being outed, or another reason, does indicate that it is possible that, once a death occurs, more information about previous incidents of domestic violence will become available through multiple resources. Contrary to the literature, however, was the finding that women were more frequently involved in domestic violence than males. Kuehnle and Sullivan (2003) indicated that gay men experience more levels of extreme violence than lesbians, yet, when domestic violence is involved as a risk factor for homicide, it appears that the opposite may be true. In all, these results suggest that is a serious need for targeted domestic violence outreach and services in the GLBT community to address the prevalence of this issue. Other possible means of combating domestic violence in this community would be through media campaigns, educating law enforcement personnel regarding the prevalence of domestic violence and the risk a history of abuse poses in this community, and a linking of resources with mainstream anti-domestic violence efforts to effectively deliver services.

Likewise, while drug use is often associated with prostitution, this sample showed that the two are not necessarily as entwined as social stereotypes would suggest. Several of the findings involving prostitution, including the relationship with symbolic cruising locations, and alternate gender expressions were not surprising, with these results solidly supported by the literature. There were no findings in the categories of drug and alcohol use by the victim that were not supported in the literature. Thus, targeted outreach to those engaged in these

behaviors—prostitution, drug and alcohol use—could open dialogues and also aid in developing risk management and situational prevention strategies.

Conclusions

As social scientists, we are only just beginning to explore and understand the relationship between sexual orientation, the GLBT culture and homicide. The Center for Homicide Research, in creating the GLBT data set, has developed a powerful analytical tool that will provide research opportunities for many years to come and, if maintained, will provide great insight into the complexities of homicides involving members of the GLBT community. The current research, while exploratory in nature, shows that the victim risk factors of domestic violence, prostitution and alcohol and drug use, which are commonly addressed in mainstream homicide research, are significant risks in GLBT homicide, as well. More research needs to be done to determine the extent of the impact of these risks in GLBT homicides, if sexual identity or orientation exacerbate or mitigate these risks, and how knowledge of risk factors, victim information and incident details can be used in a both a predictive fashion and to bolster preventative efforts.

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The Influence of the Street Network on the Distribution of Lethal and Sub-lethal Violence in Public, Open Spaces

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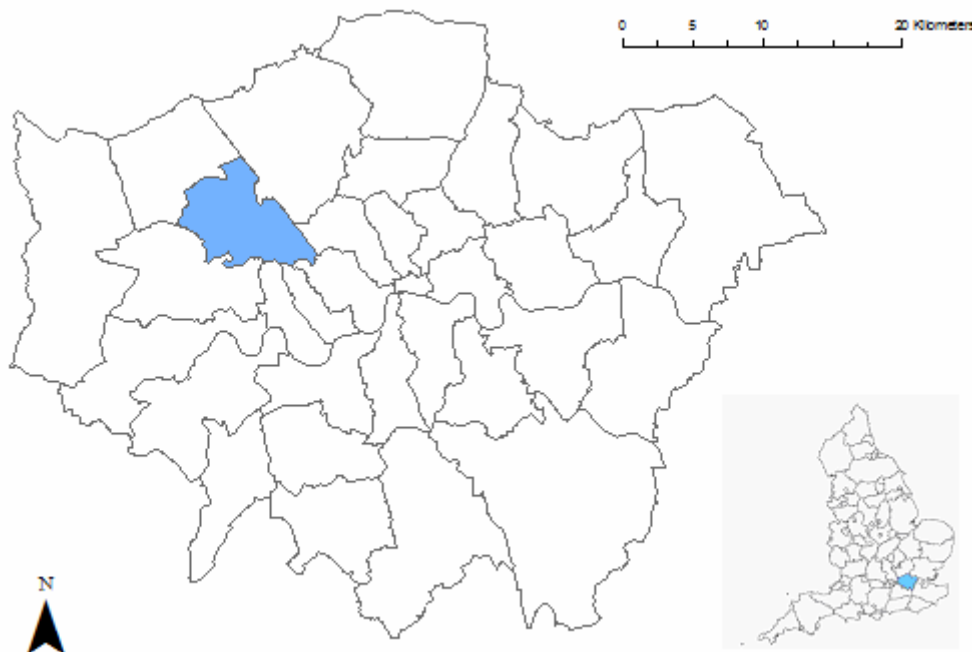
The configuration of the street network can be influential in determining the spatial distribution of criminal events. For instance, property crime has been found to be higher in more accessible areas, possibly due to the increased availability of targets in these areas (Bevon et al. 1994). In recent years, Space Syntax (see Hillier and Hanson 1984) has been used to explore these relationships in a more systematic way, for crimes such as burglary (e.g. Hillier and Shu 2000; Shu 2000) and street robbery (e.g. Sahbaz and Hillier 2007). To date, however, this technique has not been applied to the study of serious violence, other than in relation to personal robbery.

This study aimed to determine whether the street network topological configuration (as measured using Space Syntax) influences the spatial distribution of serious violence and, if so, whether this varies when certain factors are considered. These include the offence type and the timing of the offence.

Methods

Data for all serious violence offences recorded by police as having taken place in an open, public space in the London Borough of Brent (see Figure 1) between 1st April 2002 and 31st March 2007 were included in the analysis. The offence types considered were homicides, attempted murders and other forms of violence where the injury inflicted on the victim(s) was severe. This amounted to 454 offences.

Figure 1. Map of the location of the London Borough of Brent within Greater London and England, UK.



In total, there were 7,177 street segments contained within Brent. A street segment is defined – for the purposes of this study – as a straight line within the street network that is delimited

by street intersections. These were, on average, 76.24 metres long (minimum 0.001m; maximum 788.82m; median 59.54m; standard deviation 73.29m - some of these segments are extremely short, due to the segment automatic generation procedures used in Space Syntax²).

Each offence was then assigned to the segment it was nearest to – the street segment being represented by a straight line that fell somewhere within the open air space within each street (sometimes along the middle of the street, sometimes on a diagonal). On average, offences took place 18.60 metres away from the nearest street segment (minimum 0m; maximum 130.02m; median 16.20; standard deviation 16.24m).

The 454 offences were assigned to 378 street segments in total, indicating some degree of spatial concentration, even at this level. Most segments contained just one offence ($N_1=320$); 44 segments contained two offences; 11 segments contained three offences; two segments contained four offences; and one segment contained five offences.

Space Syntax measures considered

There were two main Space Syntax measures that were considered in this study: *integration* (indicative of to-movement) and *choice* (indicative of through-movement). Both of these are calculated using increasing radii. In this study, the radii chosen ranged from 100m to 3,000m, at 100m intervals (i.e. 30 radii in total). The maximum radius was chosen in line with the buffer that was created around the study area to avoid edge effects (i.e. both values equalled 3,000 metres). According to Hillier (2009), pedestrian movement is best represented by radii of around 800m – although smaller radii may be more appropriate in more locally intensified areas such as where there is a market – while vehicular movement is best represented by higher radii.

Integration measures indicate how close (or accessible) each segment is to other segments within a specified radius. As such, it is a proxy for the destination potential of each segment (i.e. a measure of to-movement). Integration in Space Syntax is measured by the *mean depth*, which is the mean number of steps away other segments are from the one this measure is being calculated for. Because the mean depth is dependent on the total number of segments

² In future weeks, the possibility of using Ordnance Survey MasterMap Road Network data to address this problem will be explored.

in a system (k), this measure is usually converted to the *relative asymmetry* – this enables integration measures for differently sized graphs to be compared. For a particular number of segments, the maximum and minimum mean depths are calculated; these will be equal to the mean depths for a unilinear structure ($MD=k/2$) and that for a maximally shallow graph or bush-like structure ($MD=1$). The formula for calculating the relative asymmetry is:

$$RA = \frac{2(MD - 1)}{k - 2} \quad \text{[Equation 1]}$$

While relative asymmetry is a proxy for to-movement, the choice metric is a proxy for through-movement. Segments with high choice values are more likely to be found in least angle routes between all other segments in the system.

Comparisons between street segments based on the presence or absence of crime

To begin with, the 378 segments where at least one offence took place were compared to the remaining 6,799 street segments (i.e. containing no crime). Results showed that segments where crime took place had lower levels of integration at smaller radii (i.e. 100m) but, at 200m the pattern switched, so that on radii between 300 and 900 metres, it was the segments containing no crime that were more integrated (with higher radii, there were no discernible differences between the two segment groups). However, this effect disappeared once the length of the segments was taken into account.

In relation to choice, all segments appeared to have comparable values up until a radius of 900m. From this on, the differences between the two segment groups gradually increased, with segments containing crime having higher values for this measure (this effect remained after accounting for the segment length).

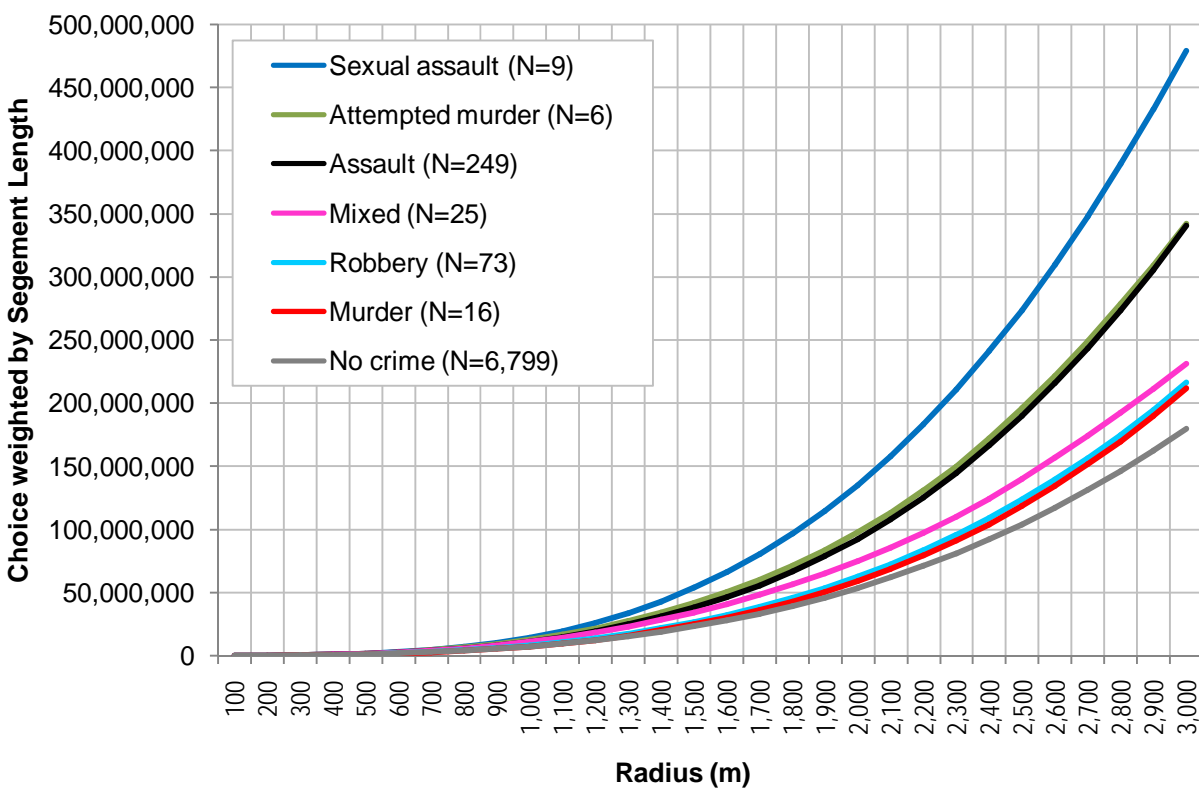
Comparisons by crime type

Most of the 454 offences related to assaults ($N_A=321$). Of the remaining 133 offences, 92 were robberies, 20 murders, 10 attempted murders and 11 sexual assaults. Each segment was assigned to one of these categories, based on the type of the crime that fell on it. Where segments contained more than one crime, a crime type category was allocated where all

crimes falling on the segment were within the same category. Where this was not the case, the segment was classified as 'mixed'.

As before, once the segment length was taken into account, no differences in relative asymmetry (i.e. to-movement) were detected. However, some differences were observed at higher radii for choice, with segments containing sexual assaults having higher through-movement potential (see Figure 2).

Figure 2. Choice measures at varying radii (weighted by segment length), separated by crime type.



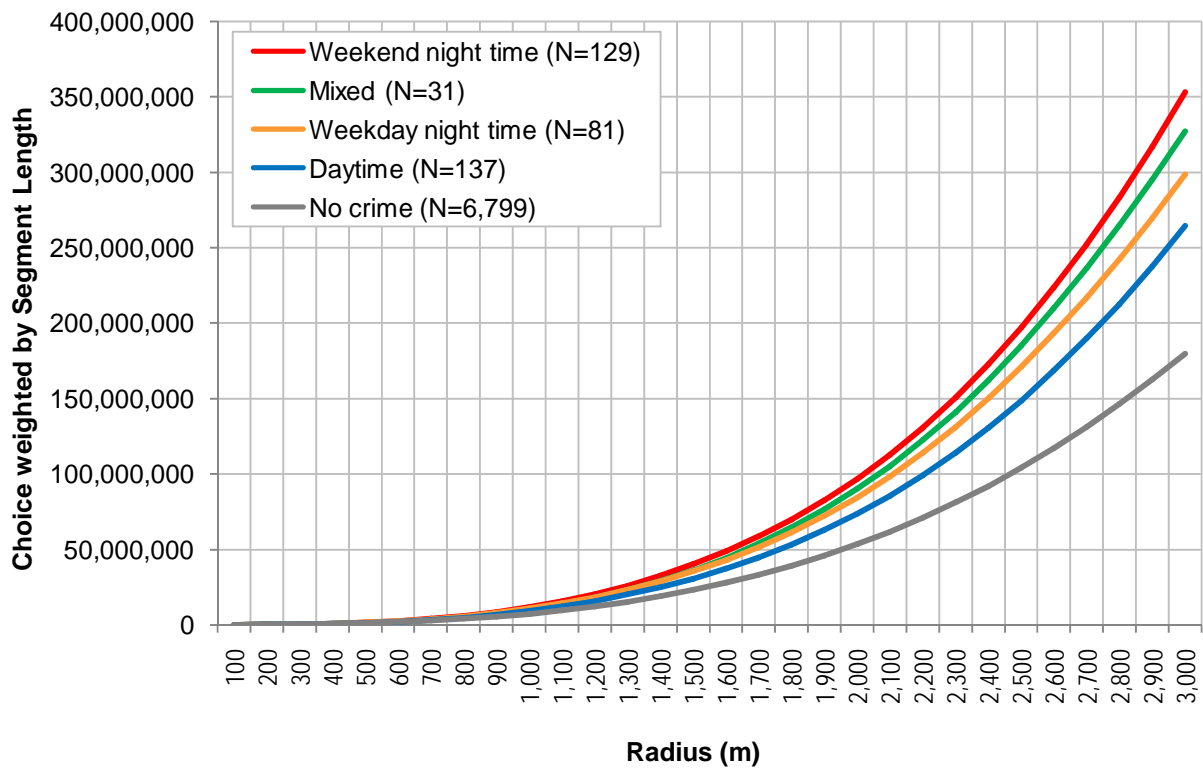
Comparisons by time of the offence

Offences were categorised as either having taken place during the day (i.e. 'Daytime'; 07:00-18:59h any day of the week; N=173), during the night on a weekday (i.e. 'Weekday night time'; 19:00-06.59h Monday-Thursday; N=112) or during the night at the weekend (i.e. 'Weekend night time'; 19:00-06.59h Friday-Sunday; N=169). Each segment was assigned to one of these categories, based on the type of the crime that fell on it. Where segments contained more than one crime, an offence timing category was allocated where all crimes

falling on the segment were within the same category. Where this was not the case, the segment was classified as 'mixed'.

Again, no discernable differences were observed for the to-movement potential. In relation to through-movement potential, some differences were observed at higher radii, with street segments where crimes occurred during weekend nights having the highest choice values (see Figure 3).

Figure 3. Choice measures at varying radii (weighted by segment length), separated by timing of offence.



Summary, interpretation and further analyses

Overall, it seems that choice measures (i.e. through-movement) are better than relative asymmetry measures (i.e. to-movement) at differentiating between those street segments where no crimes took place and those where at least one crime occurred, with the latter being associated with higher through-movement potential, but only at radii of one kilometre or higher – this is greater than the optimal distance for pedestrian movement. Particularly high choice values were observed for sexual assaults and offences taking place during weekend

nights, again at larger radii.

It is difficult to interpret these results without considering further information. One of the methodological shortcomings of Space Syntax is that it fails to take into account information about the socio-demographic characteristics of the area and the land use configurations.

Relating Space Syntax measures to the socio-demographic characteristics of an area can be difficult due to the differing levels of aggregation applied to each set of variables; while Space Syntax measures are calculated using a line as the unit of analysis (i.e. the street segment), socio-demographic variables tend to be aggregated at the polygon level (e.g. Output Area or Census tract). Although some of the street segments may be fully contained within a Census area, others may fall on two or more. In addition, an assumption is made that all street segments contained within a specific Census area would be homogeneous in relation to these socio-demographic variables, which may not always be the case.

Land use can also be an important factor to consider, especially when estimating measures of to-movement. It is a possibility that, once land use data are incorporated into the analyses, clearer patterns might emerge.

In the following weeks, socio-demographic and land use data will be added to the model and their relative contribution assessed. It is hoped that the presentation given at the HRWG meeting will include this information. The presentation (time allowing) will also include a more extended description of the Space Syntax methodology, for the benefit of those who have not encountered it previously.

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Juvenile and Adult Homicides: A Comparative Geographic Analysis

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Abstract: Previous research has shown that several indicators of social disorganization significantly aid in the prediction of homicides by young offenders (Laurikkala, 2009). However, the effect that social disorganization variables have on adult versus juvenile perpetrated homicides is less known. The seminal work on the connection between communities and its relation to crime are associated with the Chicago School and many of the early sociologists, including Shaw and McKay (1969, [1942]), Park and Burgess (1924), and Thrasher (1963, [1927]). In this paper, we are demonstrating similarities and differences in the geographic locations of adult and juvenile homicides in Chicago with the use of ArcGIS, thus extending previous research on the geographic distribution of crime by focusing on the relevancy of community context to help explain homicide offending among juvenile and adult homicide offenders. The data for the present study were derived from The *Homicides in Chicago, 1965-1995 offender* data set. The results indicate some significant differences between the homicide locations for juveniles and adults. Limitations and suggestions for future research are addressed.

