



NATIONAL INSTITUTE OF JUSTICE

Research Report

Questions and Answers in Lethal and Non-Lethal Violence

Proceedings of the First
Annual Workshop of the
Homicide Research
working Group

Ann Arbor, MI
June 14–16, **1992**

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First Annual Workshop of the
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The first intensive Workshop of the Homicide Research Working Group was held from June 14 to 16, 1992, in Ann Arbor, Michigan. Attended by 29 homicide researchers and policy experts, the Workshop included tutorials on national homicide datasets, reviews of local homicide research projects, a hands-on session on measuring drug-related crime, a roundtable discussion on three homicide intervention projects, an introduction to and tour of the National Archive of Criminal Justice Data, and a "town meeting" discussion of issues in lethal and non-lethal violence. This volume, which was supported and published by the National Institute of Justice, is a record of the proceedings of that meeting.

The Ann Arbor Homicide Research Workshop was sponsored by the Inter-University Consortium for Political and Social Research (ICPSR) and by the National Institute of Justice. All of the participants owe a hearty thanks to Victoria Schneider and Cathy Kinzel of ICPSR, who thought of everything to make the Ann Arbor Workshop a success.

The growth of the Homicide Research Working Group, from Richard Block's idea for an American Society of Criminology (ASC) session in November, 1991 to the intensive Ann Arbor Workshop in June, 1992, was so rapid that it seemed to exemplify the "idea whose time is come." However, there were a few people who had the vision, early on, to see the potential of such an interdisciplinary, international working group of researchers in homicide. One of the first of these was Victoria Schneider, Archival Assistant Director of the ICPSR National Archive of Criminal Justice Data. At the ASC session, she reviewed the purpose and the functions of the Archive, offered to provide a repository for homicide data archives and to facilitate communication among Working Group members, and then extended a gracious invitation for the Homicide Research Working Group to hold its first extended meeting at the Archive in Ann Arbor.

It can truly be said that the Homicide Research Working Group would not exist without the American Society of Criminology, which encourages interdisciplinary problem-solving, and has the flexibility to foster innovative ideas. The "Workshop on Homicide Research" session, the first Research Workshop session ever held at the ASC, was organized by Richard and Carolyn Rebecca Block with the support and encouragement of Program Committee Member Kenneth Land and ASC President Alfred Blumstein. The Working Group owes a debt to the 70 people who attended the ASC session (for a list of Working Group members, see Appendix V), and to those who presented five-minute overviews of a critical problem facing homicide research -- Henry Brownstein, Chris Rasche, David Curry, Daniel Perales, Derral Cheatwood, Chris Wright, Margo Wilson, and Victoria Schneider.

John Campbell, Chief of the Behavioral Science Unit of the FBI Academy, supported the vision of the Homicide Research Working Group from its beginning. First

declaring his support at the ASC session, he followed up with an invitation for the Working Group to meet at the FBI Academy in 1993, a meeting that is currently being planned by the Academy's Roland Reboussin. In addition, both Loyola University Chicago and the Illinois Criminal Justice Information Authority provided a home during the incubation stages of the Working Group, and continue to support the organizational activities necessary to its existence. A vital source of support for both for the administration of the Working Group and for this publication is the National Institute of Justice. Pamela Lattimore of the NIJ not only could see the value of the Working Group from its inception, but supplemented that vision with an energetic search for the means to implement it.

The most essential contribution to these proceedings was provided, of course, by the participants of the Ann Arbor Workshop -- researchers and policy experts from all over the country, representing a variety of disciplines. The essays in this volume are the most visible product of the Workshop, and the Working Group members are grateful to the authors who provided them and to Karen Martin, who assembled them into a coherent whole. However, the most valuable and enduring product of the Workshop, the result of the interaction of all of the participants over three intense days of give-and-take, was the development of the Homicide Research Working Group as a tool for asking questions and providing answers in lethal and non-lethal violence.

Carolyn Rebecca Block
Richard L. Block

INTRODUCTION: THE HOMICIDE RESEARCH WORKING GROUP

People who do homicide research, develop and maintain homicide datasets, or design intervention strategies for lethal violence are literally involved with life-and-death issues. Nonetheless, work in lethal violence has been scattered among numerous disciplines, with little coordination and often little or no communication between them. In an attempt to address this problem, a group of practitioners, researchers, and academics from public health, criminology, psychology, law enforcement, geography, medicine, sociology, criminal justice and a variety of other disciplines recently organized the Homicide Research Working Group.

The Homicide Research Working Group has the following goals:

- ▶ to encourage more efficient sharing of techniques for measuring and analyzing homicide,
- ▶ to forge links between research, epidemiology, and practical programs to reduce levels of mortality from violence,
- ▶ to promote improved data quality and the linking of diverse homicide data sources,
- ▶ to foster collaborative, interdisciplinary research on lethal and non-lethal violence,
- ▶ to create and maintain a communication network among those collecting, maintaining and analyzing homicide datasets, and
- ▶ to generate a stronger working relationship among homicide researchers.

Membership in the Homicide Research Working Group is open to anyone who agrees with the above goals and who pays a small annual membership fee. The Working Group currently has over 200 members representing many disciplines and many countries, and maintains an active telecommunications network and a newsletter. The November, 1991, charter meeting, held as a session at the annual meeting of the American Society of Criminology (ASC), brought together over 70 people who were struggling with the problems associated with collecting, maintaining, defining and analyzing homicide data. The ASC Workshop session identified homicide research currently being conducted, distributed sets of "homicide data questionnaires" that participants had completed about 18 projects, and outlined some of the primary issues facing homicide research.

Participants at the charter meeting voted to organize a "Homicide Research Working Group," which would meet at least twice a year, once in conjunction with the ASC or other annual meeting and again in early summer for a sustained two or three day period. At this writing, the Working Group has held sessions at the 1992 ASC and the 1993 Academy of Criminal Justice Sciences annual meetings, held its first three-day Intensive Workshop in Ann Arbor (resulting in these Proceedings), and is currently planning sessions at other professional meetings and a four-day Intensive Workshop in June, 1993, at which the theme will be "Homicide Research: Coordinating Resources, Linking Datasets and Learning from Different Approaches."

The Homicide Research Working Group is guided by a steering committee, and presently has two subcommittees, the Planning Grant Proposal Subcommittee, which is developing a planning grant to make use of homicide data collected nationwide, and the Data Needs Subcommittee, which addresses the common data needs of homicide researchers relative to large central datasets such as NIBRS. It is fortunate to have received the enthusiastic response of a number of agencies, including the American Society of Criminology, where it held its charter meeting, the ICPSR (home of the National Archive of Criminal Justice Data), which hosted the first Intensive Workshop in 1992, the National Institute of Justice, which has provided support and is publishing the proceedings of the annual Intensive Workshops, and the FBI Academy, which will host the second Intensive Workshop from June 13 to 17, 1993 in Quantico, Virginia.¹ The Working Group hopes to organize future Intensive Workshops at the Centers for Disease Control in Atlanta and at Statistics Canada in Ottawa.

These Proceedings are organized not according to the chronological order in which they were originally presented (see Agenda in Appendix I), but rather according to similarity of topic, beginning with five papers outlining substantive current issues in homicide research and intervention strategies -- a discussion of the pitfalls of comparing rates across geographical area, an outline of practical and measurement issues in drug-related violence, a summary of the Danger Assessment Instrument for homicide risk in intimate violence, and overviews of two violence prevention programs, one targeting individuals and the other targeting neighborhood Hot Spot Areas. Discussions of six homicide datasets follow, including two papers on national datasets -- the Canadian Homicide Database and the United States National Incident-Based Reporting System, and four papers on local datasets -- the Los Angeles Gang Homicide Datasets, the Chicago Homicide Dataset, the Baltimore City Homicide File, and the Philadelphia Homicide Project Data. The Ann Arbor meeting agenda, a list of participants at the meeting, a review of the organizational issues decided there, an overview of the issues raised during group discussion, and a list of members in good standing, are found in the Appendix.

The intention of the Working Group and the National Institute of Justice is to publish a series of annual reports, based on the Proceedings of each annual Intensive Workshop. The title of this series, *Questions and Answers in Lethal and Non-Lethal Violence*, is in keeping with the Working Group goal to foster communication and problem solving among homicide researchers, epidemiologists and practical specialists, rather than promoting one agenda or one point of view. The Ann Arbor Intensive Workshop was designed to encourage discussion, debate, and brainstorming around the many unresolved measurement and analysis issues facing homicide research today. This initial three-day meeting, therefore, probably raised more questions than it produced answers. We hope that, as future annual editions of the Proceedings are published, the number of answers will increase.

¹This was written in January, 1993. By the time of the publication of these Proceedings, a very successful Quantico Workshop had been held. The Proceedings of that second Workshop will be published early in 1994.

DIFFERENT LEVELS, COMMON CAUSES: ST. LOUIS HOMICIDE RATES IN NATIONAL PERSPECTIVE

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...statistics can be deceptive even when they are accurate. They can mislead us, for example, if they beguile us into confining our attention to the plight of places, whereas our central concern is with the well-being of people (Morrison, 1974:761).

ABSTRACT

St. Louis homicide rates are substantially greater than the national average and are higher than those of many urban areas with roughly the same population size and composition. This presentation places these observations in the context of changes in homicide rates over time and place. Despite the difference in the levels of local and national homicide rates, there is a remarkably close correspondence in the pattern of change over time. The strong relationship between local and national homicide rates suggest that they are driven by many of the same causal factors.

When comparing homicide rates across urban areas, it can make a great difference whether the unit of comparison is the central city or the metropolitan area. Central city comparisons are influenced and possibly distorted by differences in the distribution of the population between the city and the surrounding metropolitan area. St. Louis, whose population is highly dispersed away from the central city, ranks much higher in comparisons of central city homicide rates than in comparisons of metropolitan area rates. Without good reasons for using cities as the unit of analysis, comparisons of homicide rates should be based on metropolitan areas. Metropolitan area rankings provide a more accurate view of St. Louis homicide rates and those of many other urban areas.

INTRODUCTION

In recent years, St. Louis has consistently ranked near the top of the nation in homicide. In 1989, for example, the St. Louis homicide rate of 39 homicides per 100,000 residents was higher than that of several cities that are generally regarded as having high crime rates, including Newark (34), Miami (29), Philadelphia (29), Houston (27), and New York (26). The St. Louis murder rate is more than four times greater than the national rate of 9 per 100,000 -- which was the St. Louis rate in 1960. That year, 67 people were victims of homicide in St. Louis. In 1989, the city had 158 homicide victims, a difference made all the more striking by the fact the city lost almost half of its population during that 30-year "generation of homicide."

Each of these figures is accurate, and yet each is also misleading if, following Morrison (1974), we prefer to focus on people rather than places. To be sure, St. Louis does have a high

rate of homicide that has grown substantially over the last 30 years. However, how high the rate is in relation to other cities depends on how St. Louis is compared with other cities. The growth rate in St. Louis homicide also must be viewed in relation to the increases -- and the declines -- in violence and crime nationwide since the early 1960s. When based on a reasonable standard of comparison, the St. Louis homicide rate does not appear quite as exceptional and the city's ranking on the murder list drops considerably.

LOCAL - NATIONAL COMPARISONS

In spite of the large difference in the magnitude of local and national rates, a portion of which is due simply to the higher rate of homicide in cities generally, there is a strong correspondence between the pattern of change in the two series. The ups and downs in the national homicide rate since 1960 have been closely paralleled by corresponding changes in the St. Louis rates.

The relationship between the St. Louis and national rates is illustrated in Figure 1, which plots both series between 1960 and 1988 in the form of standard scores (z)¹. Transforming each series in this way removes the scale difference between them and reveals their very close linear association ($r = .91$). The two series share over 80 percent common variance. Although this does not necessarily mean that they share a set of common causes, the fact that they rise and fall together so consistently suggests that the factors that are responsible for changes in the national rate are also driving the local rate.

Putting local figures in national perspective makes changes in local levels of violence less puzzling than they might otherwise appear. For example, the conditions that drove St. Louis homicide rates up during the late 1960s and down during the early 1980s were evidently not unique to St. Louis, since these changes occurred throughout the nation. There is little we can do about some of these conditions, such as the passage of the postwar baby boom generation through the high-crime teenage years during the 1960s and 1970s, although we may want to plan for the movement of the children of the baby boomers, the "echo boom," into their crime-prone years. We had better begin this process soon.

The strong connection between changes in levels of violence here and elsewhere should not result in fatalism regarding local responses to violent crime. On the contrary, it suggests that we base our own approaches to violence on promising strategies pursued in other cities and explore the inherent possibilities of using national patterns as an indication of expected changes in local homicide levels in the years ahead.

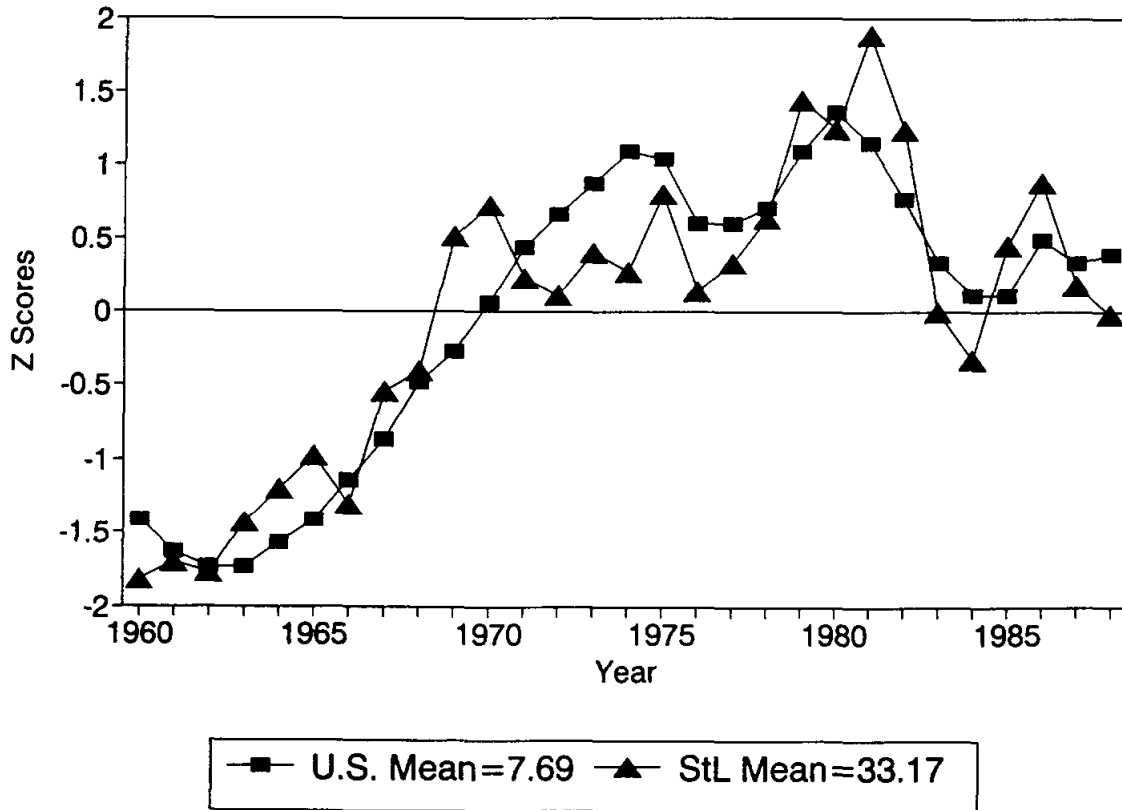
COMPARING CITY CRIME RATES

Despite the fact that St. Louis homicide rates have mirrored the trends and fluctuations of national homicide rates over last 30 years, we still need an explanation of why the St. Louis

¹ Z is obtained by subtracting the mean of the series from each of the original scores and dividing the result by the standard deviation.

FIGURE 1

**U.S. and St. Louis City Homicide Rate,
1960-1988 (Standard Deviation Scores)**



rates are so much higher than those of other cities, particularly during the past decade or so. A complete answer would involve estimating models that contain the factors that are thought to account for differences across cities in their homicide rates (see Messner, 1982; Sampson, 1987). However, these models, no matter how well they specify the causes of homicide, must be applied to appropriate and comparable units of analysis. An argument can be made that the units of analysis that are used in comparisons of urban homicide and other crime rates are neither appropriate nor comparable.

Gibbs and Erikson (1978) pointed out in the mid-1970s that cities are unreliable units for comparing urban crime rates to the extent that the metropolitan areas in which they are situated differ in the proportion of residents who live in versus outside of the central city. The reason is due, in part, to how city crime rates are constructed. A crime rate is a fraction that divides the number of actual crimes c by the number of potential crimes p , which is conventionally defined as the number of residents of the city. Thus p is limited by the size of the city's population, while c may reach a theoretical maximum equal to the number of offenders times the number of crimes they commit during a specified time interval. Contributions to c can be made regardless of residence; to contribute p you must live in the city.

A city's crime rate will rise, then, if increases in **c** exceed increases in **p**, or if decreases in **p** exceed decreases in **c**. Cities that have experienced rapid population loss may well have upward pressure exerted on their crime rates, especially if those who leave the city do not leave the metropolitan area and therefore remain potential offenders or targets of crime within the city. Persons who move out of the city and return on a frequent basis to work, shop, attend sporting and cultural events, or commit crimes can make a potentially very significant contribution to the city's crime rate by withdrawing from **p** while continuing to make regular deposits to **c**. Cities characterized by large numbers of sojourners of this kind may have good reason to suppose that their official crime rates are biased by an artificial shortage in their denominators.

The influence on city crime rates of the size of population decline is compounded by the composition of the outward migration. The disadvantaged segments of the city's population, where offenders are concentrated, are under-represented among those who leave and over-represented among those who remain in the city. These conditions have affected most large cities in recent decades, especially those located in the Northeast and Midwest. St. Louis has been especially hard hit. After attaining a population peak of 880,000 in the early 1950s, the city's population declined to under 590,000 in 1972 (Morrison, 1974:758). It fell to about 450,000 in 1980 and presently stands at about 395,000. Fifteen years ago, Morrison (1974:759, 761) provided a prescient description of the net impact of this massive outmigration from the city:

Persistent and severe migration away from St. Louis has altered the structure of its population. These changes bear heavily on the city's capacity to meet the needs of the increasingly disadvantaged population that remains.... Through selective out-migration, then, problems of dependency and poverty -- not exclusively problems of St. Louis -- have come increasingly to be located in St. Louis.