Introduction and Literature Review

Criminologists have long recognized that certain variables are related to crime. Edwin Sutherland (1992 [1942]), for example, noted decades ago the significance of age, gender, race, social class, and community size as important factors impacting crime. This paper focuses on age and community context as significant correlates of homicide offending.

In a seminal article, Hirschi and Gottfredson (1983) argued that people commit fewer crimes as they age, regardless of various factors, including race, gender, and social class. However, very few of the most violent offenders are very young, for example, very few of the homicide offenders are under the age of 13 (Heide, 1999; Laurikkala, 2009). Further, while young persons under the age of 18 constitute approximately 25.7% of the population in the United States (U.S. Census Bureau, 2008) only 8.7% of the suspects of the minimum of 16,277 murders that were committed in the United States in 2008 were under the age of 18 (Federal Bureau of Investigation, 2009).

Research has also shown consistently that crime rates and the risk of victimization vary by social context, which is evidenced by the fact that crime is more common in specific geographic areas, for example, the rates vary by cities, neighborhoods, census tracts, and standard metropolitan statistical areas (SMSAs) (Miethe & Meier, 1994). Communities with higher rates of crime are characterized by such factors as family disruption, high rates of unemployment, economic deprivation, and racial segregation (e.g., Peterson & Krivo, 1993; Sampson, 1987; Shihadeh & Steffensmeier, 1994).

The early work on the connection between communities and its relation to crime are associated with the Chicago School and many of the early sociologists, including Shaw and McKay (1969, [1942]), Park and Burgess (1924), and Thrasher (1963, [1927]). Shaw and McKay (1969, [1942]) examined the distribution of male delinquency in Chicago and its relation to various community characteristics and based on the results led them to conclude the following: “It is clear from the data included in this volume that there is a direct relationship between conditions existing in local communities of American cities and differential rates of delinquents and criminals” (p.315).

In an examination of juvenile homicides in Chicago over a 31-year time period, Laurikkala (2009) found that several variables related to social disorganization could aid in the prediction of homicides by juveniles. Specifically, the results show that racial/ethnic heterogeneity, educational deprivation, unemployment, and family disruption to be significantly and positively related to juvenile homicides. The question of whether the conditions of communities’ impact juvenile and adult homicide offenders similarly remains largely unexamined, however. In a scarce study focusing on structural sources of homicide offending in which the data were disaggregated by age and gender, Steffensmeier and Haynie (2000) found that structural disadvantage had an effect on both adult males and females, but among juveniles, the effect was considerably smaller on females. This line of research that disaggregates data by age (and gender) is called for because it is possible that social disorganization has a differential impact on adults and juveniles.

The main assumption of social disorganization theory is that criminal behavior is more frequent in areas that are less socially organized. Sampson and Groves (1989) define social disorganization as “the inability of a community structure to realize the common values of its residents and maintain effective social controls” (p. 777). The classic statement of social disorganization was first formulated by Shaw and McKay (1969, [1942]) who outlined their theory in *Juvenile Delinquency and Urban Areas*. Shaw and McKay demonstrated systematic relations between social areas and crime rate, and how delinquency rates declined as the distance from the inner-city neighborhoods increased. Consistently they found the highest rates of delinquency in the transition zones—locations adjacent to the areas zoned for industry and commerce, including the central business district. By focusing on structural sources of violence, i.e.

community characteristics, the purpose of this present study is to demonstrate similarities and differences in the geographic locations of adult and juvenile perpetrated homicides in Chicago with ArcGIS.

Methods

The data for the present study were derived from the *Homicides in Chicago, 1965-1995* offender dataset. The dataset consists of information on every homicide recorded by the Chicago Police Department (with the exception of “justifiable” homicides) between the years 1965 and 1995 and it was compiled by Block and Block and made available by the Inter-University Consortium for Political and Social Research (Block, Block, and the Illinois Criminal Justice Information Authority 1998, number 6399). A total of 24,509 homicides were included, of which 30% were committed by offenders under the age of 19.

Data Analysis

The comparative geographic analysis of the locations of juvenile and adult homicides was completed using ArcGIS (Geographic Information System) Map. In this analysis, the locations of adult and juvenile perpetrated homicides were mapped to determine if the spatial distribution of the homicides for each Census year group: 1965 to 1974, 1975 to 1984, and 1985 to 1995. This was implemented by geocoding³ each of the homicides, based on the Census tract provided in the offender dataset for each of the year groupings. Then the Census maps were each joined with the homicide dataset based on spatial location. This way each incident of adult and juvenile perpetrated homicide was tallied to a total count for each Census tract per Census year group. The analysis of the Local Moran’s I, a spatial autocorrelation tests was used to determine the distributions of the homicides, was completed. The Local Moran’s I is a value calculated for each division—the Census tracts in this study—of the whole area and allows for scrutiny of the locations to determine where the significant clustering or dispersion of homicide counts were located. However, the Local Moran’s I test violates the assumption of independence. To address the violation the Bonferroni test was used as a more stringent criterion for the significance level, by adjusting the significance level and accounting for the number of tests completed. The Bonferroni at the stringent confidence level were significant at the alpha level of $5.46e^{-5}$. For an alpha level of a two-sided z-score of $5.46e^{-5}$ the critical value is the absolute value of 4.055 (Sauro 2007). With the use of the Bonferroni test it is easier to identify the significant clustered locations of the two types of homicides which aid in the understanding of how the locations of the homicides relate.

³ Geocoding is the placement of known locations on a map. It is often done with street addresses to find a known location. In this case the known locations are the Census tracts in which the homicides occurred.

Results and Discussion

After mapping the data and completing the Local Moran's I test, we then applied the Bonferroni test to determine whether the findings were significant at the stringent significance level, those tracts which are not significant at this stringent level are in a shade of gray (See Figures 1, 2, and 3). In Figures 1, 2 and 3 the Local Moran's I at the Bonferroni level a large positive value indicates that the feature is surrounded by tracts with similar homicide counts (Mitchell 2005), which is indicated in a shade of red. A negative value indicates that the tract is bordered by tracts with dissimilar counts, which is indicated in a shade of blue. The darker the shade of gray, red or blue indicates the higher count of homicide per Census tract, the lighter shade indicates a zero or lower count.

From 1965 to 1974, the test identified 119 tracts in which adult perpetrated homicides occurred around tracts with similar counts in bordering tracts, and 98 tracts where juvenile perpetrated homicides were similar in counts of homicides to the bordering tracts (Figure 1). It is noticeable that the differences in the location of the significant Census tract clustering between the adult and juvenile perpetrated homicides are slight. However, the juvenile perpetrated homicides are not as spread out as the adult, nor are there as many homicides per Census tract.

From 1975 to 1985, the test identified 68 tracts for adult perpetrated homicides that occurred around tracts with similar counts and 35 tracts were identified for juvenile perpetrated homicides (Figure 2). It is important to be reminded that the number of significant tracts does not necessarily relate to high counts of homicides, but it identifies the tracts that are of

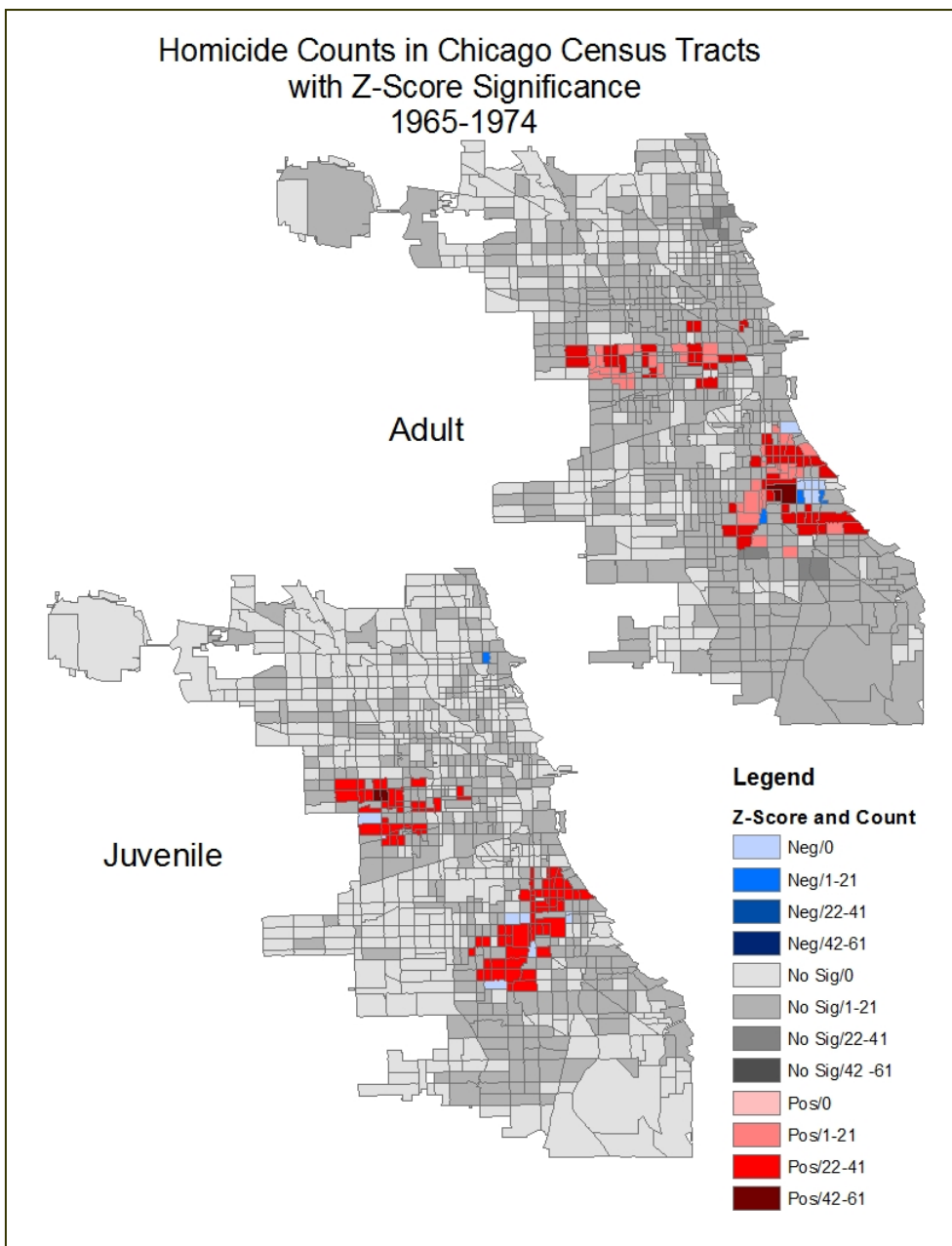


Figure 1. 1965-1974 significant Tracts and homicide counts

similar; whether of zero, low or high, counts of homicides. In this map there is quite a change, the adult and juveniles perpetrated homicides are not as focused as was seen in the 1965-1974 grouping. One noticed difference between adult and juvenile perpetrated homicides is the juvenile perpetrated homicide map there are some tracts in north central Chicago that are significant, but are not for adults.

In the final year group of 1985 to 1995, the number of adult perpetrated homicide tracts that were located to similar count tracts were 75 and 61 tracts with juvenile perpetrated homicide counts were identified because they are located around tracts of similar counts (Figure 3). Although the prominence of significant tracts is once again, there still seems to be more of a difference in the locations of the juvenile significantly clustered tracts and the adult. In Figure 3 it is noticed that the juvenile perpetrated homicides have a focus in south central Chicago where the adult perpetrated homicides are not as prominent.

Conclusion

This study builds upon the notion that community context is an important component in understanding violent offending. Specifically, in this paper we focused on the relevancy of community context in helping to explain homicide offending among juvenile and adult homicide offenders. The results of the mapping of both juvenile and adult homicides show that both types produced a cluster effect for the locations of the homicides by Census tract. It is also shown that from a general view point the significant clustered Census tracts with counts of homicides are similar between juvenile and adult perpetrated homicides. However a more detailed view of the locations of these two perpetrations of homicides shows there

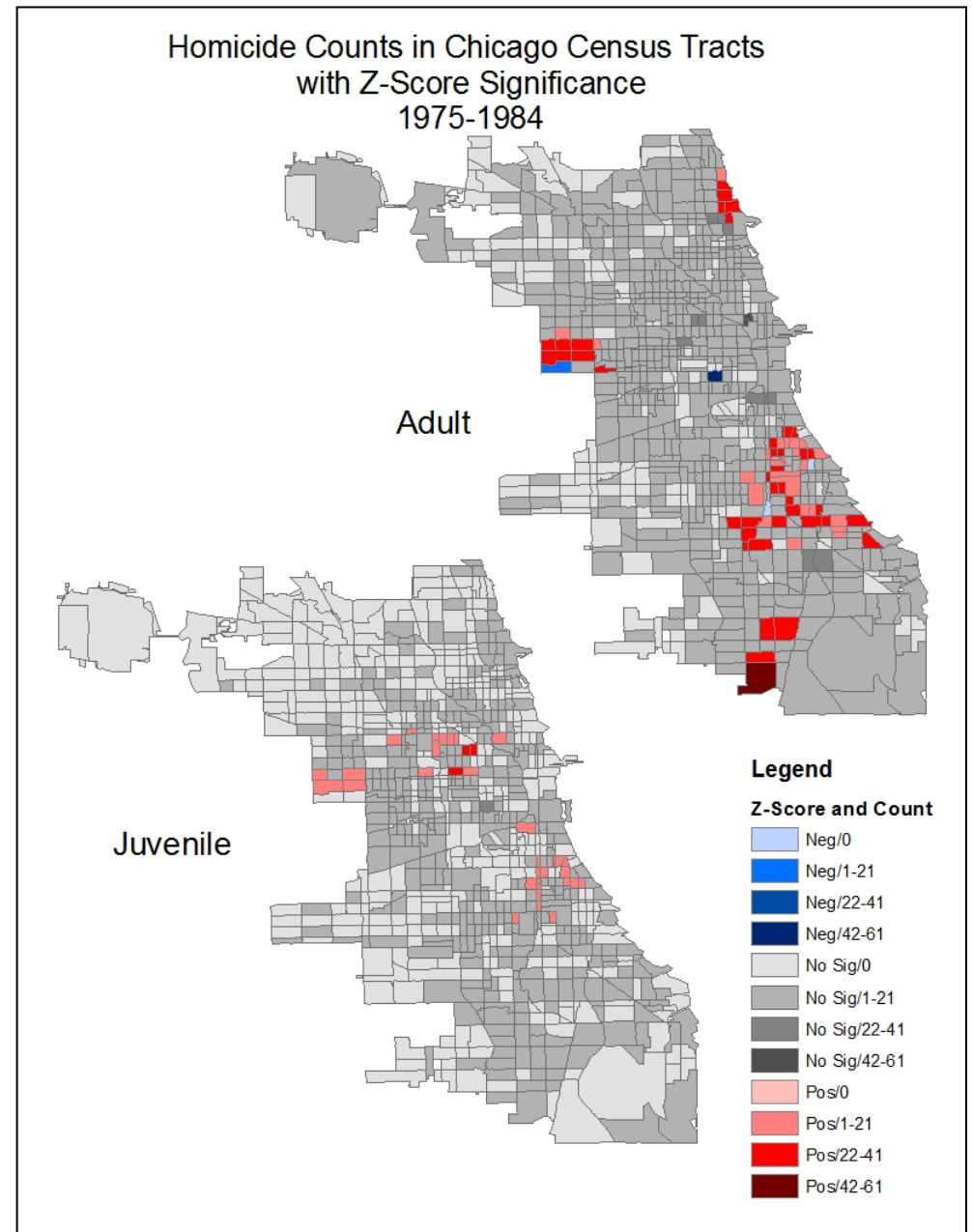


Figure 2. 1975-1984 significant Tracts and homicide counts

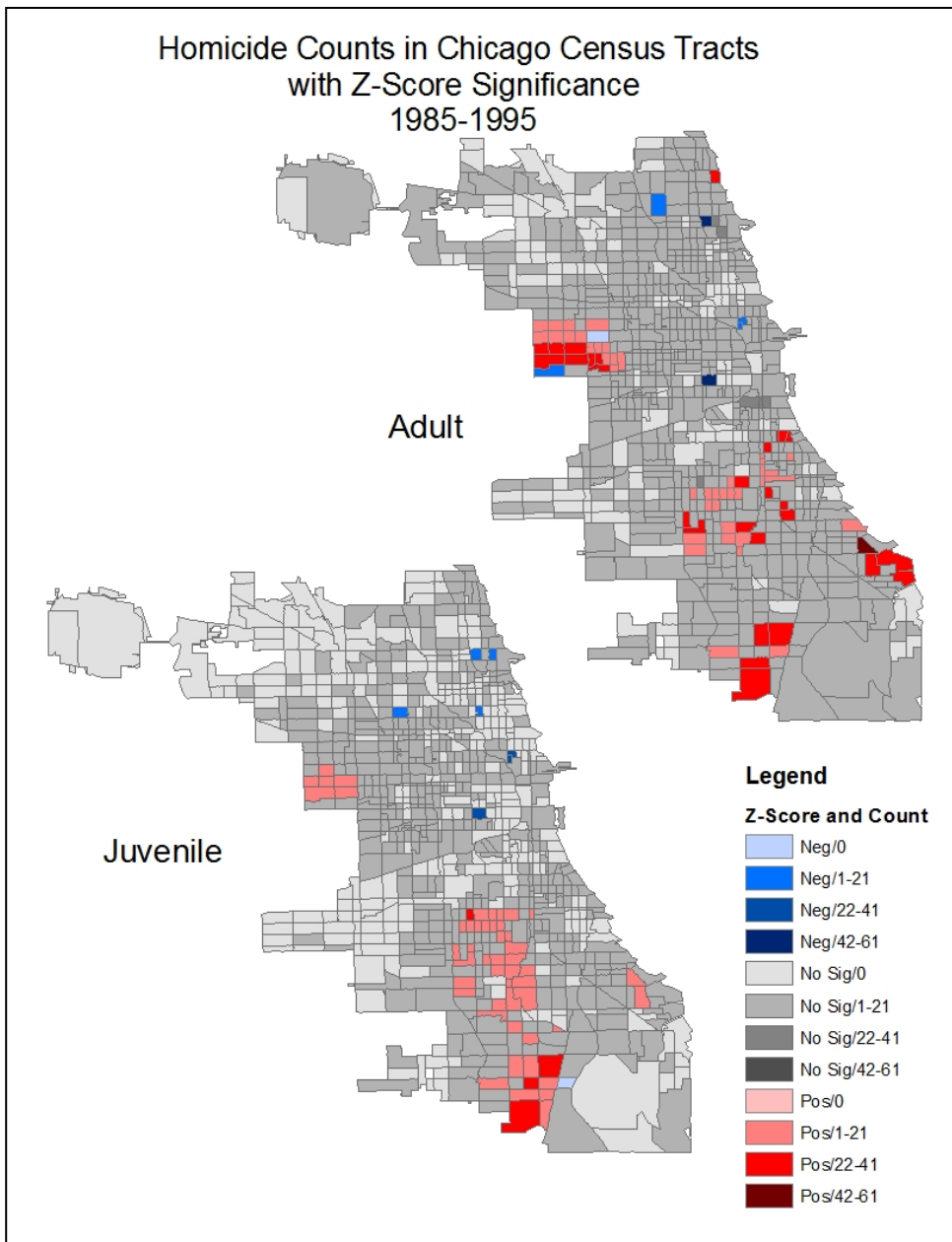


Figure 3. 1985-1995 significant Tracts and homicide count

are some differences in the locations. Specifically, the findings indicate that the differences between adult and juvenile perpetrated homicide locations grew larger over the 31-year period.