Population loss may affect a city's crime rate by increasing social dislocation and economic disadvantage in the central city, thereby increasing the number of crimes committed by a shrinking population, in other words, by both raising **c** and lowering **p** (Wilson, 1987). Understanding the effects on homicide of poverty, unemployment, and family disruption is an important objective of the St. Louis Homicide Project (See Decker, Kohfeld, Rosenfeld, and Sprague, 1991: Chapter 4). This presentation is concerned, however, with a related measurement issue of how city homicide rates are influenced by changes in the denominator **p** assuming no change in the numerator **c**. To what degree are comparisons of urban homicide rates influenced, and possibly biased, by the dispersion of metropolitan populations away from the central city?²

The effect of metropolitan population dispersion on central city homicide rates, and on St. Louis's ranking relative to the homicide rates of other cities, is examined with data from a sample of Metropolitan Statistical Areas (MSAs) comparable to St. Louis in size and population diversity. The sample consists of the 29 MSAs with an estimated 1988 population of over one million and a black population greater than 100,000 residents. The homicide rates are for 1989. Population

²See Farley (1987) for an excellent discussion of this issue.

dispersion is measured by the proportion of the MSA population that resides outside of the central city.³

The 20 MSAs display enormous variability in population dispersion away from the central city. At one extreme, the Nassau-Suffolk MSA and "central city" are one and the same. Similarly, the New York MSA and central city populations are nearly coterminous; only 14 percent of the New York MSA population lives outside of New York City. The cities of Norfolk-Newport News and Houston account for more than half of their MSA populations. Consistent with expectations regarding central city population loss, 84 percent of the St. Louis MSA population lives outside of St. Louis city. Only Atlanta's population is more highly dispersed, with 85 percent residing outside of the central city. As expected there is a significant relationship between population dispersion away from the central city of an MSA and central city homicide rates ($r = .44, p < .05$).

To more fully isolate the impact of population dispersion on city homicide rates, the crime rates were regressed on the population dispersion variable, and on the proportion of homicides in the MSA that occurred in the central city. This variable captures the influence of c on central city crime rates. The regression results, presented in Table 1, confirm the importance of population dispersion away from the central city in accounting for differences in city homicide rates, net of the influence of the concentration of MSA homicides in the central city.⁴

Table 1. The Effects of Population Dispersion and Homicide Concentration in the Central City on Central City Homicide Rates. (N=29)

	Unstandardized Regression Coefficient	Standardized Regression Coefficient	t-value
Population Dispersion	63.4	.74	3.92**
Homicide Concentration	53.4	.52	2.76*
Intercept	-50.73		
R ² = .38			
F = 7.89**			

** p < .01

* p < .05

³Crime and population data are from Federal Bureau of Investigation (1990:330-358, Appendix V); racial composition data, based on the 1980 census, are from McFate (1988).

⁴Inspection of scatterplots revealed Nassau-Suffolk as an outlier in pre-analysis. Removal of this case produced no important changes in the results.

One clear advantage of MSAs over cities as units of analysis in studies of homicide is that they do not appear to be subject to this source of distortion. In contrast with city homicide rates, MSA homicide rates are not correlated with the dispersion of population away from the central city ($r = .05$ in this sample). Unless there are strong substantive reasons for preferring cities as units as analysis, the safest course for researchers is to use MSAs. When crime rates are incorporated into "quality of life" ratings of desirable locations to live or do business, MSA crime rates should be used rather than those of central cities. Similarly, news accounts of urban crime rates should be based on MSAs rather than on central cities, or at the very least provide information on both central cities and metropolitan areas. The purpose of these comparisons is not to hide the city behind the rosier statistics of metropolitan areas, but to provide a more accurate view of crime in the city.

Not surprisingly, homicides are highly concentrated in the central city (mean = 71%), and there is considerably less variability among MSAs in this measure than in the measures of population dispersion. These results suggest that rankings of homicide rates will differ depending on whether cities or metropolitan areas are being compared. Areas with highly dispersed populations, such as St. Louis, should rank higher when central cities are the unit of analysis.

The central city and metropolitan area homicide rankings differ markedly (see Table 2). For example, St. Louis has the fifth highest city homicide rate and drops to fifteenth place among the 29 MSAs. By comparison, New York, which has much less population dispersion, moves from number 14 in the city ranking to second place among MSAs.

The fact that the relative positions of the homicide rates of cities and metropolitan areas differ is not, in itself, reason to prefer one unit of comparison over the other. For some purposes, such as the study of drug-related violence in the inner cities, the more "acute crime picture" reflected in the city rates may be preferred over the "diluted" MSA rates (Inciardi, 1990:105). However, analysts should exercise caution in interpreting differences among cities as indicators of actual differences in crimes as opposed to population attrition.

Table 2. Central City and MSA Homicide Rates in 1989 (N=29)

<u>Central City</u>	<u>City Homicide Rate</u>	<u>MSA</u>	<u>MSA Homicide Rate</u>
1. Washington DC	71.85	1. New Orleans	24.7
2. Detroit	60.02	2. New York	22.7
3. Atlanta	57.68	3. Miami	21.8
4. New Orleans	47.48	4. Los Angeles	18.0
5. ST. LOUIS	39.00	5. Detroit	17.5
6. Dallas	35.23	6. Houston	17.4
7. Baltimore	34.33	7. Dallas	17.3
8. Newark	34.10	8. Washington DC	17.0
9. Kansas City	30.55	9. Atlanta	14.9
10. Miami	29.21	10. Baltimore	14.2
11. Philadelphia	28.75	11. Chicago	13.1
12. Cleveland	27.49	12. Kansas City	13.1
13. Houston	26.79	13. Charlotte	12.1
14. New York	25.85	14. Philadelphia	11.8
15. Los Angeles	24.87	15. ST. LOUIS	11.2
16. Chicago	24.83	16. Norfolk-Newport News	10.1
17. Charlotte	18.91	17. Cleveland	9.7
18. Milwaukee	18.64	18. Newark	9.5
19. Tampa	17.33	19. Fort Lauderdale	9.4
20. Boston	17.07	20. Tampa	8.8
21. Columbus	15.73	21. Milwaukee	8.5
22. Fort Lauderdale	15.43	22. Columbus	8.2
23. Cincinnati	12.09	23. San Diego	7.8
24. San Diego	11.01	24. San Francisco	7.0
25. Norfolk-Newport News	10.81	25. Indianapolis	6.4
26. San Francisco	9.72	26. Cincinnati	5.6
27. Indianapolis	8.47	27. Boston	4.6
28. Pittsburgh	8.24	28. Pittsburgh	3.2
29. Nassau-Suffolk	2.68	29. Nassau-Suffolk	2.7

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DRUGS AND VIOLENCE

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I became interested in drugs/violence relationships while doing research in East Harlem in the late 1970s. On this project, over 200 subjects reported to our field sites for 5 consecutive days, then for 4 weeks. A total of 33 days of data was gathered for each subject. Our focus was on economic behavior; where subjects' money came from, and how the money was spent. How much came from crime? What kinds of crime? How much went to drugs? What kinds of drugs? Results were published in the book *Taking Care of Business: The Economics of Crime by Heroin Users*, (Johnson, et al, 1985).

The focus of this research was not on violence, but violence was an ever-present reality. Interviewees frequently arrived at the field station bloody and bandaged from wounds. A number of interviewees failed to complete the study because they had been severely injured or killed. A staff member was robbed at gunpoint in one of our field sites.

Most of the violence that we observed was connected to the drug business. For example, a young man (code name "Top") kept running afoul of drug dealers that he worked for. His transgressions usually involved what was known on the streets as "messing up the money." Top would be given drugs to sell by a dealer, and would be expected to return after his workday with a specific sum of money and/or any unsold drugs. All too frequently, Top would return with insufficient money. Or he would not return at all. On one occasion, Top was severely beaten and thrown into the East River. Another time he was stripped naked, a tube was inserted in his rectum, and raw alcohol was pumped into him.

Top was a frequent victim of violence. He generally brought this victimization upon himself. His own drug use had gotten out of control, and he was constantly bilking people whom he knew would be willing and able to hurt him. Top lacked the capacity to defend himself, and usually tried to talk his way out of threatening situations with outlandish stories that nobody believed. His only effective defense, which he employed on several occasions, was to become a police informant so that the police would arrest the person who was after him.

The continuous pattern of violence in Top's life was hardly unique. Another of our research subjects was a male in his mid-thirties (code name "Modigliani"). Modigliani was tall and lean, with angular features. He had an amiable disposition, and was quite articulate and candid about his behavior. Both Modigliani and his wife were in our study sample. They would always arrive for their interviews together, and frequently brought their young son with them. The boy was about ten years old. He seemed hyperactive, and would annoy everybody in the field station. On one occasion he was running about with a pencil in his mouth. Staff members were concerned that the boy might fall and hurt himself. When they told him to stop running and to take the pencil out of his mouth, the boy grinned and grasped the pencil as if it were a hypodermic needle. He then mimicked giving himself a "shot" in the arm.

Modigliani was a "lieutenant" in a drug dealing operation. This role combines the functions of a middle manager and a foreman. Basically, a lieutenant is a middle man between the "big dealer" and the street pushers. He recruits the street pushers and is responsible for keeping them in line. He receives the drugs from the big dealer, distributes the drugs to the pushers, collects the money from the pushers after they have sold the drugs, and returns the money to the big dealer. The street pushers seldom know who the big dealer is, or where he lives. Most importantly, they are not supposed to know where drugs may be stored, or money kept.

One day Modigliani arrived at the field station looking pale and shaken. We asked him what was wrong. He told us the following story. He had been rather lax in overseeing his street pushers. A number of them were "messing up the money." The big dealer (in this case the "big dealer" was actually three brothers) had become increasingly annoyed at the loss of money. They had warned Modigliani on several occasions, but he had not resolved the situation. This particular morning the three brothers picked up Modigliani in their car, and drove around until they found the most egregious offender among the pushers. The three brothers jumped out of the car and beat the pusher with metal pipes until he was unconscious. Then they positioned his body so that the torso was on the sidewalk and the legs were in the street. They got back in the car and drove the vehicle over his legs. They told Modigliani afterwards that the same punishment would be meted out to him if he did not perform his duties properly.

A short time after the completion of our East Harlem study, Modigliani was killed. He had been sitting on an apartment house stoop with some of his buddies. It was a warm summer afternoon. They were drinking cheap wine. A teenaged boy walked by carrying a large radio that was blasting out the music of the day. Modigliani, perhaps emboldened by the spirits that he had been consuming, decided to take the radio away from the boy. He left the stoop and confronted the boy in the street. The boy refused to give up his radio. A struggle ensued. The boy pulled a knife and stabbed Modigliani. He bled to death in the street.