The differences in these locations we hope will help us to identify in the future whether the rates of homicides by juveniles or adults better relate to the variables of social disorganization. This line of research poses important implications for better understanding homicide and the possibilities of prevention.

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Studying Homicide Location Using NIBRS and the CHD

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Introduction

Where a homicide occurs has been a topic of interest to criminologists for decades. In his seminal work, *Patterns of Criminal Homicide*, Wolfgang (1958) devoted an entire chapter to examining the location or “spatial patterns” of homicides. He believed that where a homicide occurred had the potential to provide a larger context in which to interpret and explain homicides. Other criminologists have continued to see the importance of location particularly in the development of various opportunity theories of victimization including routine activity (Cohen & Felson, 1979; Cohen, Kluegel & Land, 1981), lifestyle-exposure (Hindelang, Gottfredson & Garofalo, 1978), and criminal event perspective (Sacco & Kennedy, 2002; see also Luckenbill, 1997).

All three of these opportunity theories share a common focus that includes location as a measure for exploring (directly or indirectly) the activity that exposes a person to crime and victimization. By including these locations, homicides can be situated in a richer context which can be used to better explain their occurrence as well as to suggest policy implications. In one study that utilized routine activities theory to explain homicide, Messner and Tardiff (1985) found that individuals whose lives are centered in the home (such as housewives or those under age 16 or over age 60) are more likely to be killed at home (see also Caywood, 1998, for a replication of Messner and Tardiff’s study). In a recent study utilizing the criminal event perspective, Weaver and his colleagues (2004) found that violence that occurred in a home tended to be more lethal. Based on this finding, the researchers suggested the need to continue efforts to reduce domestic violence.

Location also has been included in descriptive studies to better understand the context of homicide incidents. In these studies, location measures often appear as dichotomies comparing home and non-home locations (e.g., Addington, 2007; Swatt & He, 2006). Homicides frequently occur at home especially between victims and offenders who know each other (e.g., Mouzos, 2000). Despite the inclusion of location in these studies, location typically appears as one of many descriptive variables and is not the primary focus of inquiry (e.g., Zahn & Sagi, 1987). A notable exception is the body of work that has focused on the presence of firearms in the home and risk of homicide (see Hepburn & Hemenway, 2004, for a review of the literature).

One reason for the lack of emphasis on location and studies focusing on this attribute of homicides may be a lack of available data. Homicide researchers looking for national data typically utilize the Uniform Crime Reports (UCR) and the UCR’s Supplementary Homicide Report (SHR). While the SHR gathers incident-level details, no location data are collected. As such projects examining location have been limited to a single city (Messner & Tardiff, 1985) or comparison of two (Caywood, 1998) or nine (Zahn & Sagi, 1987) cities due to data limitations that require researchers to collect location data themselves.

To address these data limitations, our study examines this issue by widening the geographic scope and using the UCR’s National Incident-Based Reporting System (NIBRS) data and the Chicago Homicide Dataset

(CHD). By using both datasets, this study can provide a more comprehensive picture than by relying on either dataset singly. Although the NIBRS data do not provide complete coverage of the nation, they provide a broader scope than any other publicly available data. NIBRS provides location information, but these data are not as refined as those collected by the CHD. One limitation of NIBRS arises from its limited coverage and particularly its small agency bias (Addington, 2008). Currently no agency covering a population over 1 million participates in NIBRS (JRSA, n.d.). This results in a large case selection bias, which could pose a limitation to this study. The CHD provides a means to overcome this limitation because it provides data from one of the largest cities in the United States. These data allow us to detect variations that may be attributable to jurisdictional size. However, the CHD by itself has the limitations of prior studies that were limited to only one jurisdiction. Both the CHD and NIBRS data allow a more complete study of location and homicide.

Research Agenda

Our present study has three main purposes: (1) to confirm the findings of local studies regarding locations of homicides by using a multi-state dataset; (2) to build on these in terms of details concerning variations by sex and patterns related to variations by sex as well as more precise age categories; and (3) to explore the benefits to research and practice of utilizing two data sources. The primary focus of our initial study here is on home locations. We plan to expand our analysis to other locations in the future.

Data and Methods

Data

NIBRS

This study uses data from the 2000 to 2002 NIBRS. These data constitute the three years of public-use NIBRS data that are both the closest in time to the CHD and have sizable coverage (20% of the US population). Three years are used to both expand the cases examined and to limit possible variations occurring in a particular year.⁴ The cases analyzed are all murders and nonnegligent manslaughters. Both offenses are referred to as “murder” for shorthand. The unit of analysis is murder victims. Between 2000 and 2002, 5,706 murder victims were reported in NIBRS. NIBRS murder data are incident based and provide victim and offender demographics as well as details such as victim-offender relationship, circumstance and weapon. Of relevance for this study is that NIBRS collects information about the location of the murder as well as additional details such as victim demographics, victim-offender relationship and weapon used.

CHD

⁴Variations could occur since new states and law enforcement agencies begin reporting NIBRS data at regular intervals. Since no large agencies have begun reporting in NIBRS format and because all agencies are held to the same stringent data quality requirements, little variation has been found to occur. In addition, in analyses not presented here, individual years of NIBRS data were examined and compared. Each year provided a consistent pattern.

This study uses data from 1965 to 2000 in the Chicago Homicide Dataset (CHD). One of the largest and most detailed datasets on violence ever collected in the United States, the CHD contains detailed information on every homicide in Chicago police records from 1965 to 2000 totaling over 200 variables and over 27,000 homicides (for an overview, see Block & Block 1992). Data collection began in 1968 and continues today, with the coding of all variables consistent back to 1965. The CHD is organized so that questions about victims, offenders, or incidents (and inter-relationships among them) can be answered, and each case is geo-coded to Census tract. The data are publicly available through the National Archive of Criminal Justice Data (ICPSR 6399).

Variables Utilized

Location Measures

NIBRS collects location information that specifies 25 locations, which include a variety of places such as home/residence, bar/nightclub and highway/road/alley. Law enforcement agencies are instructed to report where the crime incident occurred (FBI, 1992); however, it is possible that the location is where the body was discovered rather than where the crime occurred. With regard to recording home/residence, NIBRS does not specify in whose home the murder occurred. It could be the home of the offender, the victim, both or neither.

CHD location is coded by the homicide detective filling out the Murder Analysis Report (MAR) as the place where the body was found or the place where the injury occurred. There are many values in the MAR location variable, and the Chicago Homicide Project has added additional, more detailed, categories using the MAR narrative to distinguish between public and private places. The Project also created summary recodes. When further information is discovered about place of injury through CPD investigation, the Homicide Project updates the information in the CHD. In addition, the Project created a variable containing information about the specificity of location information. The values for this variable are: Place where fatal incident occurred; Place where victim died (not where injury occurred); Dump Site (body moved to this place after death); Abducted to this place; Place where body found - unclear if person was killed here; Place of occurrence, but body moved elsewhere; Victim dropped off at hospital.

With regard to home location, the CHD location provides more specific details that enable this location to be further explored. These details specify in whose home the homicide occurred; for example, if it was the home of the victim, offender, both victim and offender, or someone else. Details also specify the type of home such as traditional home, hotel or group home, or outdoor residential home.

Victim Characteristics

For both NIBRS and CHD, the victim demographic variables include sex (male and female) and age. For this analysis, *age* is categorized into five year groupings (i.e., 0 to 4; 5 to 9; etc.) to mirror Census population data. The oldest victim in the CHD was 103.

Both NIBRS and the CHD have numerous codes for victim's relationship to each offender in the incident. The CHD has over 80 relationship type values for each victim-offender dyad. For ease of comparison, this analysis divides victim-offender relationship into five categories - intimate partners, family members, friends/acquaintances, strangers and unknown. *Intimate partners* are spouses, common-law spouses, ex-spouses, ex-commonlaw spouses boy/girlfriends, ex-boy/girlfriends (CHD only), same-sex partners, and ex-same-sex partners (CHD only). The CHD *intimate partner* category also includes victims killed by an offender who was sexually pursuing them but being rejected. Casual sex partners are not included. Other *family members* include parents, children (including step and foster relationships), siblings, half-siblings, mother's boyfriend, father's girlfriend, grandparents, grandchildren, cousins, aunts and uncles, in-laws (including commonlaw in-laws), ex-in-laws, and other family relationship. The CHD provides finer distinctions for family members than NIBRS (by identifying, for example, cousins, half-siblings, foster relationships).

Friends/acquaintances include friends, neighbors, acquaintances, employers/employees, and ex-employers/employees, otherwise known (e.g.: proprietor/customer, child/babysitter, landlady/tenant, sexual rivals, cab driver/fare, partners in crime, and prostitute/client). *Strangers* are those identified through investigation as strangers. To minimize the number of missing cases, a category of *unknown* victim-offender relationship was included to include those cases where the relationship was specified as unknown as well as cases where no information was known about the offender.⁵ In the CHD, the most frequent *offender's motive* codes where the relationship is *stranger* are: armed robbery and other offenses, gambling, drunken brawl, altercation over money, and random shootings. The *Relationship Summary* variables in the CHD count every victim-offender dyad; thus, the total relationships exceed 100% of the victims.

Incident Characteristics

⁵NIBRS allows multiple codes for victim-offender relationship, where there were multiple offenders in the incident. Since the vast majority of cases involve a single relationship (79%), the first of the NIBRS codes are used unless otherwise indicated. The victim-level CHD contains a relationship code for each offender in the incident. Where there are multiple offenders, the victim-offender relationships may include more than one category (e.g.: family and acquaintances). Therefore, the total percents exceed 100%.

The incident details include weapon used. Like the relationship variable, weapon has many categories. For ease of comparison, we have aggregated them into eight (for NIBRS) and ten (for the CHD). For NIBRS, *weapon used* is categorized into: firearm (type not specified), handgun, long gun, knife, blunt object, personal weapons, fire, other and unknown weapon. The CHD summary weapon variable is the same, except that long guns are divided into rifles versus shotguns, and there is a separate category for automatic or semi-automatic weapons. Thus, the CHD handgun category in the summary *weapon used* variable refers to non-automatic handguns. Although NIBRS allows for reports of up to three weapons per each offense in the incident, the decision was made to count only the first weapon reported. This decision rule greatly simplifies the analysis and includes the vast majority of weapons since 84% of the murders involved only one weapon. In the CHD, the *weapon used* variable analyzed here is the primary cause of death, determined by the Medical Examiner.

Analyses Conducted

To explore our research agenda, we first will explore bivariate relationships to examine the initial aspects about the location of the homicide. We plan to build upon these analyses and estimate multivariate models.

Preliminary Results

Examining the initial frequencies and bivariate analyses shows interesting patterns between the two datasets and with findings from previous studies. For the NIBRS data, most murders (55%) occurred at a *home* location, while only 30% of the CHD murders occurred at a *home* location. However, the CHD *summary location* variable divides home into outside or inside a private residence, and inside locations not inside the door of the private residence (such as a vestibule). Including all these home subcategories, 41% of CHD were killed in a home location. This does not include the categories “hotel or group home” and “abandoned or vacant location,” where some people may be living. To provide more clarity as to whether the incident took place in the victim’s home, the CHD Project created an additional variable, based on MAR narratives, depicting who was living in the homicide location. The great majority (71%) of homicides occurring in a home occurred in the victim’s home, and another 17% occurred in either the victim’s or offender’s home, but the exact place was unclear.⁶ However, 6% occurred in the offender’s home and 3% occurred in the home of some other person. From the opposite perspective, 87% of the CHD homicides that occurred in the victim’s home were coded “location = home.” Comparing NIBRS and CHD data for the victim’s age and gender (Figures 1a and 1b), we see that the patterns are remarkably similar.

⁶The summary variable *Victim’s Home* includes the home of the victim and the home of the victim and offender (they are living together). These two categories account for about half of the total *Victim’s Home*.

Figure 1a. Murders Occurring at Home by Age and Sex, NIBRS 2000-2002

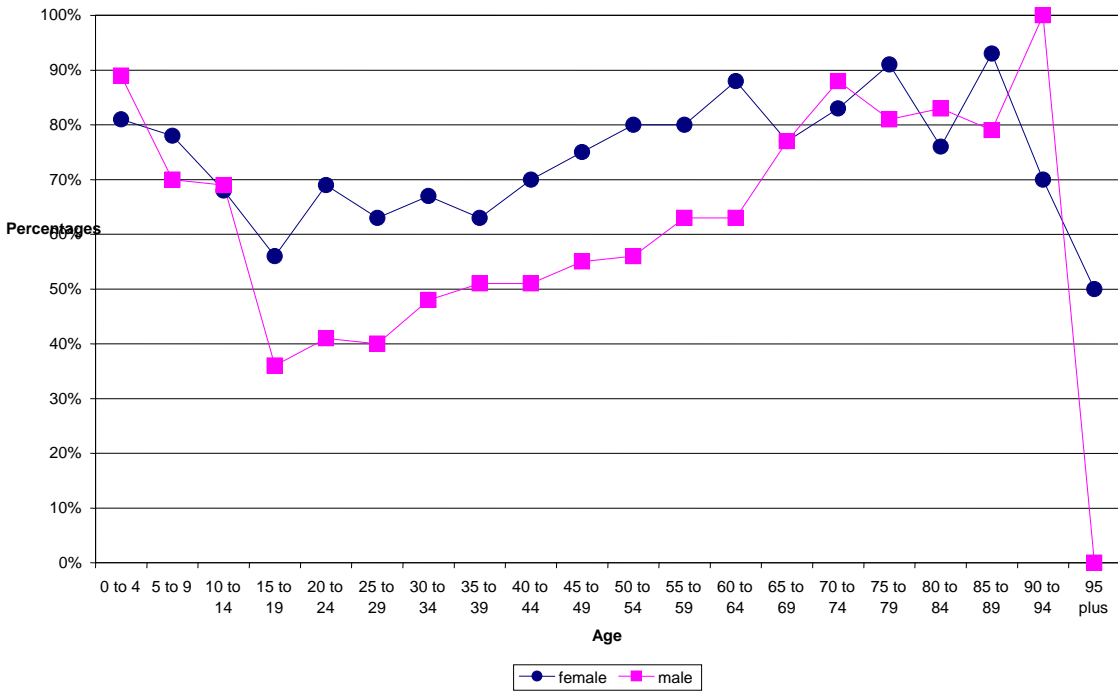
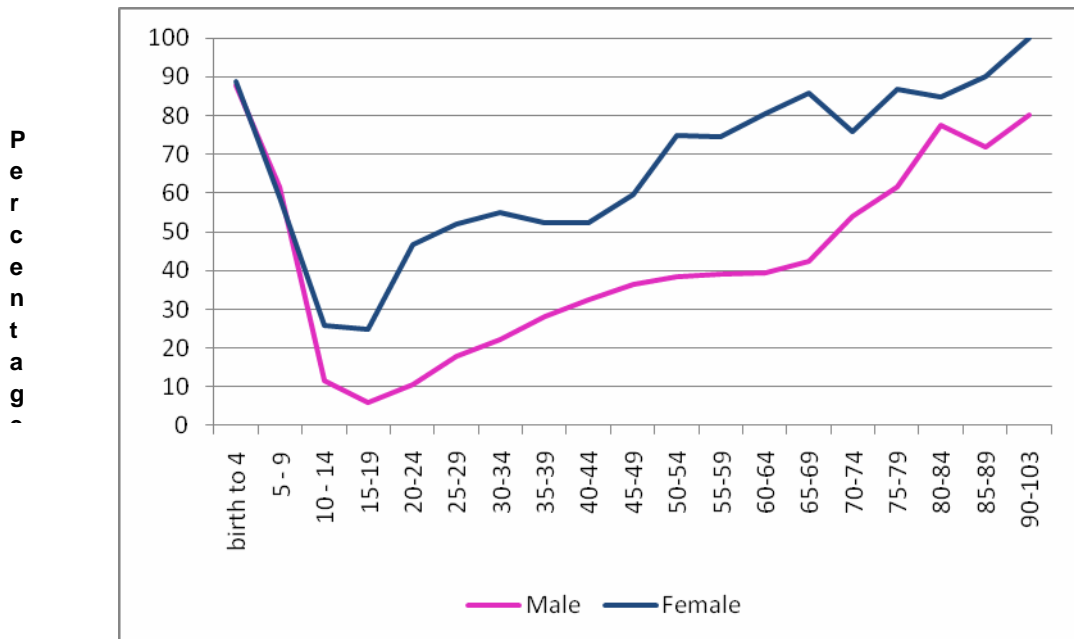


Figure 1b. Percentage of Murders Occuring at Victim's Home by Age and Sex, CHD 1965-2000



During the HRWG conference meetings, we will present additional information about these initial frequencies as well as bivariate comparisons focusing on homicides occurring in the home.

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Income inequality (still) rules in explaining variations in homicide rates

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Annual meeting of the *Homicide Research Working Group*, June 2010

In cross-sectional analyses at various scales, income inequality has proven to be a consistent, and often the strongest, predictor of homicide rates (LaFree 1999; Daly *et al.* 2001; Messner *et al.* 2002; Fajnzylber *et al.* 2002; Jacobs & Richardson 2008; Wilkinson & Pickett 2009). Nevertheless, many analysts question its relevance, including Nisbett & Cohen (1996), Neumayer (2003), Pridemore (2008), and Minkov (2009). Here I refute these authors' critiques and counterclaims.

Is "culture" an alternative to explanations invoking economics?