The tragedy and senselessness of Modigliani's death was compounded for all of us because of our acquaintance with his wife and son. Modigliani's son certainly was growing up in a difficult situation. He had been born to poor parents who lived in a violent, ghettoized area of New York City. His parents were both convicted criminals and heroin users. The previously described event where the boy had pretended that a pencil was a hypodermic needle suggested that his parents had injected drugs in his presence. And now his father had died violently in the gutter.

Another child that we encountered on the East Harlem study was Jose. Jose was an adorable and charming little hustler. He was about five years old when we first made his acquaintance. He lived above one of our field stations. We got to know him quite well the first summer that we were on his block. He and his friends would cool off by playing in his bath tub. They would let the water overflow until it was gushing through our ceiling. Somehow, in the process of our going upstairs to complain, Jose became a "member" of our research team.

He would come down to our field station and offer to sweep up for a quarter. He would be waiting most mornings when I drove up and he would offer to guard my car for a quarter. When I left in the evening, little Jose would be waiting with tales of the "bad men" who had tried to steal the car during the day, and how he had fought with them and made them run away.

Jose would act out these stories, doing a little dance in which he would show off his fearsome karate moves. Of course, Jose would receive another quarter for his valiant efforts.

We knew Jose for about two years. He begged for, and received, rides in the car that he had so bravely defended from the "bad men." We frequently chatted about many things. I had a daughter about the same age as Jose. Jose was very interested in hearing stories about her. He would occasionally send her a little present, for example, a tiny plastic cat.

Jose was a sensitive and communicative child. Yet, his conversations were filled with images of violence. When asked how things were going, he would inevitably reply with a tale of violence. He would tell us about the gunshots on the street the night before. He would tell us about the husband who had beaten his wife. He would tell us about the man who had jumped or been pushed from a rooftop and had been impaled on a fence. All of these stories were told with graphic detail. Were any of the stories true? Perhaps some of them were. What was clear, however, was that much of Jose's ideation concerned violence. His knowledge of the sorts of violence that adults inflict on one another seemed far in excess of what should be known by such a little boy. His presentation of this knowledge, though rich in gory detail, was usually delivered in a matter-of-fact tone that implied that he "knew" that this was the way things were in the world.

Jose is now in his late teens. Modigliani's son is now about twenty years old. What sort of young men have they become? Are they currently enmeshed in a life of violence? Are they still alive today? What has become of Top? These questions, and the stories and experiences that precipitated them, are drawn from personal contacts with just a small number of individuals. However, they are illustrative of a much larger social problem. The phenomenon of violence has profound public health and criminological significance. The relationships between drugs and violence has especially profound implications for community safety.

In the early 1980s, I began examining existing data sources for information and insights on the drugs/violence nexus. I was surprised at how few theories and data there were (Figure 1). Certainly, there were no comparable data that allowed the assessment of trends over time and between localities. Some locations relied solely on Medical Examiner data for indication of drug-related homicides. Such data, of course, only reveal the presence of drugs in a homicide victim. Yet, a homicide could be drug related because of drug use by the perpetrator or due to the circumstances of the homicide event. Other localities called a homicide drug related only if drugs were found at the scene of the homicide. Some police departments relied on the location of the homicide. If the homicide took place in an area known for heavy drug use and trafficking, the police considered the event to be drug related.

No national data bases in the criminal justice or the health care systems routinely specified the relationship between drugs and violence. There were no standardized definitions or indicators of drug related violence. Because of these problems, I created my own definition of drug related violence. This definition took the form of a tripartite conceptual framework (Figure 2).

Figure 1

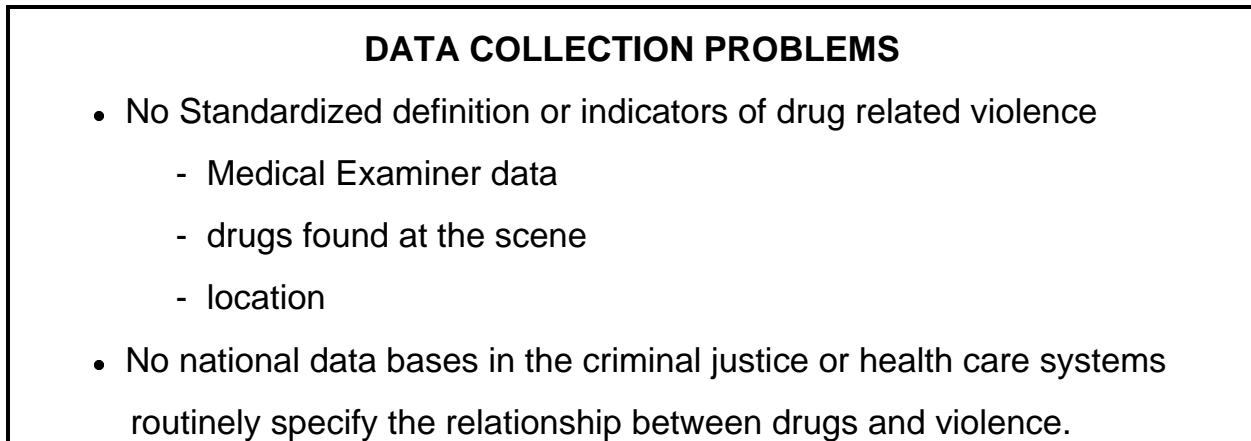
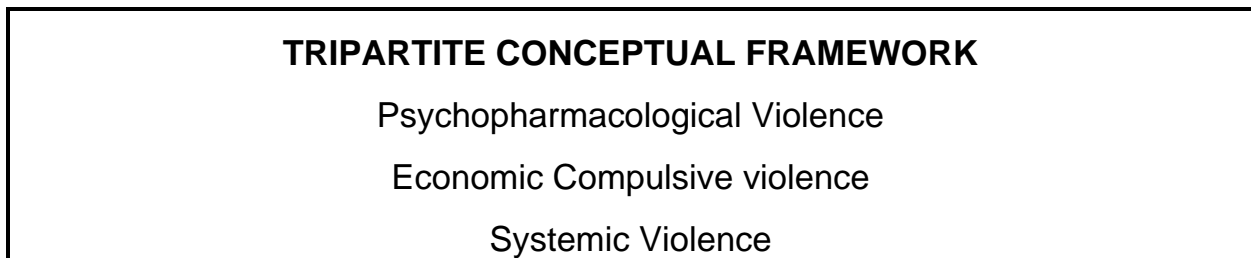


Figure 2



The psychopharmacological model suggests that some persons, as a result of ingesting specific substances, may become excitable and/or irrational, and may act out in a violent fashion. Psychopharmacological violence may also result from the irritability associated with withdrawal syndromes from addictive substances. Psychopharmacological violence may involve substance use by either victims or perpetrators of violent events. In other words, substance use may contribute to a person behaving violently, or it may alter a person's behavior in such a manner as to bring about that person's violent victimization. Finally, some persons may ingest substances purposefully in order to reduce nervousness or boost courage and thereby facilitate the commission of previously intended violent crimes.

The economic compulsive model suggests that some persons feel compelled to engage in economic crimes in order to finance costly drug use. Sometimes these economic crimes are inherently violent, as in the case of robbery, and sometimes the violence results from an unintended or extraneous factor in the social context in which the economic crime is perpetrated. Such factors include the perpetrator's nervousness, the victim's reaction, the presence or absence of weapons carried by either victim or perpetrator, the intercession of bystanders, and so on.

The systemic model refers to the normally aggressive patterns of interaction within the systems of drug use and distribution. Most systemic violence arises from the conditions of doing business in a black market. Examples of systemic violence include territorial disputes between rival dealers, assaults and homicides committed within particular drug dealing operations in order to enforce normative codes, robberies of drug dealers, elimination of informers, punishment for selling adulterated or bogus drugs, assaults to collect drug related debts. Systemic violence may occur between users, as in cases of disputes over drugs or drug paraphernalia.

So, having formulated this definition, I designed a series of studies to validate it, and to elaborate on it. The first study was called DRIVE (Drug Related Involvement in Violent Episodes) (Figure 3). We set up a research field site in an area known for its high levels of drug activity. Research subjects received eight weekly interviews. A total of 56 days of data were gathered on each subject. Our primary focus was on patterns of drug use and sale, patterns of criminality, and involvement in violence, either as a perpetrator or a victim. Our field site became a hang-out for drug users. We also went with research subjects to their homes, to shelters for the homeless, to shooting galleries, and to other places where they congregated to use or to sell drugs.

Figure 3

DRUG RELATED INVOLVEMENT IN VIOLENT EPISODES (DRIVE)	
Date:	1984-1985
Location:	Lower east side of Manhattan
Sample:	152 male drug users and distributors
Method:	Ethnography, weekly interviewing

Women came to our field site and were annoyed that the study was restricted to men. We were becoming interested in aspects of the drugs/violence nexus that might be unique to women. So, we designed FEMDRIVE (Figure 4). Our research methods and research foci were the same on FEMDRIVE as in DRIVE. Both studies were designed to validate and to elaborate on the tripartite conceptual framework. Both DRIVE and FEMDRIVE were funded by the National Institute on Drug Abuse.

While engaged on the FEMDRIVE project, I decided to take a closer look at drug relationships in homicide. The first project in this regard was called DRUG RELATED CRIME ANALYSES - HOMICIDE (Figure 5). Homicide was chosen as the focus of this analysis because homicide is a relatively rare event and, hence, there was a manageable number of cases for us to examine. Also, homicide has relatively high clearance rates and police tend to have high levels of knowledge about what happened. However, we found that there was little information in police records pertaining to the drug relatedness of homicides. The police just did not record

much information about potential drug relationships. As a result of this lack of data, we designed another study (Figure 6).