Nisbett & Cohen (1996) maintain that regional differences in US homicide rates derive from the fact that the south, but not the north, embraces what anthropologists call a "culture of honor". They make a convincing case for the reality of cultural differences, showing that southerners differ from northerners in relevant attitudes and values, and even that they exhibit bigger testosterone and cortisol responses to a standard insult. Less convincing, however is the proposal that these differences, including a difference in homicide rates, are *purely* cultural in the sense that they have no contemporary ecological / economic basis: that the southern culture of honor "maintains itself... for nonmaterial reasons". Nisbett & Cohen dismiss economic bases for north-south differences, but did not adequately assess the possible relevance of income inequality. In fact, income inequality is substantially higher in the south, and when one controls for it, regional differences virtually disappear; the same is true if one restricts the analysis, following Nisbett & Cohen, to "white" males (Daly & Wilson 2010; Figure 1).

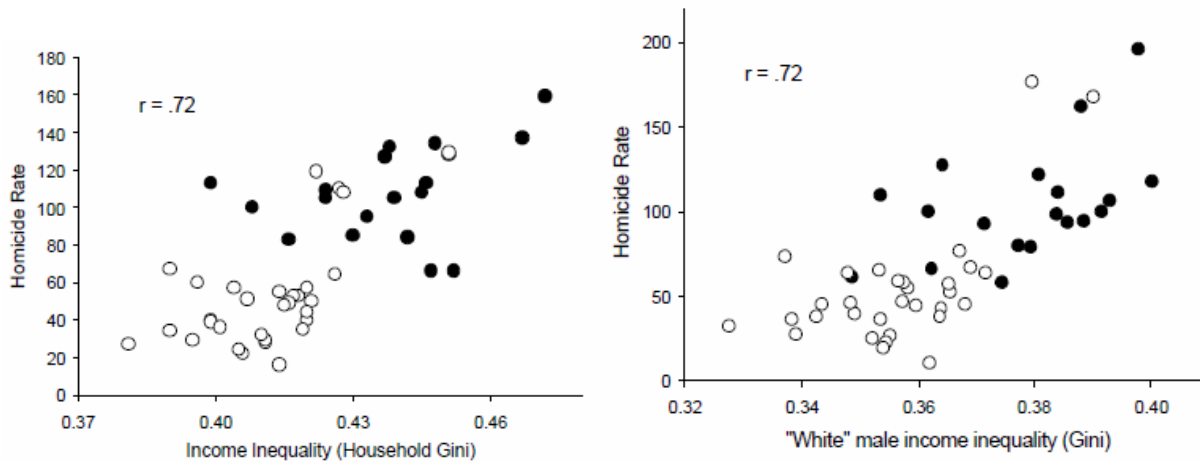


Figure 1. Homicides per million persons per annum in southern (●) and non-southern (○) states in 1990, as a function of income inequality. Left panel: all homicide victims and incomes of all households; right panel: “white” men only. From Daly & Wilson (2010).

I do not deny the reality of cultural differences between north and south, nor their likely relevance to violence. But greater inequity in the south is a *part* of its “cultural” distinctiveness, plausibly linked to southerners’ relative fondness for self-reliance, including “self-help justice”. What is gratuitous in Nisbett & Cohen’s discussion of their results is the suggestion that because “southern violence” is “cultural”, it is impervious to change. In fact, cultures change continuously and sometimes rapidly, and so, of course, do homicide rates. Nothing in Nisbett & Cohen’s data or discussion warrants the conclusion that policy must be impotent against southern violence, and yet many who have cited their work have interpreted it thus (see Daly & Wilson 2010).

Cross-sectional and longitudinal prediction

On the basis of multivariate fixed-effect analyses of cross-national data on homicide rates over an 18-year period, Neumayer (2003) provocatively claims to have demonstrated that “policies aimed at improving equity have no effect on violent crime” (p 619) and that “the... effect of income inequality found in many studies that

rely purely on cross-sectional information, is likely to be spurious” (p 633). These strong conclusions are utterly unwarranted. Neumayer bases them on a method of analysis that deliberately removes all cross-national variability by the use of what amount to individual-country dummy variables, and by this and other devices, he restricts the range of potential “explanations” for the variability in homicide rates to those that can account for short-term temporal change by virtually simultaneous change in other measures. Any variation that depends on the effects of people’s cumulative experience over years is obliterated by such an approach.

It is worth noting that Jacobs & Richardson (2008), using a similar analytic approach that differs mainly by the inclusion of some different control variables, 21 years of data rather than 18, and the incorporation of several variable-specific lags into the models, obtained contrary results that affirmed the importance of income inequality. Whether Jacobs & Richardson’s choices of lag times were principled or arbitrary can be debated, but there is an important general point here. It is certainly true that income inequality generally predicts homicide rates less successfully in longitudinal analyses than in cross-sectional analyses, but this is only to be expected. Changes in income inequality could not possibly influence the behavior of potential homicide offenders instantaneously, and without explicit notions of exactly how inequality exerts its effects on individuals, we have no basis for saying what sort of lags one might expect. Perhaps childhood effects of growing up in a more or less equitable society influence adult behavior. Perhaps there are more direct effects of inequitable resource distributions experienced in adulthood, but even these require the cumulative effects of a series of experiences that collectively inform actors about that inequity. In short, a satisfactory theory of inequality and homicide cannot avoid the *psychological* question of how the social structural variable of inequality affects the actions of individuals. I return to this point in this paper’s concluding section.

Other components of mortality are not appropriately treated as predictors

Pridemore (2008) maintains that cross-national analyses that confirm the predictive power of income inequality have not adequately distinguished this construct from poverty. His argument is that income inequality is a matter of "relative deprivation" whereas poverty is a matter of "absolute deprivation", and that violence might, in principle, be a response to either or both. Pridemore complains, correctly, that a given level of GDP per capita tells us nothing about how many people are impoverished; he is wrong, however, to imply that controls for GDP per capita are therefore meaningless additions to tests of the causal impact of inequality, because poverty remains an orthogonal and unexamined alternative causal factor. For a given level of GDP per capita, a reduction in the number of people living in poverty cannot be attained other than by a reduction in inequality; thus, when GDP per capita is controlled, poverty and inequality become almost synonymous. More generally, *contra* Pridemore, "poverty" cannot be characterized simply as "absolute deprivation". It is equally a matter of "relative deprivation". Consider the facts that people living in "poverty" in the developed world are not typically at risk of starvation, that most possess television sets, and so forth; people in such "absolute" material circumstances would have been considered *affluent* in many past societies, and would still be in certain present-day ones.

It is for this very reason that the United Nations uses distinct definitions and measures of "poverty" for developed *versus* developing nations. Pridemore himself notes this fact when explaining why, lacking any direct measure of poverty, he resorted to infant mortality as a putative proxy measure instead. Using infant mortality as a predictor of homicide eliminated the significance of income inequality in Pridemore's analysis, and it is on this basis that he concludes that "absolute deprivation" trumps "relative deprivation". But this is a very odd conclusion to draw from the fact that two components of overall mortality are highly correlated with one another! A more defensible approach would be to treat both as outcome variables - Wilkinson & Pickett (2009)

consider them both to be indicators of "population health" - and to seek to elucidate what appears to be their substantial overlap in causation.

Minkov (2009) makes a better argument than Pridemore, but ultimately commits the same mistake. This author created a compound measure of what he calls "risk-taking reproductive competition" from three components: income inequality, traffic deaths, and adolescent pregnancies. He then finds that this curious amalgam is an excellent predictor of homicide rates in cross-national analyses and, perhaps more surprisingly, that income inequality is its most expendable component, predicting homicide rates less well than traffic deaths alone. I endorse the notions that accidental deaths and homicides both index local levels of competition, and that competition is ultimately about reproduction; I have made similar arguments myself (Daly & Wilson 2001). But traffic deaths constitute yet another component of total mortality that evidently shares substantial causation with homicide, and the arguments I just made about infant mortality apply to it, too: rather than treating traffic deaths as an (implicitly prior) predictor of homicide, one should be seeking to illuminate their common causes. And of course, inequitable access to resources is a leading candidate.

Inequality, competition, and disciplinary parochialism

Even those who champion the relevance of income inequality often fail to grasp how and why it is so important, arguably because disciplinary parochialism has blinded social scientists to the psychology of competition and relative position.

Most homicides arise from competitive conflicts between unrelated men, and such cases furthermore constitute the most variable component of homicide rates (Daly & Wilson 1988). If one's current life trajectory promises abject failure, a "reckless" escalation of competitive tactics may become attractive, and men at the bottom of the social and economic ladder may become dangerous in their competitive interactions with one another.¹ Thus, to understand why homicide rates vary between times and places, we need to understand what makes social milieus more or less competitive. It is an obvious hypothesis that variations in income inequality

will prove relevant, and if that be so, then we also need to understand exactly how the fact that resources are inequitably distributed works its way into the minds and actions of men in competition with one another.

Knowledge about the psychology, endocrinology, and neurobiology of competitive and aggressive responses is growing rapidly, and will play an essential role in the development of a full understanding of the impacts of inequality (Daly & Wilson 2001; Wilson *et al.* 2010). Unfortunately, some social scientists seem to view these developments as a threat rather than an opportunity, and defend their turf by disregarding and dismissing insights from other fields. Pridemore (2008: 147) provides an unabashed display of such parochialism when he writes “Unfortunately, what are claimed to be structural-level theories too often resort to reductionist explanations about individual behavior”. Well, of course they do! If “structural-level” variables affect phenomena like homicide, they do so through their effects on individuals, and no theory can be complete - or even plausible - if it avoids the “reductionism” of considering how such effects might work. In practice, of course, relevant “sociological” theories such as “strain theory” are usually highly psychological, which is what so exercised Pridemore. Regrettably, such theoretical treatments often maintain their disciplinary purity by avoiding citation of psychologists’ findings; they thereby risk reinventing the wheel, and often an obsolete wheel (such as the tired old “frustration-aggression” hypothesis) at that. There is nothing shameful about synthesizing the contributions of complementary disciplines. To the contrary, such synthesis is desperately needed.

A final point is that it is remarkable that homicide researchers have found income inequality to be of such consistent and substantial relevance, given how it has been measured. There is nothing about the Gini index that makes it a uniquely apt measure other than its availability (see, e.g. Babones 2008), much less a Gini index based on household incomes, and yet this is what has usually been used. There are a number of other measures of inequality, some of which can be parameterized to be differentially sensitive to inequality at different levels of the income distribution, and researchers interested in

inequality and health have begun to explore their utility. Those of us who are interested in inequality and homicide might usefully do likewise.

1. This claim about “men at the bottom” concerns modern nation states, especially developed countries. Where strong institutions of dispassionate third-party justice are lacking, men at the top must also rely on their personal powers of intimidation, and may resort to violence as much as or more than those at the bottom.

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Motive for Murder: Does the level of neighborhood isolation make a difference?

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INTRODUCTION

One of the more important sociological approaches to the study of crime and the use of informal social control is Donald Black's, seminal article entitled *Crime as Social Control*. The author disputes the idea that informal social control stems from a lack of formal social control. In other words, when these communities lack a formal social control system they create their own informal justice systems. These types of 'informal justice systems' use intimidation to control these neighborhoods. This leads to isolation from formal social control institutions where communities are threatened, terrorized, and frightened into not using outside forces when needed. These types of communities function adjacent to neighborhoods that rely on the formal justice system but they rarely come in contact with each other. Instead of calling upon the formal justice system in situations where they are needed, these communities tend to "take the law in their own hands." This dangerous mistrust of the criminal justice system creates a norm of never utilizing them. This in turn, at least in the context of dysfunctional and criminogenic neighborhoods, makes the act of calling upon the formal justice system a deviant act (e.g. being a snitch). The idea of utilizing informal social control to solve interpersonal issues is a cultural pattern that the individual isn't even conscious of being influenced by it. Our research uses the idea of informal social control to describe a default social control system.

As we use it here informal social control deals with two main ideas; the lack of social control, and the need for social control—two inversely related ideas. A collapse of informal social control results in an increase need for formal social control, and informal social control develops out of the desire to fill the gap left behind by the breakdown of a formal control system (Akers 1997, p.138). Or in this instance, the cultural belief is that a person should take care of their own business and leave the police out of it.

We have found that those neighborhoods with high rates of murder also experience high rates of drug arrests and a high volume of murders that the police classify as "drug related" (Harper, Voigt, & Thornton, 2005). Because drug dealing is illegal, the players arm themselves for self-defense purposes since calling upon the police in situations when they would be needed would be ludicrous. This increases the likelihood of gun violence thus creating a clear link between murder and drug use.

Revenge killing, (*Retaliation*), involves the killing of another in retaliation for a perceived wrong, real or imagined, committed against the offender or a significant other (Douglass 2006 p 180). In order to classify the motive as revenge, there are major indicators left by the perpetrator. Often, there are several locations involved with the offense. The offense appears to be well planned all the way up to the point of the killing, and manifested by the blitz style of killing, followed by a swift exit. The crime itself can be opportunistic and spontaneous, but still well planned and thought out. The weapon is usually one of choice by the perpetrator, most likely a firearm or knife (presently, the weapons of choice are semi-automatic and automatic firearms). The killing is close range and confrontational with the victim receiving multiple gunshot wounds in order to complete the excitement and obsession of getting even. The offender obtains fulfillment by witnessing.

“Justice” bestowed upon the victim. Revenge killing crime scenes greatly resemble a majority of any premeditated killings, however investigation of the offender and the offender’s peers offers major indicators of a revenge motive. Perpetrators of revenge killings follow a very distinct pattern (Douglas, et. Al. 1997). The offender at first is verbal about the incident that involved the victim’s injustice. Once the offender has formulated a plan for vengeance, the person becomes less vocal and preoccupied. After the offense, the offender shows signs of relief and basks in the glory of reaping revenge. At this point, the offender will either flee the crime scene or stay around in order to savor the achievement. Perpetrators with this approach believe the death of the victim was justified and feel no remorse; and if they stay around the crime scene there is a greater likelihood of witnesses.

NEIGHBORHOOD ISOLATION

Neighborhoods that experience extremely high rates of poverty and are also racially isolated will exhibit higher rates of drug and retaliatory killing that reflects the operation of an informal justice system. These types of neighborhoods are a result of *de facto* racial segregation which has been compounded by white flight to the suburbs and in the case of New Orleans the inability or lack of desire to desegregate public schools in the 1960s. The problem was further compounded by a net in migration of uneducated African Americans from delta regions of Louisiana and Mississippi during the 1970s and 1980s creating a majority African American city with jobs (Frailing and Harper, 2010). Likewise, William Julius Wilson, in *When Work Disappears*, argues that in addition to the effects of joblessness, inner-city neighborhoods have experienced a growing concentration of poverty for several other reasons including the mass departure of non poor black families, white families and other non black families. In addition, the rise in the number of residents who have become poor while living in these areas has also positively affected the growing rates of poverty. Additional research on the growth of concentrated poverty suggests two other factors: the movement of poor people into a neighborhood (immigration) and the changes in the age structure of the community toward a much younger population (Wilson 1996 p. 42).

Violent crime in New Orleans is not a city-wide problem, but rather a neighborhood problem. According to our data, there were approximately 63 neighborhoods (census tracts) that did not have a single murder from 2005 to 2007; a stark discovery considering the public view of New Orleans as one of the most dangerous cities in the United States. To illustrate, in 2004 university researchers conducted an experiment (Carr 2008). They went into a high crime neighborhood in the middle of an afternoon and fired 700 blank rounds. There was not one single call to the police. Some explanations for this phenomenon are that citizens in these neighborhoods are not only reluctant to go to the police, but are petrified. This unwillingness to come forward as a witness is a direct response to the fear of retaliation. Moreover, it is our contention that these exceptionally poor and isolated neighborhoods characterized as providing generally no economic opportunities for their members other than the drug trade, experience the highest levels of revenge/retaliatory and drug homicides.

DATA AND METHODS

The main data sources in this study are New Orleans Police Department (NOPD) homicide reports. This type of research facilitates a macro-level community analysis that includes the entire city of New Orleans. This research accounts for all 181 census tracts and every murder known to the police (N=461) that occurred within those tracts for 2003 through 2005 (pre-Katrina). In this paper the variables we consider are motive for murder and a composite measure of neighborhood isolation which includes percent African American and percent poverty (Fourteen cases were removed from our analysis because they were insufficient data).

While Wendell Bell's (1954) seminal article on measuring ecological segregation and its consequences is probably the most cited, the issue was addressed at least seven years earlier by Jahn, Schmid and Schrag (1947). The idea of racial and economic isolation has in recent years figured prominently as a covariate in explanations of high rates of homicide analyzed at the neighborhood level (Lee, 2000; Lee & Bartkowski, 2004).

The *race isolation* variable for our research is calculated by giving a "5" if the census tract consists of 80% or more of the population is African Americans. A score of "4" indicates that 79.99% through 60% of the population is African American. A score of "3" indicates that 59.99% through 40% of the population is African American. A score of "2" indicates that 39.99% through 20% of the population is African American. A score of "1" indicates that less than 20% of the population is African American.

The *poverty isolation* variable is a categorical variable which gives a "5" if the census tract consists of 80% or more of the population is in poverty. A score of "4" indicates that 79.99% through 60% of the population is in poverty. A score of "3" indicates that 59.99% through 40% of the population is in poverty. A score of "2" indicates that 39.99% through 20% of the population is in poverty. A score of "1" indicates that less than 20% of the population is in poverty.

The composite *neighborhood isolation* variable adds the "poverty isolation" and the "race isolation" together to get a combined number. A "10" represents extreme isolation, "9" is elevated isolation, "8" is high isolation, "7" is moderate isolation, "6" is average isolation, "5" medium isolation, "4" is low isolation, "3" is minimal isolation, and "2" is no isolation. Our study hypothesizes that the top three levels of isolation (extreme, elevated, and high) will make up the most dangerous neighborhoods in New Orleans.

For the purpose of analysis our classification system is as follows; a "1" equals the combination of "low", "minimal" and "no isolation". This translates into a neighborhood that is no more than 40% black and 40% in poverty. A "2" equals the combination of "medium", "average" and "moderate isolation". That translates into neighborhoods that are at the minimal 40% black and 40% in poverty, but no more than 60% black and 60% in poverty. A "3" equals the combination of "high", "elevated", and 'extreme isolation'. This translates into neighborhoods that are more than 60% black and more than 60% in poverty. The table below presents the distribution of murders by levels of isolation and motive.

Table 1 Percent Distribution of Isolation by Motive

<u>Isolation</u>	<u>Rev.</u>	<u>Drug</u>	<u>Rob</u>	<u>Dom</u>	<u>Argu</u>
1.00	4.72	4.94	16.00	4.55	13.64
2.00	33.96	53.70	46.00	70.00	63.64
3.00	61.32	41.36	38.00	25.45	22.73

You will note in the table that retaliatory, drug and domestic murders are rare events in the least isolated neighborhoods while revenge murders are quite prevalent in the extremely isolated neighborhoods. The following correlation matrix illustrates these relationships further.

Table 2. Correlation Matrix

		Isolation	Retal	Narc	Robb	Argu	Dom
Isolation	Pearson Correlation	1	1.000**	.718	.708	.313	.171
	Sig. (1-tailed)		.006	.245	.250	.399	.445
Retal	Pearson Correlation	1.000**	1	.732	.721	.331	.190
	Sig. (1-tailed)	.006		.239	.243	.393	.439
Narc	Pearson Correlation	.718	.732	1	1.000**	.885	.808
	Sig. (1-tailed)	.245	.239		.005	.154	.200
Robb	Pearson Correlation	.708	.721	1.000**	1	.892	.817

	Sig. (1-tailed)	.250	.243	.005		.149	.196
Argu	Pearson Correlation	.313	.331	.885	.892	1	.989
	Sig. (1-tailed)	.399	.393	.154	.149		.047
Dom	Pearson Correlation	.171	.190	.808	.817	.989	1
	Sig. (1-tailed)	.445	.439	.200	.196	.047	

** . Correlation is significant at the 0.01 level (1-tailed).

We used the one-tailed test because we are principally interested in the distribution toward the most isolated neighborhoods.

DISCUSSION

Finding retaliation murders in extremely isolated neighborhoods is not surprising. These are the areas where normal mechanisms of formal and informal social control are broken and replaced by a system of “taking the law into their own hands”. Surprisingly, drug murder did not follow the same neighborhood pattern but its pattern correlated highly with robbery murder. It is our contention that drug and robbery are indistinguishable in their neighborhood pattern because in many instances they are one and the same crime. “The dude is dead, I might as well take his money, he ain’t gonna be needin it where he’s going”. The police arrive, there is drug paraphernalia, and it’s a drug homicide. If his pockets are turned out and there is no money or drugs, it’s a robbery homicide. Domestic and Argument homicides follow a similar neighborhood pattern. In these types of murders which could be aptly labeled “garden variety.” The actors know each other and may be on intimate terms. These murders often occur over trivial issues when the actors are impaired by drugs or alcohol and a weapon is available. The solve rate for these types of murder is fairly high, particularly for domestics because the perpetrator often does not leave the scene.

LIMITATIONS

Determining the motive for murder is a process fraught with ambiguity and poses much difficulty; there is no way to confidently determine if every motive accurately fits each homicide. An example of this relates to the instance in which when her son reported that he had been beaten by an acquaintance, the mother gave her son a gun and told him to go “take care of it.” According to the NOPD homicide statistics for 2007, the motive for this homicide was “argument.” An argument or conflict murder results from a dispute between persons excluding family or household members (Douglass, 2006 p 170). These types of homicides are characterized by an argument or conflict that occurred at an earlier occasion. This dispute prior to the actual murder therefore

makes this homicide motive an argument. However, one could classify this murder as retaliation considering the perpetrator premeditated the murder and was seeking revenge.

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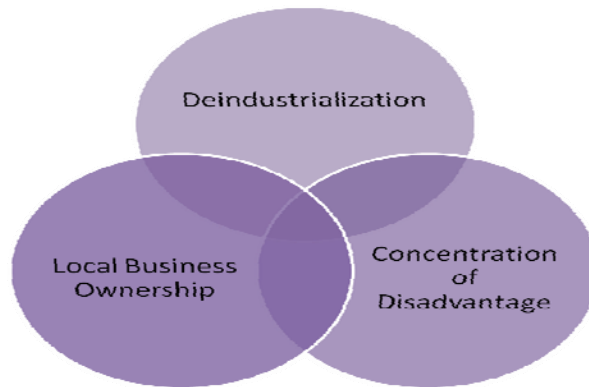
LOCAL BUSINESS OWNERS: Exploring the Relationship between African American Owned Businesses and Arrest Rates in Urban Areas

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Abstract: A large body of literature has investigated the influence of urban disadvantage and/or deindustrialization on crime rates in urban areas, but less is known about what role the business owners plays in the urban context, particularly those businesses owned by African Americans. In this study, we propose to investigate the potential for black business owners to serve as a source of jobs for urban youth and a community resource for reducing urban violence among youth. We merge census data on social, demographic and economic characteristics with business owner (SBO) data when examining the arrest trends of black youth from 1990 to 2000. For a large sample of U.S. cities, we explore the changes in black owned business over time and utilize a fixed-effect modeling procedure to examine if the shift in business ownership impact the rate of black youth crime while accounting for levels of concentrated disadvantage and deindustrialization.

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Figure—Different Dimensions of the Local Urban Economy.

Deindustrialization:

- ❑ Removal of Manufacturing Jobs
- ❑ Shift into Service and High-Tech Economy
- ❑ Skill Mismatch, Spatial Mismatch

Concentrated Disadvantage:

- ❑ Poverty
- ❑ Racial Residential Segregation
- ❑ Removal of Safety Net– Welfare Reform

Local Business Ownership:

- ❑ Black Owned Business out of All Businesses

Unit: Large U.S. cities in 1990 & 2000

Sources:

1. **UCR Arrest Counts (Chilton & Weber)**
2. **U.S. Bureau of the Census – Social and Economic Indicators**
3. **Census of State and Federal Adult Correctional Facilities (BJS)**
4. **Census: Survey of Business Ownership (SBO)**

Research Question-- Despite inequalities in access to opportunity and growing dependence of social control (e.g., incarceration rates), can we expect a growth in Business Ownership among African Americans to reduce rates of young urban violence?

Table. Negative Binomial Regression Equations and Random-Effect Model using Robust Standard Errors for Black Juvenile Arrest Models, 1990 and 2000.

	Model 1 (1990)	Model 2 (2000)	Change
(1990-2000)			
Black Owned Businesses (out of all businesses)	-.046** (-4.36)	-.032** (-3.81)	-.027** (-2.86)
Concentrated Disadvantage Index	.018** (3.29)	.004 (0.05)	.002 (0.039)
Deindustrialization			
Manufacturing	-.025** (-2.56)	-.015 (-1.38)	-.005 (-0.52)
Service Industry	-.054** (-5.01)	-.027+ (-1.78)	-.004 (-0.25)
Racial Income Inequality	-.203 (0.18)	.378* (2.09)	.314 (1.45)
Police Officer Rate	.002* (1.96)	.002** (2.31)	.002** (2.03)
Incarcerated Population	.073 (0.14)	.112 (0.21)	.123 (0.21)

Percent Hispanic Population (log)		-0.008	-0.037	.036
		(-0.16)	(-0.61)	(0.60)
Residential Mobility		-0.013	-0.007	-0.003
		(-1.33)	(-0.61)	(-.21)
South		.023	-.603**	-.423**
		(0.14)	(-3.64)	(-2.80)
Yr- 1990	.624**			
	(3.90)			
Constant	5.36	-3.45	-5.07	
Maximum Likelihood R-square	.243 (overall)	.395	.416	
Log Likelihood		-772.88**	-593.77*	
N	224	122	102	

+ p < .10 * p < .05 ** p < .01
 10.1); Hausman Test- NS

+ Random-Effect Estimator (XTREG), Pooled Time Series Panel Design (Stata

Means, Standard Deviations (in parentheses) for All Variables—1990, 2000 and Percent Change 1990-2000.

% Change 90-00*	1990	2000
Black Juvenile Violent Arrest (counts) -28.6%	573.61 (1921.8)	409.74 (1245.2)
<i>Black Urban Disadvantage Index</i> -3.05%	87.57 (17.99)	84.9 (19.9)
Poverty -14.2%	26.16 (9.72)	22.44 (9.12)
Intra-Income Inequality -3.9%	.439 (.049)	.422 (.046)
Percent Household on Public Assistance -46.9%	15.73 (8.17)	8.34 (4.42)
Percent Kids not living with both Parents -7.7%	63.23 (12.64)	58.36 (12.73)
Racial Residential Segregation -16.9%	.516 (.179)	.429 (.160)
Percent Black Owned Business 22.2%	7.53 (7.40)	9.20 (8.4)
(Out of All Businesses)		
Deindustrialization		
Manufacturing -52.2%	25.50 (8.3)	12.18 (6.2)
Service Industry	22.48 (8.0)	21.93 (5.3)

-2.45%

Ratio- Wh to BI Income Inequality -8.3%	1.68 (.389)	1.54 (.434)
Police Officer Rate 8.2%	205.84 (87.00)	222.63 (98.88)
Incarcerated Population, Proportion Black 2.6%	.427 (.149)	.438 (.172)
Hispanic Population 64.3%	12.65 (16.02)	20.78 (19.30)
Residential Mobility -8.20%	56.44 (6.88)	51.81 (5.88)
South ----	.34 (.47)	.30 (.46)

* **Change Score:** ((t minus (t-1), divided by (t-1) and multiplied by 100)

THE NEW IMMIGRANTS AND VIOLENT CRIME:

Further Reflections*

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With few exceptions, recent studies have found that immigrants have lower crime rates than native-born citizens in the United States (U.S.). But, most of these investigations have compared levels of crime for immigrants to total rates for native-born citizens that are not decomposed by race. This type of comparison is problematic for examinations of violent crime, because rates of criminal offending, especially for homicide and robbery in urban areas, are significantly higher for African Americans than for Whites. Using data from Orange County, Florida (Orlando), we compare violent crime rates for immigrants with those for native-born citizens disaggregated by race. The results show that the relative level of immigrants' involvement in violent crime differs by offense, with their rates typically being higher than those for native-born Whites but significantly lower than for African Americans.

Introduction and Literature Review

The recent resurgence of scholarship on the linkages between immigration and crime has been partially spurred by the ascendancy of illegal immigration as a “hot-button” political issue in the U. S. The 2010 passage of an Arizona law requiring police to investigate the citizenship status of people they suspect to be illegal immigrants has pushed what was already an acrimonious debate to new levels. This is not a new issue. Fear of crime committed by immigrants, both legal and illegal, has been a recurrent theme in the U.S. since the late 1800s. And, early investigations of crime and delinquency during the height of European immigration in the early 20th century typically found that 1st generation immigrants committed criminal offenses at higher levels than native-born citizens (Adler, 2006; Lane, 1986,

1999[1979]; Shaw & McKay, 1969[1942]). These researchers also found that crime rates receded among 2nd and 3rd generation immigrants.

After a hiatus of scholarly interest on the nexus between immigration and criminal offending, the first decade of the 21st century has witnessed an increasing volume of research focused on immigrants' impact on U.S. crime. Against the background of increasing public fear, it is noteworthy that most contemporary studies find that immigrants are either no more likely or, indeed, are less likely than native-born citizens to be criminal offenders (Butcher & Piehl, 2008; Freilich & Newman, 2007; Martinez, 2002). In fact, the conventional wisdom in scholarly circles is now that immigrants do not disproportionately contribute to violent crime, and some investigators (e.g., Sampson, 2008) propose that their presence in a neighborhood may lessen homicide and other violent offenses among native-born Blacks and Whites (on this point, however, see Polczynski Olson et al., 2009).

Current research on immigration and crime has developed along two paths. The first investigates whether immigrant concentration in various population units (e.g., cities, neighborhoods, census tracts or block groups) is significantly related to rates of homicide and other violent offenses. Most studies report no positive impact on levels of violence (Feldsmeier & Steffensmeier, 2009; Graif & Sampson, 2009; Nielsen & Ramirez, 2009), but there are exceptions to the general pattern of findings. In a study of three cities, Lee, Martinez and Rosenfeld (2002) found that immigrants' presence increased the level of Black homicides in San Diego, although there was no similar effect in Chicago or Miami. Other studies provide a strong indication that the effect of immigration on homicide levels may be sensitive to contextual differences in the units of analysis, i.e. there may be significant interaction effects. For example, Velez (2009) finds that immigration decreases homicide in disadvantaged Chicago neighborhoods, but increases it in advantaged areas. Furthermore, Shihadeh and Barranco (2010) report that Latino immigration increases Black homicide rates in cities. The intervening mechanism is an

increase in Black unemployment rates, presumably a reflection of increased competition for jobs with Latino laborers. It is clear that further research will be required to understand the different impacts of immigration on homicide and other violent offenses across varying political and social contexts.

The second stream of ongoing research on immigration and crime addresses whether offending rates are higher for immigrants than for individuals born in the U.S. The answer from nearly all studies has been negative, although many of the investigations rely on data that are not nationally representative. Additionally, many of these investigations report comparisons only for homicide or aggregated totals for violent or property crimes. Analyzing disaggregated data for the four FBI Crime Index violent offenses from Orange County (Orlando), Florida, Polczynski Olson (2009) report a slightly more complex set of findings. Specifically, while they find that immigrants have lower rates of involvement in homicide and attempted homicide, robbery, and aggravated assault than native-born citizens, their sexual assault rates are higher. In a subsequent study, the same authors report that this pattern is consistent for both men and women (Laurikkala et al., 2009). The authors suggest that the discrepancy for sexual assault may be a result of cultural differences, but they admit that this idea is conjectural.

A potential problem with recent investigations comparing violent crime rates between immigrants and native-born citizens is that the latter numbers have not been disaggregated by race. Levels of violent crime offending (and victimization) have been consistently higher for native-born Blacks than Whites for several decades (Hindelang, 1978). For example, in 2008 Blacks comprised 12.8 % of the U.S. population (U.S. Census Bureau, 2010) but accounted for 40.3% of arrests for FBI Violent Crime Index offenses (Federal Bureau of Investigation, 2010). These numbers differ significantly by offense, however, with over half of the arrestees for murder and robbery being Black, while approximately one-third of those for forcible rape and aggravated assault were Black. Racial differences

in arrests for Blacks and Whites are more pronounced in metropolitan than in non-metropolitan counties, and most recent studies of immigration and crime have used data from urban areas. It is important to emphasize that these differences do not reflect racial differences in the propensity to commit violent crimes but are rooted in the historical, structural, and cultural contexts of Blacks' lives in the U.S. Nevertheless, the disaggregation of crime rates by race is a common practice in criminological investigations (Flewelling & Williams, 1999), and it may provide greater insight into immigrants' role in U.S. violent crime.

In this paper, we examine racially disaggregated rates of homicide and attempted homicide, sexual assault, robbery, and aggravated assault by citizenship status in Orange County, Florida. Our goal is to enhance the current level of understanding concerning what is increasingly becoming recognized as complex linkages between immigration and crime.

Methods

The data for the present study were obtained from the Orange County Department of Corrections (OCDC). OCDC provided data on all arrestees processed (booked) through the 33rd Street Jail from 2006 to 2009. Several variables, including the offense type(s), race, age, citizenship status, country of birth, and most current address were provided to us as Excel files. It is important to note that the 33rd Street Jail is the only booking facility for Orange County and is exclusively used by all law enforcement agencies in the county. Some individuals had more than one charge, for example, a homicide and an aggravated assault charge for example, resulting from the same incident. However, the offense of highest severity was the only one counted for an arrestee for a single criminal event. The offenses analyzed in the present study are restricted to the four violent felonies that are part of the FBI Crime Index, i.e. homicide and attempted homicide, sexual assault, robbery, and aggravated assault. Although arrest does not signify guilt, we use booking as a proxy for criminal involvement in the current study.

Offenders for whom either the citizenship status or country of birth was unknown and persons 17 years and younger were excluded from the analyses. The final dataset consists of 30,475 cases.

Of the arrestee population, 24,795 (81.4%) were male and 5,680 (18.6%) were female. The racial categorization of the sample was as follows: 46.8% black, 52.9% white, and 0.3% Asian. Unfortunately, Orange County criminal justice agencies do not systematically collect information on Hispanic or Latino ethnicity, and no identifier was included in the dataset. Of the arrestees, 707 Blacks and 335 Whites (3.4%) were charged with one or more counts of homicide or attempted homicide, 368 Blacks and 395 Whites (2.5%) were charged with sexual assault, 2,827 Blacks and 2,278 Whites (16.8%) were charged with robbery, and 10,312 Blacks and 13,117 Whites (76.9%) were charged with aggravated assault.

The citizenship status of those booked was recoded into three categories: U.S. citizens born in the States or abroad, naturalized citizens, and non-citizens (i.e. immigrants). Of the arrestees, 1,529 (5.0%) were naturalized citizens, 2,336 (7.7%) were non-citizens, and 26,610 (87.3%) were U.S. citizens. As with most studies of immigration and crime, it is impossible to decipher if non-citizens are in the country legally.

Results

Table 1 displays the population totals and average yearly offending counts for the four violent crimes by race and citizenship status. Population totals from the 2008 American Community Survey were used to calculate offending rates for each offense categories by race and citizenship status. Not surprisingly given their larger numbers in the county population, the counts for each violent crime is highest for Black and White native-born citizens.

(Table 1 about here)

As displayed in Table 2, consistent with national figures Black native-born citizens have higher rates of violent crime than their White counterparts. Similarly, their rates are also consistently higher than the comparable figures for Blacks who are naturalized citizens or non-citizens. The pattern for Whites is somewhat different. Homicide, sexual assault, and aggravated assault rates are highest among non-citizens, while robbery rates are highest among native-born Whites. For most crime rates for both Whites and Blacks, non-citizens are more likely to be involved as offenders than naturalized citizens, although this pattern is reversed for homicide and robbery rates among Blacks. Except for robbery, native White citizens have lower levels of involvement in violent crime than non-citizens of either race. These patterns underscore the utility of separating violent offenses rather than using an overall index and disaggregating arrest data by race. Specifically, they provide an important qualification to the conventional wisdom that immigrants commit fewer violent offenses than native-born citizens. It is important to emphasize, however, that rates of violent crime by immigrants in Orange County are relatively low.

(Table 2 about here)

The significant differences between the rates of crime by race per citizenship status were tested using a 2-tail confidence level z-score test (see Table 3). It was determined that the rates of offending by blacks and whites of all citizenship types are significantly different.

(Table 3 about here)

The z-scores in Table 3 are extremely large, indicating significant and substantial differences between the rates of offending by race. In all but one grouping, Blacks had significantly higher rates of offending than Whites. The exception is aggravated assaults for non-U.S. citizens with Whites having

the higher rate. Turning to a comparison of non-citizens with Black and White citizens, the importance of disaggregating by race becomes apparent. Non-citizens have a significantly lower rate of offending than Black native citizens for each violent offense but a significantly higher rate than for White native citizens.