Figure 4

FEMALE DRUG RELATED INVOLVEMENT IN VIOLENT EPISODES (FEMDRIVE)	
Date:	1985-1986
Location:	Lower east side of Manhattan
Sample:	133 Female drug users and distributors
Method:	Ethnography, weekly interviewing

Figure 5

DRUG RELATED CRIME ANALYSES - HOMICIDE 1 (DRCA-H1)	
Date:	1986
Location:	Police Departments throughout new York State
Sample:	All 1984 homicides (N=1,768) 309 non-New York City 1,459 in New York City
Method:	Retrospective records analysis

On DRCA-H2, we designed a data collection instrument. We trained New York City Police Department (NYPD) homicide squad commanders in its use. This instrument was included in detectives' case folders in all participating precincts. The detectives recorded information pertaining to drug relatedness that would not have been recorded normally. We received excellent cooperation from the New York City Police Department. Our basic aim here was to demonstrate that high quality data on the drug relatedness of homicide could be collected during active police investigations. Both the DRCA-H1 and DRCA-H2 projects were funded by the National Institute of Justice.

Figure 6

DRUG RELATED CRIME ANALYSES - HOMICIDE 2 (DRCA-H2)	
Date:	March 1, 1988 - October 31, 1988
Location:	New York City (23% of police precincts)
Sample:	414 homicide events (23% of police precincts)
Method:	Prospective case analysis

Data are now available from these four studies that enable us to examine the nature and scope of drug related violence, and to compare homicidal violence to other forms of violence (Figure 7). The numbers written under the columns in Figure 7 refer to the number of violent events being analyzed. Insufficient 1984 data were available from the NYPD to be included in the table, so the findings reported for DRCA-H1 include all homicides that occurred in New York State (n=309), but not in New York City, that year.

Please note the relative consistency of findings across the various studies. The proportions of violence that were drug related ranged from 39% (FEMDRIVE) to 53% (DRCA-H2). Conversely, please note the relatively high proportions of violence not related to drugs (43% in DRIVE and 60% in FEMDRIVE) in which our street sample of drug users and dealers participated.

Figure 8 breaks down the totality of drug related violence in each of the 4 studies into the categories of the tripartite conceptual framework. Surprisingly, there were a very small number of economic compulsive events in all studies. There were roughly similar proportions of psychopharmacological and systemic violence in both the male and female street studies. Psychopharmacological homicides predominated in the DRCA-H1 study. However, the vast majority of drug related homicides in the DRCA-H2 study were systemic, ie, related to the drug business.

Figure 7

DRUG RELATEDNESS OF VIOLENCE - FOUR STUDIES

Drug Relatedness of Violence (in percent)

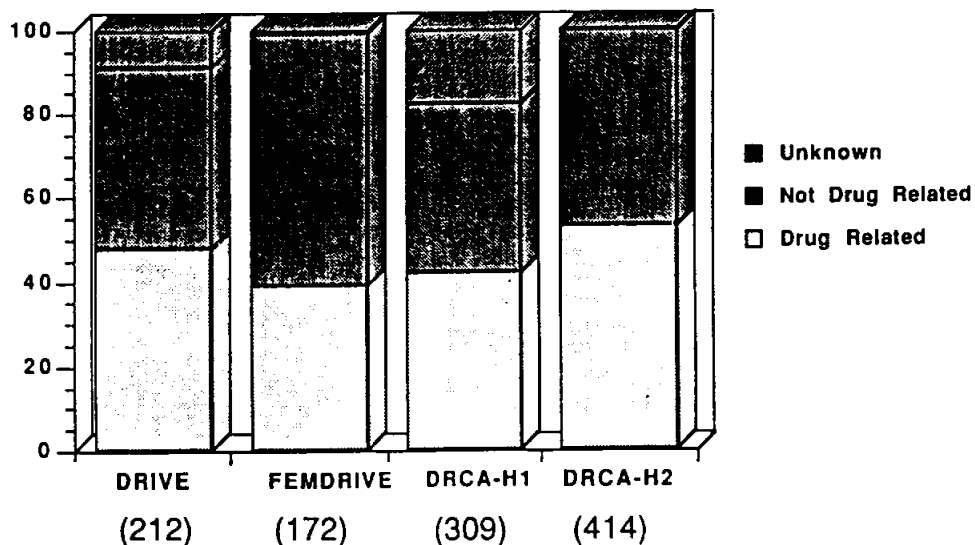
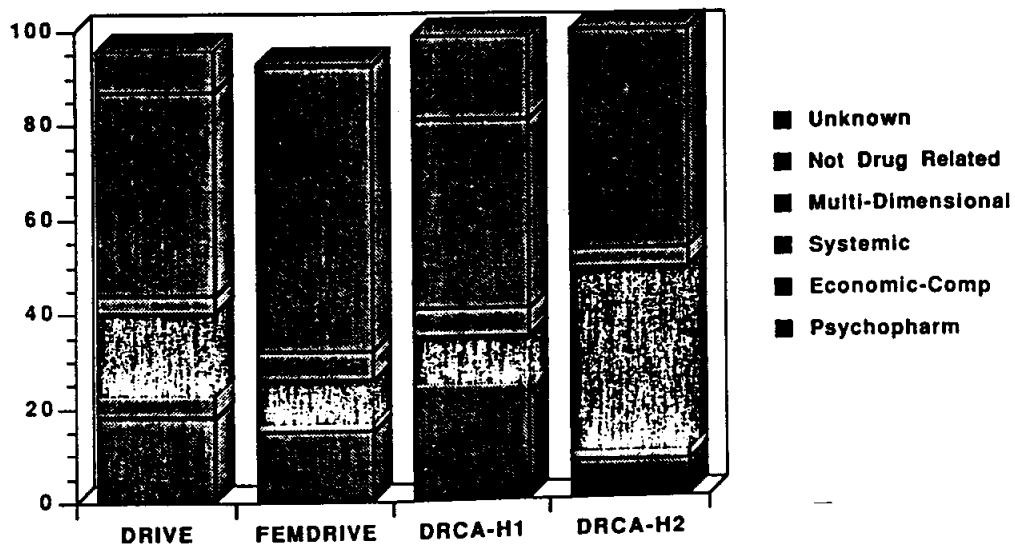


Figure 8

TYPE OF DRUG-RELATED VIOLENCE - FOUR STUDIES

Types of Drugs/Violence Relationships (in percent)



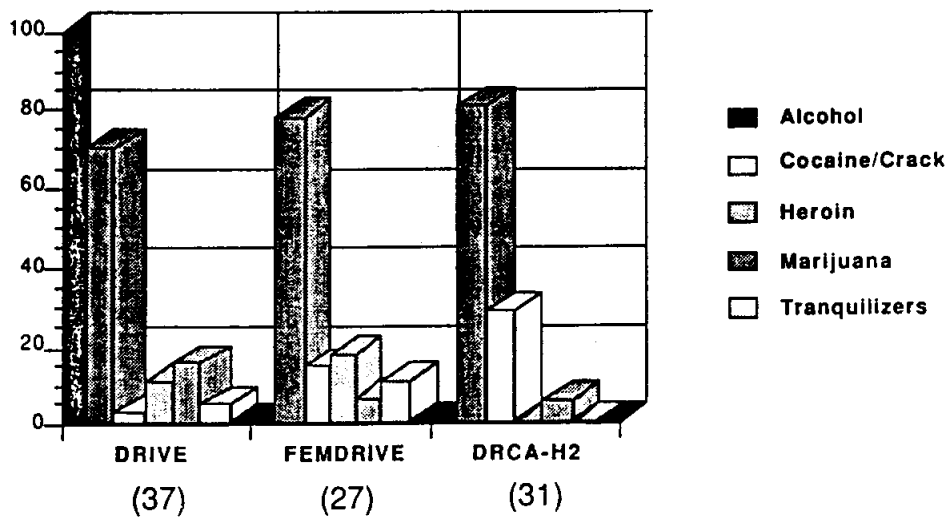
It is difficult to compare results from DRCA-H1 to results from DRCA-H2. DRCA-H1 only reports data from non - New York City police agencies, because the large number of homicides in New York City prevented us from obtaining sufficiently detailed data in a retrospective inquiry. DRCA-H2 data were all obtained within New York City. DRCA-H1 data are from 1984 homicides, which preceded the widespread availability of crack. DRCA-H2 data are from 1988 homicides, which occurred during the height of the crack "epidemic." Finally, DRCA-H2 data were collected during active police investigations where detectives were instructed to look for a wide variety of potential drug relationships to the homicide; DRCA-H1 data were gathered retrospectively from police records which were not designed to document drug relationships.

When we look just at the category of psychopharmacological violence, alcohol is clearly the major contributor (Figure 9). More than 70 percent of the psychopharmacological violent events in the DRIVE, FEMDRIVE, and DRCA-H2 studies were related to the use of alcohol. DRCA-H1 data do not appear, because police records were frequently inadequate to enable us to identify the specific drug relevant to the homicide.