Discussion and Conclusion

The current analyses of violent crime rates in Orange County, Florida, provide a more nuanced understanding of the frequently reported finding that immigrants have lower rates of violent offending than Persons born in the U.S.. If the rates for native-born citizens are disaggregated by race, immigrants have lower rates than Blacks but higher rates than Whites for homicide, sexual assault, robbery, and aggravated assault. Overall, the levels of involvement for immigrants are more similar to Whites than Blacks. This finding should not be surprising. African American neighborhoods in Orlando and Orange County are plagued with many of the disadvantages conducive to high rates of crime, e.g., poverty, a high concentration of single-parent families, unemployment, and drug markets, that have been noted by a plethora of researchers (Wilson, 1987).

Like many other studies of immigration and crime, the present research has important limitations. First, the data are from a single metropolitan area. Obviously, there is a need to replicate the findings in other settings. Second, criminal justice agencies in Orange County do not use an identifier for Latinos or Hispanics in official records, so it is not possible to calculate separate crime statistics for this group. Based on contacts with local law enforcement officials in Orange County, we believe that most Latinos who enter the criminal justice system are classified as White. Most investigations have found Latino crime rates to be higher than those for Whites but lower than comparable figures for Blacks (Martinez, 2002). If this pattern is true for Orange County, the result

would be to attenuate the differences in crime rates reported for Whites and Blacks. Third, there is no valid strategy for estimating legal and undocumented immigrant populations, and the OCDC data do not include a field for immigration status. We have no way to determine if a disproportionate share of crime by non-citizens is committed by undocumented immigrants.

As a final caveat, most of the recent attention to immigration and crime has focused on their offending, although there is evidence that undocumented immigrants are at a very high risk of criminal victimization. Their status prevents them from opening checking accounts, so any money in their possession is usually on their person or in their living quarters, making them an inviting target for predators. Therefore, they are frequently targeted by street robbers as potentially lucrative targets, with the added advantage that they are not likely to report the crime to police. In Orlando and some other cities, “walking ATMs” has become a street term for undocumented immigrants. Unfortunately, the difficulty of estimating the victimization of the undocumented is a more vexing problem than determining their level of criminal offending.

Table 1. Population Totals and Crime Counts by Race of Citizenship Types Individuals 18 Years or Older 2006-2009

U.S. Citizenship Status	Population Over 17	Homicide Count	Sex Assault Count	Robbery Count	Agg Assault Count
Black					
Native U.S. Citizen	102,814	778	253	2626	9,165
Naturalized U.S. Citizen	21,276	29	19	128	555
Non-U.S. Citizen	22,097	21	36	73	590
White					
Native U.S. Citizen	471,086	280	310	2,111	11,042
Naturalized U.S. Citizen	36,313	17	23	71	672
Non-U.S. Citizen	44,255	38	62	96	1,403
Total Population	697,841	1,163	703	5,105	23,427

Note: a-Homicides and attempted Homicides

Table 2. Average Crime Rates per Year x 1,000 by Race of Citizenship Types for those over 17 Years Old 2006-2009

U.S. Citizenship Status	Homicide Rate	Sexual Assault Rate	Robbery Rate	Aggravated Assault Rate
Black				

Native U.S. Citizen	2.52	0.82	8.51	29.71
Naturalized U.S. Citizen	0.45	0.29	2.01	8.70
Non-U.S. Citizen	0.31	0.54	1.10	8.90
White				
Native U.S. Citizen	0.19	0.21	1.49	7.81
Naturalized U.S. Citizen	0.15	0.21	0.65	6.17
Non-U.S. Citizen	0.28	0.46	0.72	10.57
Total Population	0.55	0.33	2.43	11.19

Note: a-Homicides and attempted Homicides

Table 3. 2-Tail Confidence Level Z-test of Crime Rates per Citizenship Type for those over 17 Years Old by Race for 2006-2009

	Homicide	Sexual Assault	Robbery	Aggravated Assault
Black & White Native Citizens	3,372,589***	528,944***	8,203,803***	13,386,592***
Black & White Naturalized Citizens	49,199***	17,162***	63,161***	680,184***
Black & White Non-U.S. Citizens	69,241***	82,192***	12,119,896***	16,242,602***
Black Native Citizen & Black & White Non-U.S. Citizen	2,057,768***	74,703***	10,843,157***	434,082***
White Native Citizen & Black & White Non-U.S. Citizen	2,122,788***	279,257***	17,004,394***	2,133,016***

Note: a-Homicides and attempted Homicides

Included are the Z-scores. * $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$

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*Exploring Police Shootings and Officer Survivability: An Elaborated Case Study
Research in Progress*

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The Problem

Police shootings are incidents that have lasting effects on the officers involved, the department to which they belong and the community at large, yet these events are rarely discussed. According to Bohrer, Kern and Davis (2008), police officers shoot and kill approximately 350 individuals each year, a mere fraction of the individuals that are likely to pose a deadly threat to officers and civilians. While this number of lethal incidents may seem surprisingly low, McElvain and Kposowa (2008) found that, of officers involved in a shooting, over half were likely to be involved in another shooting incident.

Much of the existing literature on police shootings refers to the decision to use and factors influencing the use of deadly force (Belur, 2009; FitzGerald & Bromley, 1998; Ho, 1997; Klinger, 2001 (Unpublished); Parent, 2006; Parent & Verdun-Jones, 1998, 2000; Perkins & Bourgeois, 2006; White, 2002). Literature on posttraumatic stress disorder (PTSD) can be applied (Brough, 2004; Hodgins, Creamer, & Bell, 2001; McCaslin, et al., 2008; Pole, et al., 2001; Winwood, Tuckey, Peters, & Dollard, 2009), but few studies have examined PTSD in the context of officers who have had to use deadly force in the line of duty explicitly. Finally, of the literature available, many of the seminal pieces on police shootings were written and published in the early- to mid-1980s (Brown, 1984; Commission, 1981; Doerner & Ho, 1994; Donahue & Horvath, 1991; Fyfe, 1988; Fyfe & Blumberg, 1985; Geller, 1985; Griswold, 1985; Horvath, 1987; Stell, 1986; W. B. Waegel, 1984; W. R. Waegel, 1984), before the widespread community-oriented (COP) and problem-oriented policing (POP) movements that occurred

in the mid-1990s ("About COPS: COPS History," 2009). COP may have significantly altered officer and agency response to these incidents.

In all, there is often a narrow focus on the shooting incident itself, with little attention paid to pre-event factors (such as psychological training and preparation) or to the long and short term post-event factors (such as agency response, value conflicts for the officer, PTSD, changed relationships with colleagues, organizational and systemic response, community response, and various support networks, to name a few).

The Purpose

This study seeks to gain a more broad understanding of police shootings by conducting an elaborated case study, approaching the incident from the following three dimensions: personal, professional, and organizational/systemic (which then can be further divided into law enforcement and legal). This will be accomplished by dividing the research into smaller, more manageable, projects (focusing on one dimension at a time) aiming to describe and understand the pre-event, event and post-event (both short and long term) forces at play in an officer involved shooting, covering a variety of topics, such as: officer preparation and training (physical, psychological/emotional), response (of individual, of family and friends, of peers and coworkers, of supervisors, of agency, of community), personal support, professional support, organizational support, value conflict, the impact of determining whether or not the action was justified (and how this judgment then impacts other issues), and officer survivability.

Rationale for Choosing this Case

The case to be studied in this research has been chosen for several reasons. First, it is a local case, and thus easier to access, and Sergeant Scallon is willing to not only be interviewed extensively, but is also eager to be an active collaborator in the research process. Second, this case was well-covered in the media and also led to Sgt. Scallon receiving numerous awards and citations for his actions. Third, due to the nature of the incident, several of the areas of concern are highlighted, while other issues, such as the involvement of other officers or offenders in the shooting incident, are minimized. Several issues that the research seeks to understand are magnified as a result of details specific to this case, such as the extended duration of the gun fight with the offender and the officer's willingness to speak openly about the incident and its impact, and therefore make this an ideal case for an in depth study.

Proposed Methodology

This study will be a case study, defined by Creswell (2007) as research involving the study of one issue, explored through one or more bounded cases, through the use of detailed, in-depth data collection that involves multiple information sources, with the intent of producing a detailed case description and a thematic analysis of the case. Punch (Silverman, 2005) echoes Creswell's (2007) definition, adding that the "general objective of a case study is as full an understanding of a case as possible" (pp. 126).

The research design will also borrow from both critical and feminist criminology in an effort to develop a more comprehensive and honest qualitative study. Cormack (1999, pp. 291) cites Cain's definition of what a standpoint is, noting that it is a "site which its creator and occupier has agreed to occupy in order to produce a special kind of knowledge and practice of which he or she is aware in a special, theoretical way." Feminist standpoint methodology also supports the idea of locating the researcher within a research project and addressing power differentials in a research process, paying

particular care to theoretical reflexivity (Cormack, 1999). In borrowing from these methodologies, this project is not aligned with traditional positivistic thought, but plans to acknowledge the roles and viewpoints of participants and the researchers.

Additionally, both feminist and critical criminology address power differentials between the researcher and the subject; this issue has been of particular concern in designing this study. It must be acknowledged that this is Sergeant Scallon's story and that, as someone who has experienced this type of incident, as someone who trains others on these incidents, and as a frontline supervisor, his contributions and insights to this project will go beyond being a mere subject or interviewee. After careful consideration and discussions with Sergeant Scallon, it was decided that he would serve multiple roles in this research, acting as both an interviewee and also as a co-researcher. This decision was supported by some of the ideas expressed in Whiteacre and Pepinsky (2002). Specifically, Whiteacre and Pepinsky (2002, pp. 27) note that there is a need to "research with and learn from illicit drug users without objectifying or pathologizing them." While this statement explicitly references drug users, it can also be applied to research with police officers to gain a more true understanding of their experiences and perspectives. Also, Whiteacre and Pepinsky (2002, pp. 27) address the fact that, in research, interviewees can occupy multiple roles, stating that "there are a number of possible social scientific approaches to knowledge. In one, we make our informants subjects. In another, our informants become our teachers (Pepinsky, 1991, p. 302). Or they can be our collaborators, where the relationship between participant and researcher is more equal. The point is to avoid viewing the subject as a source of information to be interpreted by the professional researcher. Both sides have something to offer the project." It is from this orientation, as equal collaborators, that this research will proceed.

As this case was widely publicized, and, as a result of his actions in this incident, Sergeant Scallon has received local, state and national awards, it will be almost impossible to grant anonymity to

the City of Norfolk Police Department in this research. The hope is that this research will aid in potentially assisting other officers, other police departments, and other individuals who have experienced a similar event understand their situation. An additional goal of this research is to identify possible areas of best practice and training, with the aim of providing the appropriate response and support in these cases, emphasizing officer survivability. This study seeks to approach the issues involved with police shootings holistically, looking at precipitating factors/influences, the event itself and post-event factors, across several dimensions, as opposed to a narrow approach only examining one dimension in regard to one stage of the event.

This is an elaborated case study, and, as such, the selection of research participants is purposive in that only individuals involved with this case will be asked to participate. The data collection will consist of a series of free-form interviews, beginning with several interviews with Sergeant Scallon, before proceeding to interview any additional participants. The use of cognitive interviewing techniques may be utilized in some interviews to elicit detailed responses. Interviews will be tape recorded, with the interviewee's consent, transcribed, and then analyzed to extract dominant themes. In an effort to triangulate the data collected, as well as to incorporate multiple sources of information, all relevant media, any personal correspondences and documents provided by Sergeant Scallon or other interviewees, official policies and the case file will be reviewed and analyzed.

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Does Mafia Presence Influence Community Homicide Rates?

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Introduction

According to the Johnson commission (1964): “Organized crime is a society that seeks to operate outside the control of the American people and their government. It involves thousands of criminals, working within structures as complex as those of any large corporation, subject to laws more rigidly enforced than those of legitimate governments” (Jacobs, Panarella and Worthington, 1994, p.194). These organizations can be considered anything from the grandiose Mafia families to the teen street, drug-dealing gangs (Orvis and Rush, 2000). Organized crime comes in many forms, but for the purpose of this paper, the focus will be on organized crime in the Mafia sense, specifically Italian and Italian-American groups also known as La Cosa Nostra.

Shaw and McKay (1969), Suttles (1972), Hunter (1985), Sampson (1985) and Bursik and Grasmick (2001), among others, provide the framework for the argument that, despite the massive illicit dealings of the Italian-American Mafia, the residential neighborhoods in which they live and work remain relatively free of homicide and violent crime, more so than other similar urban neighborhoods. The underlying premise is straight-forward, everybody prefers to live in a safe neighborhood. This study will examine the characteristics of the defended neighborhood and how they are uniquely applied to New York City neighborhoods, particularly the Italian-American neighborhood of Bensonhurst in Brooklyn. The expectation is that Bensonhurst and other neighborhoods with a strong Mafia presence have significantly lower homicide rates than the rest of New York City due to the influence and informal social control exerted by organized crime.

Suttles(1972) coined the term *defended neighborhood* to describe communities whose members collectively eradicate selected delinquency and crime from their community. “The residential group which seals itself off through the efforts of delinquent gangs, by restrictive covenants, by sharp boundaries, or by a forbidding reputation—what I will call the defended neighborhood—was for a time a major category in sociological analysis” (Suttles, 1972, p. 21). These communities are able to exert formal and informal social controls on community residents, on outsiders to the neighborhood, or on both. The literature makes clear that four elements are necessary to become a successful defended neighborhood: fear, reputation, organization (disorganization), and social control. The following sections will present an overview of these elements of defended neighborhoods.

“In a very real sense, many of our slum communities in large cities come to approximate warrior societies because they must perform so much of their own policing and other functions which are ostensibly the responsibility of public institutions”(Suttles, 1972, p.191). Those of lower SES are many times more tightly networked than those who have more of an economic advantage, and they will personally fight for the neighborhood; taking up where the government leaves off. “Thus in these defended communities, a significant amount of delinquency did not represent internal social disorganization but *organized* responses to perceived external threats”(Heitgard and Bursik, 1987, p. 785). Moreover, if a slum neighborhood has a reputation for violence or other street crime, it lowers the likelihood that outsiders will enter their territory; delinquency in one’s own neighborhood can be a deterrent. Neighborhoods with a higher SES may be able to afford the outside *Public* and *Parochial* control but they might not have strong *Personal* networks (Bursik and Grasmick 2001). Higher SES neighborhoods are more likely to have women that stay home and keep watch over the neighborhood. “The segmental character of urban life leaves only some people free some of the time to invest their energy and interests into the defended neighborhood” (Suttles, 1972, p. 37). Most often the best defended neighborhoods are middle to upper class because they can better afford to have the political and social connections to enforce rules about street behavior. Women of wealthier families can stay home and keep a

look out in the neighborhood. DeSena (1994) discusses the neighborhood of Greenpoint in Brooklyn, New York. The women of this neighborhood keep very close tabs on all of the social action and closely monitor who they allow into the neighborhood by tightly controlling the rental and sale of property. They have established a tight social network and use this network to aid in protecting the neighborhood (DeSena, 1994).

Basically, high socioeconomic status can help, but it is not the only indicator of a defended neighborhood. The literature has pointed to several different indicators of the defended neighborhood, but what if all of those indicators were present at the same time?

For a neighborhood to have the best defense it must have the elements of fear, reputation, social organization, and social control. At least some neighborhoods with a heavy presence of the Italian-American Mafia seem to possess all of these criteria.

Data/Methods

In order to conduct a more quantitative test of the hypothesis that Mafia neighborhoods in New York City have lower levels of homicide than others with similar socioeconomic characteristics, the next section of the paper analyzes homicide rates for the New York City community districts circa 2000. As will be discussed below, there is a difficulty in undertaking this type of analysis because there is a lack of reliable measure for Mafia presence or influence at any level. Because the Mafia has been increasingly disrupted by informants during the past two decades, their presence can begin to be approximated by using arrest records. However, even this method is not an accurate measure of Mafia presence because it only assesses those members who get caught, not all Mafia members. There are no membership lists or end of the year financial records for New York City Mafia families, and this makes it difficult to precisely measure Mafia presence.

Data from the Census Bureau were retrieved from the New York City Department of City Planning for the year 2000 for each New York City community district. The purpose of collecting these data is to obtain measures of the neighborhood characteristics that are commonly associated with neighborhood public safety. The reason community districts were chosen rather than census tracts or neighborhoods are three fold. Because this study is preliminary, first the larger community districts will be analyzed and, if the results warrant further investigation, a more detailed study of census tracts or neighborhoods will be conducted. Additionally, New York City is so large that working with census tracts or neighborhoods would be more time consuming than the scope of this project. Finally, it is important to consider that census tracts are much smaller than neighborhoods and this may misrepresent communities, especially in an urban area as dense as New York City. Instead, community districts will be viewed as neighborhoods to achieve the same effects.

Each community district is approximately 1-2 square miles with populations between 50,000 and 200,000 (NYCDCP 2008). Each of the five boroughs are divided into multiple community districts: Brooklyn is divided into districts 1-18, Queens has districts 1-14, Manhattan separates into districts 1-12, the Bronx also has districts 1-12, and Staten Island has community districts 1-3. This totals 59 community districts.⁷

The neighborhood characteristics collected from these community districts and included in the data set are % Black, % Italian ancestry, % Russian ancestry, % on public assistance, population density, % female headed households with dependent children, population change from 1990-2000, median income, % owner occupied housing, % education of high school or higher, and % of those under 18. These variables were chosen because they are commonly discussed in criminology and sociology as influential on neighborhood public safety, more specifically, Homicide (Park and Burgess 1925, Shaw and McKay 1969, Bursik and Grasmick 2001, DeSena, 1994, Patillo 1998). They were available in the community district profiles compiled by the New York City Department of City Planning.

⁷ Community districts in New York City have been previously used in scholarly research (Golub, Johnson and Dunlap 2006).