Figure 9

CATEGORY OF PSYCHOPHARMACOLOGICAL VIOLENCE - THREE STUDIES

Primary Drugs Related to Psychopharmacological Violence (in percent)



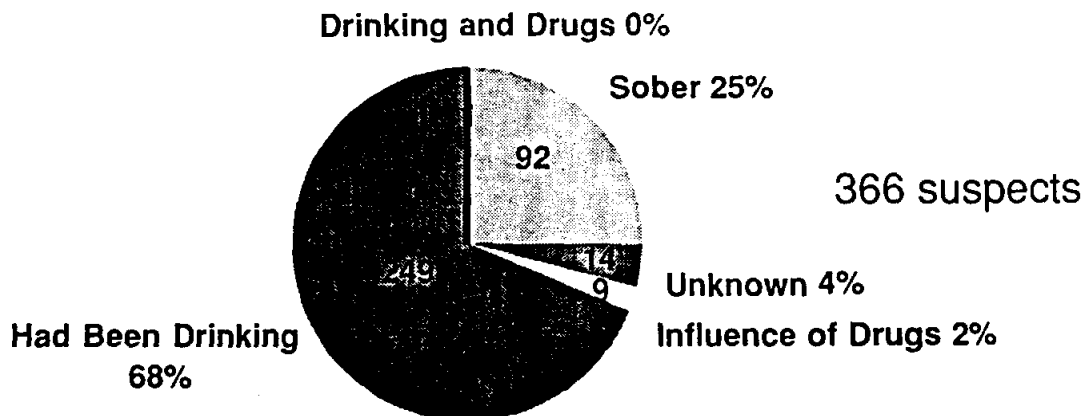
Crack first began to appear in New York City in late 1984. DRIVE data were collected before crack had become commonly used, FEMDRIVE data were collected during the early years of the crack “epidemic.” DRCA-H2 data were collected during a peak year of crack use. However, while 29 percent of the DRCA-H2 psychopharmacological homicides included the use of cocaine, mainly crack, in about one-half of those cases the cocaine had been used in combination with alcohol.

Some additional empirical support for the primary role of alcohol in psychopharmacological violence is provided by the Honolulu Police Department (Figure 10). In 1988, they did an internal study of the sobriety of assailants in assaults on police officers. They found that 68 percent had been drinking alcohol; 25% were not under the influence of any substances. Only 2 percent were under the influence of drugs.

Figure 10

ALCOHOL AND ASSAULT: HONOLULU

**Sobriety of Assailants in Assaults on Police Officers
January - September 1988**



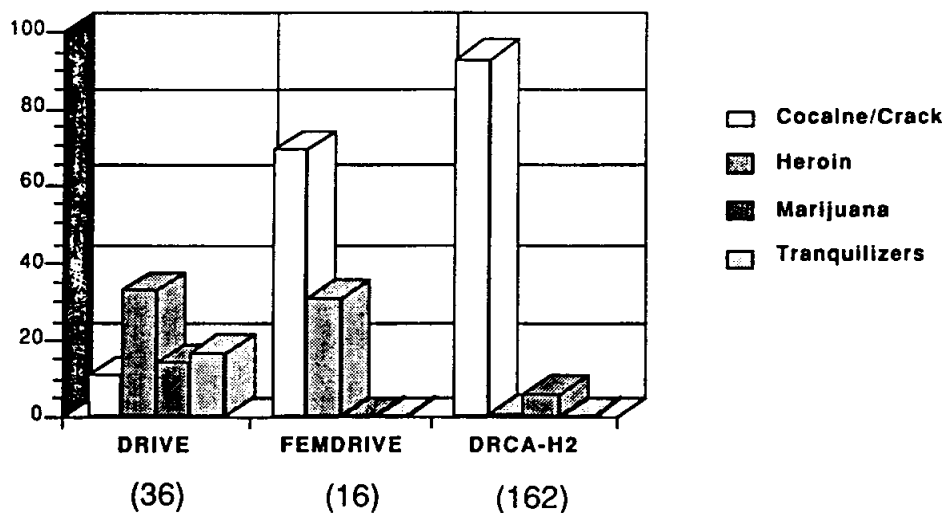
Source: Honolulu Police Department, Research & Development

The picture is rather different when we look at systemic violence (Figure 11). In the DRIVE study, where data were collected prior to widespread availability of crack, heroin trafficking was the major contributor to systemic violence. Substantial amounts of violence were also connected to the illicit distribution of tranquilizers, marijuana and cocaine. In the FEMDRIVE study, 69 percent of the systemic violent events involved cocaine. This is a reflection of increased trafficking in crack that occurred during the FEMDRIVE study period, and the fact that many of the FEMDRIVE research subjects were prostitutes and cocaine was a preferred drug among prostitutes. DRCA-H2 data indicate that the overwhelming majority of systemic homicides, fully 93 percent, were related to trafficking in cocaine. About 65 percent of these cocaine-related systemic homicides involved crack distribution.

Figure 11

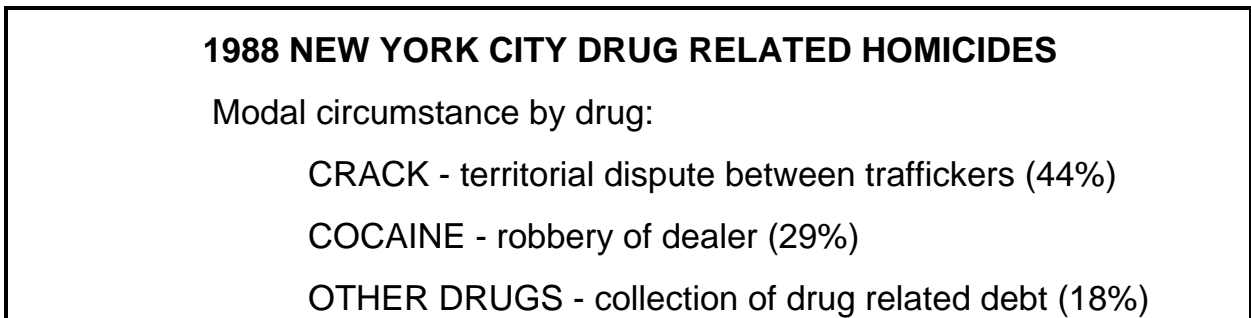
SYSTEMIC VIOLENCE - THREE STUDIES

Primary Drugs Related to Systemic Violence (in percent)



The large number of systemic homicides reported in DRCA-H2 are related to the spread of crack use and distribution. The modal crack systemic homicide involved a territorial dispute over crack distribution (Figure 12). Crack was a new drug, easy to make, that had attracted a large number of small entrepreneurs. There were many local disputes between crack distributors fighting over the right to sell crack on specific street corners, stoops, or apartment houses. There were gang disputes, frequently involving gangs organized along ethnic lines. In the precincts studied in DRCA-H2, the most frequent ethnic clashes occurred between Blacks and Dominicans.

Figure 12



There were also attempts by gangs to consolidate turf and bring isolated dealers under their control. One example of this phenomenon was the attempt by gangs to create a monopoly by forcing small dealers to buy only from them, and eliminating those dealers who refused. Other homicides occurred when gang members were punished for attempting to go off on their own and sell crack for their personal profit in territory claimed by the gang.

The impact on homicide rates of illicit drug black markets is easily seen in Figure 13, which shows trends in the homicide rates per 100,000 population for both New York City (solid line) and the United States (dotted line) over the last two decades. The peaks and valleys on this chart should actually be more pronounced, but are somewhat compressed and flattened in order to fit in the figure.

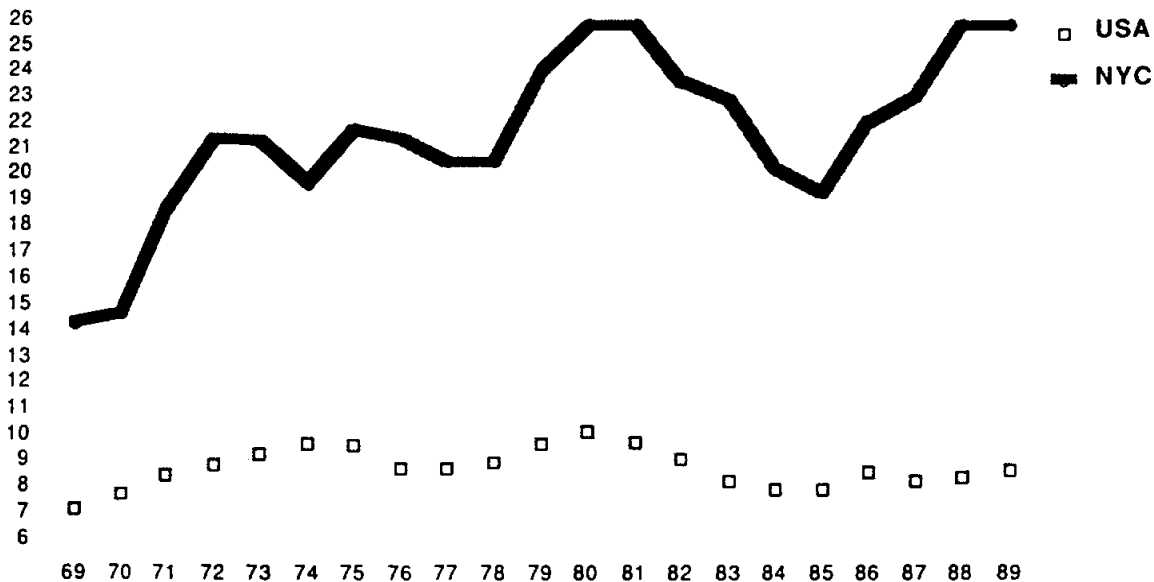
A substantial peak in the homicide rates occurred during the years 1979-1981. These were the years of the first cocaine wars. The illicit market being fought over involved powdered cocaine. The principal conflict was between Colombian and Cuban syndicates. The murder capital of the United States was then Miami, Florida. The television show, MIAMI VICE, emerged from this context. The Colombians emerged victorious in these wars. The homicide rate then declined in the mid-1980s.

In the late 1980s, the homicide rate began to climb once again. This was the time of the second cocaine wars; the crack wars. Major combatants included Blacks, Jamaicans, and Dominicans among others. Washington, DC and New York City became murder capitals.