Findings/Conclusion

The literature suggests that neighborhoods with organized criminal networks would have lower homicide rates than other neighborhoods or communities, because of the social control their organization exerts on residents and visitors. The strictly organized Italian-American Mafia seems to have characteristics that would translate throughout the neighborhood: People will not participate in overt illegal behaviors because they do not know who is watching, and the fear of what the Mafia might do keeps residents and visitors to the neighborhood relatively well-behaved. Using crime statistics from the NYPD and census data for neighborhood characteristics, four linear regressions were calculated. The results indicate that low socioeconomic status is one of the factors explaining neighborhood homicide rate variations in New York City. The percent of Italian ancestry was noted as significant and indicates that a neighborhood's reputation as Italian can potentially impact the homicide rate. The proxy variable for Mafia presence was not significant, and this can either be due to inaccuracies of the measurement of the variable or a true decrease in the influence of Mafia presence after the string of RICO prosecutions in the 1980s and 1990s. The results imply that Mafia presence does not influence neighborhood social control, but they do reinforce social disorganization theory. The foundation of this theory is neighborhood stability; the more unstable a neighborhood is, the more susceptible the neighborhood is to high homicide rates, other violent crime and deterioration. Factors like socioeconomic status and cultural homogeneity influence stability. Future research should attempt to have more accurate representations of Mafia presence and neighborhood characteristics.

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A Profile of Sentencing in Capital Murder Trials: North Carolina, 1977-2008

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Introduction

In 1976, the U.S. Supreme Court case *Gregg v. Georgia* and several companion cases reinstated the right of states to employ capital punishment as a criminal justice sanction. At present, a majority of states in the United States have capital punishment as a statutory sanction, but its actual use has been concentrated in a minority of states. The post-*Gregg* era has produced a voluminous public policy, philosophical, and research literature on this practice, especially whether it is applied in a fair and equitable manner. This report adds to that literature by providing a profile of one state's experience with capital punishment through an analysis of jury decisions in North Carolina capital murder trials that covers a period from the state's return to capital punishment in June 1, 1977 through December 2008, the last year for which a full contingency of data are available. The information is both a profile of a public policy response to murder and of factors that influence the intended imposition of a form of homicide coded as Y35.5 (Legal Execution) in the *International Classification of Diseases, Tenth revision* (ICD-10) (World Health Organization, <http://apps.who.int/classifications/apps/icd/icd10online/>).

Capital Punishment in North Carolina

Following *Gregg*, North Carolina adopted a bifurcated trial system that mandates separate guilt and penalty phases. In order to qualify as a murder subject to the death penalty ("capital murder"), the state must convince the jury at the penalty phase that at least one of 11 aggravating circumstances existed in conjunction with the murder. The defense is allowed to present an unlimited number of mitigating evidence that asks the jury to take each factor into account in setting a sentence; the defense's presentation must include the mandatory submission of any eight statutory mitigating circumstances that are thought to exist. The jury retires after the prosecution and defense presentations and is required to complete an *Issues and Recommendations as to Punishment* form in which they provide written responses to whether they accept each of the aggravating and mitigating circumstances listed on the form. Their deliberations conclude by offering a binding recommendation for a death sentence or life in prison, the latter currently without parole. Death sentences are automatically appealed to the North Carolina Supreme Court while life sentences must be appealed to the North Carolina Court of Appeals prior to state Supreme Court review. In 2009, North Carolina ranked 7th in the number of individuals on death row (169), 6th in the number of executions since 1976 (43), and 10th in the number of death sentences per 10,000 population (.047) (Death Penalty Information Center, <http://www.deathpenaltyinfo.org>). However, although death penalty trials continue, North Carolina is currently in a self-imposed moratorium on executions, and has not had an execution since August 2006.

The North Carolina Capital Sentencing Project (NCCSP)

The NCCSP is a data collection effort beginning in the late 1990s to identify and code aspects of all capital murder trials in North Carolina; Beth Bjerregaard and Sondra J. Fogel are my co-investigators (see Earl, Cochran, Smith, Bjerregaard, & Fogel [2008] for a detailed description of the project). The lack of any centralized state record of capital murder trials made the task challenging, and required a review of all first-degree murder convictions for the time period of the study to determine if they had been tried capitally. This was accomplished through reviews of appeals materials, newspaper articles, case files in the trial county. In the initial stages of data collection, it was determined that a number of errors existed in first-degree murder lists generated by state agencies, so multiple efforts and cross-checking were necessary to make a full determination of first-degree murder cases in which the death penalty was sought by the state.

Extensive efforts have led to confidence that a population of capital murder jury recommendations during 1977-2008 have been identified. The result is a database of 1,350 cases in which a jury was asked to recommend a life or death sentence. Details of these cases were gleaned from appeals case documents, original trial documents, and newspaper articles concerning the trials. Demographic information for defendants was obtained from the North Carolina Department of corrections website (<http://webapps6.doc.state.nc.us/opi/offendersearch.do?method=view>) and death certificate information for victims was gathered through cooperation of the North Carolina Medical Examiners Office. Because each jury recommendation was treated as a unique decision, the database includes both original trials (n = 1,222) and retrials (n=128, of which 102 were sentencing phase only), multiple offenders for a single victim, and single offenders with multiple victims. Deconstructed, the data covers the trials of 980 defendants convicted of the murders of 1,099 victims. All varieties of murders are represented in the dataset, including those of felony-related murders, domestic murders, murder for hire, serial killing, and mass murder.

Overview of the Data

The general characteristics of defendants and victims considered by the capital murders juries are shown in Table 1, and along with Table 2, are intended to be largely descriptive in their presentation of a profile of characteristics of capital murder decisions. As generalizations, these trials are overrepresented compared to the general population of North Carolina murders in terms of male offenders, White victims, and female victims. However, readers are reminded that the required presence of aggravating circumstances may not lend this type of murder to others in terms of etiological characteristics. That claim, however, is the essence of a number of studies seeking to determine whether prosecutorial discretion in selecting cases for capital status creates inequities -- an arbitrariness that *Gregg* sought to cure. NCCSP data focus only on those cases that have been prosecuted capitally, so do not address that issue.

Because of the extensive attention given to racial variations, and to a lesser extent, gender variations in influencing death sentencing outcomes, Table 2 is presented to provide information on sentencing patterns. Notable findings are that there are no statistically significant differences in death sentences received by White and Black defendants; as a note, some would argue that statistics derived from a population cases would dictate an interpretation that White defendants are actually sentenced in greater proportion than Black or Other defendants. However, statistically significant differences tilting toward greater death sentencing are found for cases with White

victims and where the victim was female. Focusing on defendant/victim combinations reveals no differences on the basis of race, but a greater propensity for death sentencing in male defendant/female victim cases.

It must be emphasized here that the differences shown in Table 2 are apart from the impact that any number of other legal and extra-legal factors might have in influencing jury decisions. Primary among these are aggravating and mitigating circumstances, highlights of which are presented in the Appendix. Touching on the primary findings, it can be seen that acceptance by the jury of a “cruel and heinous” circumstance (no foregone conclusion) heavily tilts the decision toward death. In contrast, acceptance that the age of the defendant should be taken into account when determining the sentence – a difficult case to make – obviously sways the jury toward a life sentence.

Previous work with earlier versions of the NCCSP dataset that have employed complex models reveals that predictors of death sentencing are complex and nuanced (Bjerregaard, Fogel, Smith, & Palacios, Forthcoming; Kremling, Smith, Cochran, Fogel, & Bjerregaard, 2007; Stauffer, Smith, Cochran, Fogel, & Bjerregaard, 2006). Generally, all other factors held constant, the number of aggravators accepted is the most powerful predictor, along with whether the victim was female; a young age of the defendant serves as a deterrent to death sentencing. Neither race of the defendant nor race of the victim emerge as consistent predictors. Work continues with is now considered to be a complete population of cases to determine the more subtle relationships among factors that appear correlated with jury decision making. However, one aspect has become apparent to the research, one perhaps most given to qualitative assessments – a high degree of capriciousness among this population of sentences. That is, the levels of prediction offered by even complex models of factors remains surprisingly low, reflecting what appears to be considerable inconsistency in sentences among similarly-situated cases. But, that is the subject of future papers.

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Appendix: Selected Characteristics of Aggravating and Mitigating Circumstances

Range of aggravating circumstances submitted: 1 – 9 (Mean = 2.23)

Range of aggravating circumstances accepted: 0 – 9 (Mean = 1.95)

Range of mitigating circumstances submitted: 0 – 123 (Mean = 17.75)

Range of mitigating circumstances accepted: 0 – 111 (Mean = 10.26)

Most submitted aggravating circumstances:

Murder was heinous and cruel = 47.6% of cases; acceptance = 76%

Murder was part of a course of other violent conduct = 46.7% of cases; acceptance* = 91%

Murder was committed during a felony = 40% of cases; acceptance = 96%

Percent death sentences if aggravating circumstance accepted:

Murder was heinous and cruel = 62%

Murder was part of a course of other violent conduct = 52%

Murder was committed during a felony = 56%

Most submitted statutory mitigating circumstances:

Under the influence of mental/emotional disturbance = 67% of cases; acceptance = 75%

No significant criminal history = 66% of cases; acceptance = 55%

Age of defendant = 46% of cases; acceptance = 27%

Percent death sentences if statutory mitigating circumstance accepted:

Under the influence of mental/emotional disturbance = 41%

No significant criminal history = 32%

Age of defendant = 22%

NOTE: Figures shown are based on varying sample sizes contingent on available data.

*Percent of cases computed on the basis of number of submitted cases.

Table 1. Characteristics of Defendants and Victims in Capital Sentencing Decisions (N=1,350)

<u>Characteristic</u>	<u>Number</u>	<u>Percent</u>
Defendant Race/Ethnicity		
White	567	42.0
Black	699	51.8
Other*	84	6.2
Defendant Sex		
Male	1,299	96.2
Female	51	3.8

Defendant Age (Mean = 28.3; range 15-77)

Under 21	267	19.8
29-31	956	70.8
Over 40	127	9.4

Victim Race/Ethnicity

White	840	62.2
Black	433	32.1
Other*	77	5.7

Victim Sex

Male	800	59.3
Female	433	40.7

Victim Age (Mean = 38.7; range = less than 1 year - 100)

Under 13	76	5.6
13-20	175	18.6
21-64	896	60.8
65 and over	203	15.0

Offender/Victim Relationship

Family/intimate partner**	275	20.4
Acquaintance/friend	241	17.8
Casual acquaintance	350	25.9
Stranger	484	35.9

*Includes Asian, Hispanic, Native American, and all other, including unknown

**Includes ex- and estranged intimate partnerships

Table 2. Death Sentencing in Capital Murder Jury Decisions, Selected Defendant and Offender Characteristics

Characteristics	# of Death	
	Sentences	Percent
Overall (N = 1,350)	575	42.6
White Defendants (n = 567)	253	44.6
Black Defendants (n = 699)	288	41.2
Other Defendants (n = 84)	34	40.5
Male Defendants (n = 1,299)	561	43.2

Female Defendants (n = 37)	14	27.5
Victim was White (n = 840)	387	46.1*
Victim was Black (n = 433)	168	38.8*
Victim was Other (n = 77)	20	26.0*
Victim was Male (n = 800)	300	37.5*
Victim was Female (n = 550)	275	50.0*
White Defendant/White Victim (n = 505)	230	45.5
White Defendant/Black Victim (n = 47)	15	31.9
White Defendant/Other Victim (n = 15)	8	53.3
Black Defendant/White Victim (n = 294)	133	45.2
Black Defendant/Black Victim (n = 379)	152	40.1
Black Defendant/Other Victim (n = 26)	3	11.5
Other Defendant/White Victim (n = 41)	24	58.5
Other Defendant/Black Victim (n = 7)	1	14.3

Other Defendant/Other Victim (n = 36)	9	25.0
Male Defendant/Male Victim (n = 766)	290	37.9*
Male Defendant/Female Victim (n = 533)	271	50.8*
Female Defendant/Male Victim (n = 34)	10	29.4
Female Defendant/Female Victim (n = 17)	4	23.5

*Statistically significant difference from corresponding category(ies), $p < .05$

CHANGES IN ELDERLY HOMICIDE IN CALIFORNIA

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While there has been a focus on elder abuse, there has been relatively little attention given to homicide among the elderly. As Krienert and Walsh (2009 p. 53) indicate,

the elderly is a segment of the population that is undergoing tremendous growth. The size of the older population—those aged 55 and older—reached 67.1 million in 2005, growing at a rate of four times faster than the population below age 55, and the elderly population—those aged 65 and older—reached 35 million in 2000 . . . with continuing increases underway as the baby boomers age through the life course.

Perhaps one of the reasons there is little research on elderly homicide is that they range between five and seven percent of all homicides. The range is illustrated by a ten year study of medical examiner records in Pennsylvania by Koehler, Shakir, and Omalu (2006) who found that 5.6% of homicide victims were 65 or older. At the other end of the range, Falzon and Davis (1998), examined Alabama medical examiner records from 1981-1995 and found that 6.8% of all homicides involved the elderly.

Elder homicide is also poorly understood because many of the studies have relied on small homogeneous samples, localized geographic regions, or older SHR data; the exceptions being two studies using recent NIBRS data (Chu & Kraus 2004; Krieinert & Walsh 2010). One of the unreviewed and relevant studies in this paper was an analysis of violent crimes, including homicides, of victims over the age of 60 by California Criminal Justice Statistics

Center (Towse, 2000). Table 1 gives the population, homicides, reported homicides, rates, and percent changes from the previous year for total and “senior citizens” from 1988 through 1998.

Table 1 about here

According to Table 1 from 1988 through 1998, the homicide rate per 100,000 for the total population declined 38.1 percent from 10.5 to 6.5. For victims over 60, “senior citizens,” the homicide rate declined 53.6 percent from 5.6 in 1988 to 2.6 in 1998.

While Table 1 is useful in demonstrating that homicide rates for the elderly has declined more than total homicides, the report provides no information as to whether the patterns of homicide events among the elderly have changed. In addition to providing homicide rates for the two time periods, 1987-1990 and 2005-2008, this paper will compare patterns of homicide victims for the two time periods.

METHOD

The present study is based on 66,232 homicides in California from 1987 through 2008. Manslaughter and justifiable homicides have been excluded from the analysis. The California data was divided into two groups: homicides from 1987 through 1990 and homicides from 2005 through 2008. Each four year group was divided into four age groups that constituted the dependent variable.

For a dependent variable, the elderly age group was divided into 60-69, 70-79, and 80-100. These three groups were compared to a 18-59 age group. The total number of homicide victims for the 18-59 group for 1987-1990 were 10,241. For the multinomial analysis as well as others, a random sample of 1,000 cases was taken for this group. For the other age group in this same time period, there were 456 victims age 60-69, 249 victims age 70-79, and 147 victims age 80-100.

Similarly, for the 2005-2008 period, there 7,709 homicide victims age 18-59 and a random sample of 1,000 cases was drawn. For this group, there were 257 victims age 60-69, 129 victims age 70-79, and 97 victims age 80-100.

There were initial plans to analyze offender variables, but the plan was dropped because of missing cases. In the 1987-1990 period, 32 percent of the offenders were missing values on age, race, and gender. In the 2005-2008 period, 46 percent of the offenders had missing values on the age, race, and gender. The missing cases are a consequence of low arrest clearances in California. According to their annual report, the clearance rate for homicide in 2008 was 57.3. Clearance rates have ranged from a high of 59.8 in 1999 to a low of 49.6 in 2001-which is considerably lower than national rates (Criminal Justice Statistics Center 2008).

The independent variables are as follows and the highest value is treated as redundant.

Gender - Males (1), Females (0)

Race/ethnicity - White (1), Hispanic (2), Black (3), Other (4)

Victim/Offender Relationships - Intimate Partners (1), Parents (2), Friends and Acquaintances (3), Other, Known to Victims (4), Strangers (5)

Weapon - Firearms (1), Cutting Instruments (2), Blunt Objects (3), Personal Weapons (4), Other Weapons (5)

Location - Victim or Offender's Residence (1), Shared Residence (2), Public Location (3), Other (4).

Precipitating Circumstances - Rape, Robbery (1), Arguments (2), Property and Other Crimes (3)

RESULTS

In Table 1, rate and percent change were taken from Statistics Center report. In Table 2, the state rates and percent change are given for the two time periods and the five age groups used in the study.

Table 2 about here

What is immediately clear from Table 2 is the decline in homicide rates from 1990 to 2005. For the state of California, the percent change in 2005 from 1990 was 43.8 percent. For the 18-59 age group, the decline was 41.10 percent. The greatest

decline occurred for the 60-69 (53.85%) and the 70-79 (53.66) age group. The decline for the oldest group (80-100) was modest (10.7).

A view of the rates horizontally indicates, with some variation, that as people age, the homicide rate declines. In part, this is a consequence of sheer numbers: fewer people to kill. In addition, however, the declining rate also indicates that as people age, there are fewer people living alone in unsupervised settings. The parallel is to the homicide rates of 6-12-year-old children who have the extremely low homicide rates because of the surveillance of teachers and parents.

In order to explore age differences during the two time periods, two multinomial logistic regressions were done. The likelihood ratio tests for both time period models were significant indicating an adequate model fit. Putting the results adjacent in Table 3A, 3B, and 3C makes it possible to review the similarities and differences.

To make it easier to read, italics and boldface group variables. Thus, victim race in the following tables are in italics and victim/offender relationships are in boldface

Table 3A, 3B, 3C about here

In general, comparisons indicate more similarities between the two time periods and more differences in comparison with the 18-59 age group.

Gender

There were no significant relationships for ages 60-69 for either time period. However, the odds of being in the 70-79 age group in 1987-1990 for male victims was decreased by a factor of .616; the odds ratio for the 2005-2008 group was not significant. The odds of the 80-100 age group in 87-90 victims for male victims was decreased by a factor of .414 in the 87-90 group and .196 in the 05-08 group.

What is worth noting is that as the number of males declined relative to the 18-59 group, a frequency distribution shows the percent of female victims is much higher than male victims in both time periods for the 70-79 and 80-100 age groups. In the 18-59 age group, the percent of male victims were approximately double the percent of female victims. In the post-70 age groups, it was reversed. The percent of female victims were at least double the percent of male victims. In short, while there were fewer male elderly victims in comparison to the younger group, there were a greater number of female elderly victims.

Race/Ethnicity

Elderly homicide appears to be primarily white victims. While there was significant odds ratio for the 80-100 age group in 05-08, all of the coefficients ratios were positive although not significant. Except for the 80-100 age group in 05-08 for Latinos, the coefficients of other age groups were significant favoring the reference group of 18-59. The odds for black victims in the 70-79 age group in 05-08 was decreased by a factor of .247.

Victim/Offender Relationships

One of the more surprising finding concerns parents as elderly homicide victims. In all comparisons, the odds ratios were positive and significant. The odds ratios ranged from 3.299 for 80-100 age group in 87-90 to 10.670 for 70-79 in 05-08. An examination of the frequencies indicated in every instance that the percent of parental victims in the 18-59 group was lower than percentages in every other age group.