Figure 13

TRENDS IN HOMICIDE RATES

Homicide Rates per 100,000 Population: USA and NYC 1969-1989



If I had been able to fit a longer historical time line on this chart, you would be able to see that there was a steady rise in the homicide rate through World War I, and then an even steeper rise when the 18th Amendment to the US Constitution prohibited the production, distribution, and sale of alcoholic beverages. That rise peaked in 1933, the year in which the prohibition amendment was repealed. The television show, THE UNTOUCHABLES, emerged from this context. The 1933 peak produced a similar rate to those produced during the cocaine wars. After 1933 the homicide rate fell steadily, experienced a brief rise during and after World War II, fell steadily again until the late 1960s where this chart begins.

Clearly, stereotypes of “crazed dope fiends,” or honest citizens being assaulted and killed by robbers in need of money to buy drugs, are inadequate explanations for the rising homicide rate and its apparent relationship to drugs.

We now seem to be in a mature phase of the crack market. National & local surveys indicate that the numbers of persons using crack has at least reached a plateau, and is probably declining. The plateau in crack use began about 1988, though there are regional variations. Yet, the violence has continued unabated. Why?

I believe that crack-related violence has remained high for two reasons. One is related to the economics of the crack distribution system. The other is related to our societal response to crack distribution.

With regard to the economics of distribution, in the earliest stages of the crack market, there was a steadily increasing number of new users providing sufficient business for all distributors. Rates of violence were relatively low. As the market matured, and the number of users began to stabilize, there was increased competition among distributors for "market share." Organized gangs attempted to consolidate their territory. This unregulated competition continues to drive our homicide rate.

With regard to societal response, I believe that intensified law enforcement efforts, such as street sweeps and neighborhood saturation, has led to increased violence. Removing dealers from their established territory by arresting them creates a vacuum that other dealers may fight to fill. By the time those hostilities have ended, the original dealer may have returned from prison and attempted to reassert his authority over the area. A new wave of violence ensues. Scaring or pressuring dealers to move from their established territory usually leads to their moving into another dealer's territory, with likely violent outcomes.

In conclusion, I want to emphasize the need for producing data that will enable us to better understand the relationships between drugs and violence. Different drugs are related to different crimes in different ways. My presentation today, which focused primarily on homicide, showed that alcohol and cocaine were related to homicide in different ways. The alcohol relationship was primarily psychopharmacological; the cocaine relationship was primarily systemic. Economic phases of the distribution system, and societal response, may substantially effect the drugs/violence nexus.

We must achieve a consensus regarding definitions of key variables. We cannot reliably compare drug-related violence in different cities if the various locations are using different definitions of drug-related violence, and different empirical indicators. There is much work to be done before we can fully utilize social data to increase our understanding of social problems, and to develop ameliorative strategies. Data collected in the criminal justice system must be better linked to data collected in the health care system. Special surveys, and perhaps most importantly, qualitative studies, must be undertaken in order to provide the clearest and most useful information about the relationship between drugs and violence in American society.

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THE DANGER ASSESSMENT INSTRUMENT: RISK FACTORS OF HOMICIDE OF AND BY BATTERED WOMEN¹

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Homicide is the leading cause of death in the United States for young African-American women, aged 15-34 (Farley, 1986). The rate of homicide per 100,000 for these young women was 20.0 in 1987, as compared with the overall rate of 8.5 per 100,000 for the entire US population (DHHS, 1990). This rate is only exceeded by African-American (90.5 per 100,000) and Hispanic (53.1 per 100,000) males in the same age group (15-34 years). The homicide rate for African-American women of all ages is higher than that of European-American men (11.3 per 100,000 versus 8.4 per 100,000), while the rate for European-American women is 2.8 per 100,000. These rates translate to an average of 2,746 European-American and 1,761 African-American women killed each year (Farley, 1986). Other female causes of death have been reduced since 1940, but death by homicide has increased for both European-American and African-American women.

Homicides involving women have different dynamics from those more often studied, between two males (Block, 1985; Daly & Wilson, 1988; Mercy & Saltzman, 1989). Ninety per cent of women murdered are killed by men, men who are most often a family member, spouse or ex-partner (Campbell, 1992; Wilbanks, 1986). Approximately 70 percent of murdered women are killed by a husband, lover, or estranged same. Approximately two thirds of those murdered by intimate partners or ex-partners have been physically abused before they were killed (Campbell, 1981, 1992; Wallace, 1986). Homicide of a female partner or ex-partner followed by suicide is another form of homicide of women wherein a history of female battering is the most usual pattern (Humphrey, Hudson, & Cosgrove, 1981; Wallace, 1986).

Similarly, when women kill, they usually kill a family member. They most often kill husbands, ex-husbands and lovers and again, there is a documented history of wife assault. Women are far more likely than men to kill during an incident when the victim was the first to commit a violent act, commonly termed "victim precipitation" in homicide research (Campbell, 1992; Daly & Wilson, 1988; Jurik & Winn, 1990; Mann, 1990).

NEED FOR PREDICTION

From these data it is clear that one of the major ways to decrease spousal homicide is to identify and intervene with battered women at risk for homicide. Recent research has

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demonstrated that the majority of battered women eventually leave their abuser (Campbell, in press; Okun, 1986). However, the trajectory of abuse is generally an increase in severity and frequency over time (Straus & Gelles, 1990) that may culminate in a homicide if the woman does not leave or the man does not receive either treatment or incarceration for violence. In addition, women are often highly at risk for homicide after they have left the abuser or when they make it clear to them that they are leaving for good (Daly & Wilson, 1988; Hart, 1988).

From in depth interviews with battered women, it is clear that the majority of battered women carefully weigh the pluses and minuses of the overall relationship, both in terms of their safety and well being and that of their children (Campbell, in press). However, most have not realistically appraised the potential for homicide. Even though many have thought about it, at least in passing, they may find it too frightening to dwell upon. The possibility of reading in the paper that an abused woman seen in a research or therapeutic interaction has been killed is a constant concern to researchers, advocates and professionals. Advocates in wife abuse shelters are extremely concerned about women leaving the shelter without knowing how dangerous their situation might be. Thus, clinicians who work with abused women need to make sure women realize the potential of homicide in their situation and give them a way to realistically assess their risk of homicide. This is both an ethical and legal imperative as well as an aide to sleeping well at night (Hart, 1988). There have been a series of court decisions over the past 20 years holding clinicians negligent for not adequately predicting dangerousness and subsequently warning and/or protecting clients as potential victims (Hart, 1988). The most significant of those cases, the famous Tarasoff decision in 1976, involved the killing of a girlfriend or wife by her partner.

For health care professionals, there is some similarity to the risks of cancer given to smokers so that they can make their own decisions about actions to be taken. There are also some analogies to the appraisal done for risk of suicide by physical and mental health care professionals wherein a clinical assessment is done and if the risk considered great, action is taken to ensure the person's safety. This type of unilateral professional action might come into play for an abused woman when her emotional trauma is so great that the professional feels she is unable to make reasonable decisions about her own safety. Yet the clinicians' "duty to warn" battered women about their risk of homicide, even though primarily a clinical issue, can be better informed by statistical prediction of dangerousness than purely clinical suggestions.

The background on homicide of or by abused women presented above establishes the need for prediction attempts. There are clinically based lists of warning signs for homicide in battering situations, based on research and clinical experience, but none have been subjected to psychometric testing. The purpose of this paper is the presentation of the Danger Assessment instrument for prediction of homicide in battering relationships and the research conducted on this instrument to date. Although predictive validity of the Danger Assessment has not been established, it is the only such instrument with any published psychometric evaluation (Campbell, 1986; Stuart & Campbell, 1989).

Prediction Research

Clinical prediction has been relied upon in most instances to determine the risk of violence in battering situations. Clinical prediction is based on the training and assessment of the professional involved. This judgment also involves the implicit assumptions and prejudices of the

clinician (Miller & Morris, 1988) and has a poor track record in accurate prediction of violence in general, although its accuracy for battering homicide specifically has not been evaluated. Psychological testing that has been used in the patient's clinical assessment may improve the accuracy of clinical prediction. It also may be based on reading or workshops that the clinician has attended on wife abuse. Some of that material contains lists of danger signals to watch for, signs that have been developed from a mixture of research results and clinical experience of the author or trainer. These lists can also help prediction accuracy. Statistically based prediction using psychometrically developed instruments is not completely accurate either, especially in their present state of development in the area of spousal homicide, but is more so than clinical judgments.

One of the most difficult of prediction issues using instruments (statistical prediction) is cutoff scores. Instruments can have some psychometric validity in terms of construct validity without a good basis for determining scores that will accurately predict the occurrence of a homicide. Clinical advice given on matters of life and death would probably involve drastic measures on the part of the client, and the clinician needs to be sure of the accuracy of any cutoff score. Only predictive validity testing (studies that determine the accuracy of the instrument in predicting actual homicide) gives a cutoff score the kind of support necessary to either give clients definitive advice about avoiding a homicide or to advise the courts on the numerical probability of an abusive or abused partner committing homicide. At the time of writing this paper, there are no instruments predicting homicide in abusive relationships for which predictive validity information has been published. Therefore the use of cutoff scores is premature.

Prediction of homicide is especially difficult because homicide is even more rare than other forms of violence. Obviously spousal homicide is even more rare and therefore even more difficult to predict. Huge sample sizes are necessary to do the future predictive validity studies necessary to detect an instrument's actual ability to predict homicide between spouses. Since battering is the most frequent relationship precursor of spousal homicide, it makes sense to design a predictive instrument around characteristics related to abuse. Yet this makes the number of occurrences, homicides in abusive relationships, even smaller. Thus, research to establish future predictive validity would be enormously expensive and time consuming.