No intimate partner (IPV) coefficients were significant. Only two instances of the friends and acquaintances coefficients were significant: the odds for age 70-79 in the 87-90 group for friends and acquaintances (F & A) decreased by a factor of .497. Similarly, for 80-100 in 87-90 for friends and acquaintances, the odds decreased by a factor of .372

Weapons

Firearms, which includes handguns and other types, had significant coefficients for every comparison age and group. The odds for firearms decreased by factors ranging from .071 to .416. Similarly, significant coefficients were negative for knives: the odds for knives decreased by factors of .121 to .348

Location

One negative coefficient was significant for location. The odds for age 70-79 in 87-90 for public location decreased by a factor of .122. None of the other coefficients were significant.

Precipitating Circumstances

For rapes and robberies and the age 60-69 as well as age 70-79 in 87-90, the coefficients were positive and significant. The odds for the two age groups increased by factors of 2.979 and 2.0798, respectively. In the age 80-100 in both time periods, the coefficients were significant. The odds were increased by a factor of 1.946 and 4.542

The odds for age 70-79 in 87-90 for arguments decreased by a factor of .434. Similarly, for age 89-100 in 87-90 for arguments, the odds for decreased by a factor of .455.

CONCLUSIONS

Research on elderly homicide seems to be a mass of inconsistencies. In reviewing the literature, Krienert and Walsh (2019 p. 58) state, "In sum, extant works reveal inconsistent findings with regard to victim gender, race, and relationship to offender." Thus, finding fewer male and more female among elderly homicide victims appear in some studies, but not others. Likewise, while white victims have positive coefficients, Latino victims have negative, and Blacks are mixed, this does not appear consistently in other studies.

With respect to victim/offender relationships, one of the more frequent findings in intimate partner violence which does not appear in this study. On the other hand, none of the studies report parents as victims.

None of the location variables were significant although firearms is consistently the favored weapon in the literature. Consistent with our findings, much of the previous research finds that elderly homicide is associated with crimes of violence.

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Table 1

Homicides Committed Against the Population and Senior Citizens, 1988-1998

Number, Rate per 100.000, and Percent Change in Rate by Year* #

Year	Total population	Total homicides reported	Rate per 100,000	Percent change in rate from previous year	Senior citizen population	Senior citizen percent of population	Senior citizen homicides reported	Rate per 100,000	Percent change in rate from previous year
1998	33,494,000	2,170	6.5	-16.7	4,723,548	14.1	121	6.2	-13.3
1997	32,957,000	2,579	7.8	-13.3	4,640,908	14.1	139	6.3	20.0
1996	32,383,000	2,910	9.0	-18.2	4,560,834	14.1	114	5.2	-19.4
1995	32,063,000	3,530	11.0	-4.3	4,506,030	14.1	140	6.3	-3.1
1994	32,140,000	3,699	11.5	-10.9	4,461,735	13.9	143	6.3	-36.0
1993	31,742,000	4,095	12.9	3.2	4,435,388	14.0	220	6.5	13.6
1992	31,300,000	3,920	12.5	-0.8	4,396,780	14.0	192	6.4	18.9
1991	30,646,000	3,876	12.6	4.1	4,326,788	14.1	161	6.3	-19.6
1990	29,557,836	3,562	12.1	10.0	4,232,094	14.4	193	6.4	2.2

1989	28,771,207	3,159	11.0	4.8	4,096,768	2	14.	184	5	4.	-19.6
1988	28,060,746	2,947	10.5	-	4,014,965	3	14.	226	6	5.	-

*Table is taken from "Report on Violent Crimes Committed Against Senior Citizens in California, 1998." Criminal Justice Statistics Center, Sacramento. page 10.

#Rates are based on population estimates provided by the Demographic Research Unit, California Department of Finance. Rates are calculated by dividing the number of crimes by the respective population. The result is multiplied by 100,000. Percentages may not add to 100.0 due to independent rounding.

Table 2

Homicide Victimization Comparing California and 18-59-Year-Old Victims to Victims Over

60: Rate per 100,000 and Percent Change from Previous Year*

Year	State		18-59		60-69		70-79		80-100	
	State Rates	Pct. Rate Change	18-59 Rates	Pct. Change	60-69 Rates	Pct. Change	70-79 Rates	Pct. Change	80-100 Rates	Pct. Change
2008	5.6	-6.67	7.7	-9.41	2.6	23.80	2.7	92.86	1.9	27.67
2007	6.0	-9.10	8.5	-8.60	2.1	-4.54	1.4	-6.67	1.5	-37.5
2006	6.6	-2.94	9.3	-3.12	2.2	-8.33	1.5	-21.05	2.4	-4.0
2005	6.8	-43.80	9.6	-41.10	2.4	-53.85	1.9	-53.66	2.5	-10.7
1990	12.1	1.00	16.3	10.14	5.2	1.96	4.1	5.13	2.8	-47.2
1989	11.0	4.76	14.8	4.22	5.1	-10.53	3.9	-20.41	5.3	-28.4
1988	10.5	-0.94	14.2	-2.74	5.7	1.78	4.9	-18.33	7.4	10.4
1987	10.6	--	14.6	--	5.6	--	6.0	--	6.7	--

*Rates are based on population estimates provided by the Demographic Research Unit, California Department of Finance.

Table 3A

*p < .05 **p < .001

#The reference category is 18-59.

Multinomial Logit for Two Time Periods and Ages 60-69#

	1987-1990				2005-2008			
	B	Std Err	Wald	Odds Ratio	B	Std Err	Wald	Odds Ratio
Males	.026	.187	.020	1.027	-.366	.283	1.673	.693
<i>White</i>	.281	.315	.794	1.324	.640	.377	2.875	1.896
<i>Latino</i>	-1.147**	.346	10.967	.318	-1.193*	.493	7.363	.303
<i>Black</i>	-.079	.324	.060	.924	-.681	.443	.113	1.156
IPV	.388	.287	1.830	1.474	.145	.433	.113	1.156
Parents	1.222*	.402	9.246	3.392	1.954**	.550	12.633	7.059
F & A	-.203	.212	.919	.816	.205	.352	.338	1.227
Other	-.009	.252	.001	.991	.112	.359	.098	1.119
<i>Firearms</i>	-1.491**	.297	25.133	.225	-.877*	.440	3.975	.416
<i>Knives</i>	-1.108**	.317	12.229	.330	-.493	.476	1.072	.611
<i>Clubs</i>	-.424	.365	1.349	.655	-.506	.609	.690	.603
<i>Personal</i>	-.153	.382	.159	.859	-.014	.550	.001	.986
Resident	.355	.634	.313	1.426	-.145	.695	.044	.865
Shared	.499	.641	.605	1.646	-.464	.728	.407	.629
Public	-.743	.637	1.360	.476	-.917	.682	1.809	.400
<i>Violence</i>	1.092**	.230	22.592	2.979	.529	.439	1.450	1.697
<i>Arguments</i>	.036	.193	.034	1.036	.072	.302	.067	1.075

Table 3B

*p < .05 **p < .001

#The reference category is 18-59.

Multinomial Logit for Two Time Periods and Ages 70-79#

	1987-1990				2005-2008			
	B	Std Err	Wald	Odds Ratio	B	Std Err	Wald	Odds Ratio
Males	-.485*	.219	4.914	.616	-.531	.325	2.661	.588
<i>White</i>	.744	.408	3.323	2.105	.125	.418	.089	1.133
<i>Latino</i>	-1.667*	.526	10.051	.189	-1.021*	.476	4.612	.360
<i>Black</i>	-.027	.431	.004	.973	-1.397*	.562	6.182	.247
IPV	.195	.366	.284	1.215	.318	.534	.355	1.374
Parents	1.667**	.446	13.981	5.296	2.367**	.608	15.187	10.670
F & A	-.669*	.278	6.308	.497	.380	.456	.697	1.463
Other	-.041	.312	.018	.960	.296	.463	.409	1.345
<i>Firearms</i>	-1.050*	.376	7.794	.350	-1.425*	.473	9.066	.240
<i>Knives</i>	-.534	.399	1.795	.586	-1.057*	.514	4.221	.348
<i>Clubs</i>	.056	.447	.016	1.057	-1.018	.671	2.301	.361
<i>Personal</i>	.713	.449	2.524	2.040	-.405	.606	.447	.667
Resident	-.579	.583	.987	.560	.103	.767	.018	1.108
Shared	-1.102	.610	3.265	.332	-.328	.807	.165	.721
Public	-2.106**	.598	12.385	.122	-1.342	.769	3.045	.261
<i>Violence</i>	.732*	.267	7.523	2.079	.609	.551	1.221	1.839
<i>Arguments</i>	-.834**	.235	12.554	.434	.027	.364	.006	1.028

Table 3C

*p < .05 **p < .001

#The reference category is 18-59

Multinomial Logit for Two Time Periods and Ages 80-100#

	1987-1990				2005-2008			
	B	Std Err	Wald	Odds Ratio	B	Std Err	Wald	Odds Ratio
Males	-1.881**	.262	11.331	.414	-1.631**	.394	17.136	.196
<i>White</i>	.604	.517	1.361	1.829	1.247*	.630	3.914	3.478
<i>Latino</i>	-1.436*	.665	4.657	.298	-.163	.717	.052	.850
<i>Black</i>	.003	.554	.000	1.003	-.948	.883	1.152	.388
IPV	-.770	.454	2.879	.463	.743	.668	1.236	2.103
Parents	1.194*	.507	5.532	3.299	2.208*	.727	9.215	9.095
F & A	-.988*	.345	8.212	.372	-.004	.636	.000	.995
Other	-.519	.413	1.577	.595	.507	.604	.703	1.660
<i>Firearms</i>	-2.643**	.396	44.607	.071	-2.582**	.529	23.813	.076
<i>Knives</i>	-2.112**	.433	23.850	.121	-1.891**	.580	10.631	.151
<i>Clubs</i>	-.629	.440	2.041	.533	-1.248	.692	3.258	.287
<i>Personal</i>	-.114	.448	.065	.892	-.289	.635	.207	.749
Resident	.556	1.118	.247	1.744	.634	.948	.450	1.886
Shared	.717	1.135	.399	2.048	.136	1.012	.018	1.146
Public	-1.664	1.148	2.102	.189	-1.673	.992	2.843	.188
<i>Violence</i>	.666*	.332	4.028	1.946	1.513*	.609	6.167	4.542
<i>Arguments</i>	-.788*	.298	6.991	.455	-.761	.442	2.962	.467

Re-conceptualizing “Cooling-Off Periods”

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The temporal aspect of serial homicide has been used to differentiate it from other forms of homicide and is highlighted in the current FBI definition: “the unlawful killing of two or more victims by the same offender(s), in separate events” (National Center for the Analysis of Violent Crime [NCAVC], 2005, p. 9). However, although the concept of cooling-off periods is a key factor in defining serial homicide (Douglas, Ressler, Burgess, & Hartman, 1986), the construct has received little attention in the research community. With the exception of one study (Lange, 1999), cooling-off periods have only been mentioned as an aside in the literature (Bartol & Bartol; 2008; Douglas, Burgess, Burgess, Ressler, 2006; Holmes & Holmes, 1998; Greswell & Hollin, 1994). There are currently no readily available baseline statistics regarding cooling-off periods and there have not been any empirical studies that have attempted to determine what factors directly influence the length of these intervals between offenses. Furthermore, to date there is lack of research serving to develop a theoretical understanding of what cooling off is.

Cooling-off periods are described as the state of returning to the offender’s usual way of life between homicides (Burgess, 2006). They are reported as the “main element that separates the serial killer from other multiple killers” (Douglas et al., 1986, p. 409). These episodes are a clinical construct. They are measured in psychological terms and have been expressed as an

⁸ The authors would like to express their gratitude to the FBI’s Behavioral Science Unit for coordinating access to the data used in the current study. Authors’ opinions, statements and conclusions should not be considered an endorsement by the FBI for any policy, program or service.

“emotional” cooling-off between offenses. Studies that employ case files for analysis cannot accurately study this construct due to the fact that detailed offender statements are required. Another issue arises when attempting to properly determine the duration of a cooling-off period. Douglas et al. (1986) stated that “when the time is right for [the offender] and he is cooled off from his last homicide, he selects his next victim and proceeds with his plan (p. 409). It is thus unclear whether the act of planning is included or excluded from the cooling-off process. As a result, it may be difficult to accurately measure the length of these periods. Due to the fact that cooling-off period data cannot be reliably obtained through case file analysis, nor accurately measured, the concept will have to be re-conceptualized to facilitate reliable empirical research.

Associated with the cooling-off construct is the fact that these episodes span the length of time between homicides within a series. If the clinical interpretation of cooling off is removed, these episodes are more appropriately termed *time intervals*. Serial homicide time intervals have been generally defined in the literature (Bartol & Bartol, 2008; Douglas et al., 1986; Holmes & Holmes, 1998). In addition to describing what entails cooling-off periods, Douglas et al. (1986) reported these time intervals can be of any length. Furthermore, Bartol and Bartol (2008) remarked that time intervals “may be days or weeks, but more likely months or years,” thus providing a possible range for their length. This researcher established the idea that cooling-off periods also serve as the time intervals between homicides. Once the concept of cooling off is reformatted as time intervals, researchers can study these periods of time without relying on offender interviews or exploring offender motivation. This re-conceptualization changes the meaning of cooling-off periods, and research on this topic can provide a good

baseline for then understanding the possible significance of cooling-off patterns. Once baseline values of actual time intervals are established, researchers can then return to the clinical interpretation of cooling off. Empirically substantiated research may help define cooling-off periods and thus build a basis for better understanding the concept.

To date, Lange (1999) has been the only study that has examined cooling-off periods. Lange (1999) demonstrated that information pertaining to cooling-off periods (e.g., homicide dates) may be used for the purpose of quantitative analysis. Lange (1999) introduced a technique for studying serial homicide time intervals. When providing possible explanations for observed patterns, Lange (1999) provided theoretical and practical hypotheses that can be categorized as internal variables (e.g., personality differences) and external variables (e.g., geographic factors).

Serial homicide time intervals may increase and/or decrease across a series for several reasons. One potential way of viewing this is by focusing on the offender's geographic behavior and victim selection procedure, and organizing these factors using the behavioral construct seen in Rossmo's (1997) hunting process. This concept was described as the offender's style of searching for and then attacking a victim (Beauregard, Rossmo, & Proulx, 2007; Rossmo, 1997; Rossmo, 2000) and serves as a potential model for studying time intervals within serial homicide. This process was expanded into a nine-step hunting process for serial sex offenders in Beauregard et al. (2007) and many of the steps are able to be divided into two groups: 1) stages pertaining to distance traveled and 2) stages pertaining to victim selection.

One potentially important aspect of serial homicide time interval length is geography (i.e., distance traveled, spatial behavior and the offender's travel plan). The foundation for this factor is the routine activities approach (Cohen & Felson, 1979), which asserts that an

offender's movement throughout his environment will have an influence on his criminal behavior. Environmental criminology literature, namely Brantingham and Brantingham (1981), has provided information on distance traveled by focusing on the interaction that occurs between people and the space they function in. Moreover, journey-to-crime research has explored offenders' spatial behavior and has stated several connections concerning how an offender's environment and travel behavior will be related to the offense (Canter & Hammond, 2006; Canter & Larkin, 1993, Rossmo, 2000; Snook, Wright, House & Alison, 2006). Related to this body of research is the offender's mode of obtaining a victim. Regarding travel behavior, four categories can be hypothesized: 1) no travel, 2) travel to the victim, 3) travel with the victim and 4) forcefully abduct the victim. The offender's travel plan bridges the influence of geography and the role victim selection might play in influencing time interval length.

Associated with the influence of travel distance and spatial behavior in serial homicide time intervals is the offender's victim selection. Hickey (2002) and Egger (2002) have spoken at length about the role of vulnerable victims in serial homicide. Additionally, it was stated in Ressler, Burgess, and Douglas (1992) that victim selection may vary among serial homicide offenders depending on the specific role the victim plays in the offender's fantasy. Therefore, the targeting of specific subgroups may influence time interval length in two different ways: 1) subgroups that are easy for the offender to encounter may result in shorter time intervals and 2) subgroups that are difficult for the offender to encounter may result in longer time intervals. Additionally, offenders who do not target specific subgroups may select their victims by means of their search method. As addressed in Levin and Fox (1985), victims may either be simply accessible or have a certain physical feature that the offender likes. The notion of accessibility

may be an influential factor in time interval length within serial homicide. Furthermore, related to issues of victim choice and accessibility is the offender's search method. Various search techniques (see Canter & Larkin, 1993; Rossmo, 1997) may correlate with different time intervals between offenses. By viewing victim selection according to search method, the offender's travel behavior once again becomes a vital element regarding when offenses occur.

Working in tandem with the offender's spatial behavior and victim selection is the presence of social elements in the offender's life. Through the work of Hirschi (1969) and Sampson and Laub (1990), it may be stated that social aspects of the offender's life influences when he has time to commit criminal acts and therefore may further influence time intervals length.

The current study sought to create a methodology for analyzing the concept of serial homicide time intervals, as well as to identify methodological issues that may be present in this type of research. The study assessed 16 series containing 90 time intervals from 121 offenses.⁹ The median interval length was 34.5 days, with data fluctuating greatly among offenders. There were four aims: 1) determine if distance traveled influences time interval length, 2) determine if the offender's travel plan influences time interval length, 3) determine if victim selection influences time interval length and 4) determine if social involvement influences time interval length.

For the first aim it was found that the majority of the offenders followed the Marauder Hypothesis (Canter & Larkin, 1993); therefore, the offender's method of traveling to/with the

⁹ The data for this research were taken from closed, fully adjudicated state and local cases that were contributed from law enforcement agencies from around the country for the purpose of research. All identifiers, including names of victims, suspects, offenders, officers, departments, and correctional agencies, are removed.

victim was assessed for the second aim. Potential trends were observed regarding the offender's travel behavior: traveling with the victim had greater time intervals compared to committing the offense at the encounter site or forcefully abducting the victim. Regarding the third aim, the data indicated that offenders who targeted specific subpopulations (e.g., children, prostitutes and the elderly) had longer time intervals than those who did not appear to select a specific type of victim, with offenders who targeted children having the longest intervals. Lastly, social involvement was taken into account. It was noted that offenders with high levels of social involvement had longer time intervals between offenses compared to more asocial offenders.

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