It would be important in any prediction of intimate relationship homicide study to include men and women who are dating and cohabiting and especially important in terms of abusive relationships, to include ex-spouses and ex-cohabitators. Yet any such effort would be hampered by the well known inaccuracies of national homicide files in terms of relationship category (Campbell, 1992; Wilson, 1991). The picture is further confounded because whether or not a serious assault becomes a homicide may be determined by the speed and/or quality of emergency response rather than the relationship, perpetrator and victim characteristics that can be measured and used for prediction. Finally, careful prediction validity assessment would be necessary in order to determine how various risk factors should be weighted. Common sense dictates that certain factors would be more predictive of homicide than others. Yet without a statistical evaluation, designation of which risk factors should be taken more seriously than others is also premature.

PUBLISHED LISTS OF DANGER SIGNS

Sonkin, Martin and Walker (1985) listed weapons in the home, use of weapons in prior abusive incidents, threats with weapons, threats to kill, and serious (life-threatening) injury in prior abusive incidents under the homicide risk category in their batterer's assessment of lethality factors list (pp. 80-83). There are also 13 other lethality factor categories listed: suicide risk, frequency/cycle of violence, history of violence, substance use/abuse, assaults on other family members, previous criminal history/activity, violence outside the home, isolation, proximity of victim and offender, attitudes toward violence, life stresses, general mental functioning, physical health, and therapist's evaluation. Each of the 13 categories is explained with further assessment probes rather than as definitive risk factors. These authors recommend a therapeutic goal of lessening the risk of homicide or serious injury before addressing in-depth issues in treatment of abusers.

In Hart's (1988) treatise on the need to protect as well as warn battered women of potentially homicidal abusers, she also gives a list of factors to "be considered when assessing lethality" (p. 241). These are: threats of homicide or suicide, fantasies of homicide or suicide, presence of weapons, obsessiveness about partner, centrality of battered woman (batterer is isolated from other support systems), rage, depression, drug or alcohol consumption, and access to the battered woman. Hart suggests that the first two factors are primary and the rest less important.

Straus (1991) based his list of "criteria for identifying life threatening risk (LTR) among violent men" from the 1985 National Family Violence Survey. These criteria were associated with severe violence as measured on the Conflict Tactics Scale (CTS), and thus can be considered an instrument with concurrent construct validity support from one sample (although nationally representative) (Straus & Gelles, 1990). As well as three or more instances of violence in the previous year, Straus stated that life threatening risk from a male abuser would be indicated by three or more of the following: he initiated two most recent instances of violence, wife needed medical treatment from abuse, police were involved in an incident in the previous 12 months, he was drunk more than three times a year, abused drugs in the past year, threatened to kill, threatened partner with a weapon in hand, owns a gun and threatens to use it, extreme male dominance or attempts to achieve such dominance, physical abuse of a child, thinks there are some situations when it is ok for a man to hit his wife, physically forced sex, extensive destruction of property, threats or actual killing or injuring a pet, history of psychological problems, assault of a non-family person or other violent crime, severe violence between parents, and verbally aggressive to partner (CTS verbal aggression score of 40+).

Thus, the prediction risk factor lists reviewed thus far concentrate on risk factors for male batterers killing their female partners. Although it happens slightly less often, abused women also kill their partners. Angela Browne's (1987) list of factors that differentiated the battered women in her sample that killed their abusers from those who did not kill is often presented as a risk factor list. Although this list was developed from a concurrent predictive validity (ability to differentiate between groups) type study, it has not yet been substantiated in subsequent research with independent samples, nor has there been reliability or other forms of validity assessed. The factors on this list are: frequency of violent incidents, severity of injuries, man's threats to kill, woman's threats of suicide, man's drug use, man's frequency of intoxication, and forced sexual acts.

DANGER ASSESSMENT INSTRUMENT

The Danger Assessment (DA) instrument, presented in Figure 1, is considered to be a form of statistical prediction as contrasted with clinical prediction, because it is based upon prior research and has some preliminary evidence of reliability and validity. However, I consider the instrument to be most useful in clinical settings, as a way to make clinical prediction more accurate. The items on the Danger Assessment have been established only as correlates not directly causative factors, of homicide.

INITIAL DEVELOPMENT OF THE DANGER ASSESSMENT

The initial items on the instrument were developed from four retrospective research studies establishing risk factors in cases where battered women were killed or seriously injured by their abusers or where battered women killed or seriously injured their abuser (Berk, Berk, Loseke & Rama, 1983; Browne, 1988; Campbell, 1981, 1992; Fagan, Stewart & Hansen, 1983). The instrument initially consisted of fifteen yes/no items including 3 demographic risk factors, age, minority ethnic status and poverty. The initial instrument development study was conducted with 79 abused women from the community recruited by newspaper advertisement and bulletin board postings in two geographically and demographically distinct cities. Approximately 20 percent of the sample were from wife abuse shelters, 45.6 percent of the sample were women of color, the mean educational level was 13.2 years of education, 38 percent had a total family income below poverty level, and the mean age was 30.5. Scores on the instrument ranged from 1-14 with a mean of 6.3 (Campbell, 1986).

There is some controversy in the literature as to whether internal consistency reliability is an appropriate psychometric technique to use with an instrument wherein each item is considered to be an independent risk factor. Since there is no definitive consensus in the literature on this issue, internal consistency estimations on the instrument have been conducted, keeping in mind that they will probably be low. Although the Kuder Richardson formula is recommended for instruments such as the Danger Assessment that use non-weighted dichotomous responses (Knapp, 1991), it does not increase the internal consistency of the DA much more than a hundredth of a point. Therefore, the internal consistency coefficients that are reported are Chronbach's Alpha coefficients, mainly because of the advantage of item analysis possibilities in computerized alpha coefficient programs. In the original study, the alpha was .71 (Campbell, 1986). Convergent construct validity (positive relationships with similar constructs) was supported by correlations of .55 with the weighted severity index of the Conflict Tactics Scale, .50 with severity of worst injury ever received from the abuser, and .43 with severity of violent tactic used against the woman.

As a result of the original study, the three demographic risk factors (age 15-34, poverty, minority ethnicity) were deleted, because both the internal consistency reliability and construct validity statistics of the scale were improved without them. The results also suggested that the original item combining increase in severity and frequency over the past year should be separated into two.

DANGER ASSESSMENT

Jacquelyn Campbell, PhD, RN, Copyright, 1985, 1988

Several risk factors have been associated with homicides (murder) of both batterers and battered women in research that has been conducted after the killings have taken place. We cannot predict what will happen in your case, but we would like you to be aware of the danger of homicide in situations of severe battering and for you to see how many of the risk factors apply to your situation. (The "he" in the questions refers to your husband, partner, ex-husband, ex-partner or whoever is currently physically hurting you.)

Using the calendar, please mark the approximate dates during the past year when you were beaten by your husband or partner. Write on that date how long each incident lasted in approximate hours and rate the incident according to the following scale:

1. Slapping, pushing; no injuries and/or no lasting pain
2. Punching, kicking; bruises, cuts and/or continuing pain
3. "Beating up"; severe contusions, burns, broken bones
4. Threat to use weapon; head injury, internal injury, permanent injury
5. Use of weapon; wounds from weapon

(If any of the descriptions for the higher number apply, use the higher number.)

- ____ 1. Has the physical violence increased in frequency over the past year?
- ____ 2. Has the physical violence increased in severity over the past year and/or has a weapon or threat with weapon been used?
- ____ 3. Does he ever try to choke you?
- ____ 4. Is there a gun in the house?
- ____ 5. Has he ever forced you into sex when you did not wish to do so?
- ____ 6. Does he use drugs? By drugs I mean "uppers" or amphetamines, speed, angel dust, cocaine, "crack," street drugs, heroin, or mixtures.
- ____ 7. Does he threaten to kill you **and/or** do you believe he is capable of killing you?
- ____ 8. Is he drunk every day or almost every day? (In terms of quantity of alcohol.)
- ____ 9. Does he control most of all of your daily activities? For instance, does he tell you who you can be friends with, how much money you can take with you shopping, or when you can take the car? (If he tries, but you do not let him, check here ____)
- ____ 10. Have you ever been beaten by him while you were pregnant? (If never pregnant by him, check here ____)
- ____ 11. Is he violently and constantly jealous of you? (For instance, does he say, "If I can't have you, no one can.")
- ____ 12. Have **you** ever threatened or tried to commit suicide?
- ____ 13. Has **he** ever threatened or tried to commit suicide?
- ____ 14. Is he violent toward your children?
- ____ 15. Is he violent outside of the home?

_____ TOTAL YES ANSWERS

THANK YOU. PLEASE TALK TO YOUR NURSE, ADVOCATE OR COUNSELOR ABOUT WHAT THE DANGER ASSESSMENT MEANS IN TERMS OF YOUR SITUATION.

The phenomenon of severity and frequency is assessed by presenting women with a calendar of the past year. The woman is asked to mark the approximate days when physically abusive incidents occurred, to estimate the amount of time the incident lasted and to rank the incident on the scale presented on the Danger Assessment.

SUBSEQUENT RESEARCH

Two smaller follow-up studies were conducted with the instrument. The first was a study of 30 women in a wife abuse shelter with an average age of 28.2 and educational level of 12.7 years (Stuart & Campbell, 1989). Two thirds were European-American and one third African-American. As with the original study, none of the demographic variables were significantly related to DA scores. An item was added to the study, making a total of 14, that asked about the male partner's history of suicide threats and/or attempts. This was related to prior research on murder of abused women followed by suicide (Humphrey, Hudson, & Cosgrove, 1981). Addition of the item slightly improved both the reliability and validity estimates. Chronbach's alpha was .60, hardly acceptable according to most criteria, but understandable given the small sample size. Test-retest reliability was .94. Convergent construct validity was again supported with a correlation of .48 with the severity of injury scale.

A third study of 52 battered women took place within an urban hospital in Chicago, with 19 of the woman having been identified in the Emergency Room with abuse related injuries and the other 33 in inpatient OB/GYN settings having been admitted for other causes than abuse. In this sample, scores from the Emergency Room ranged from 7-12 with a mean of 9.2 and in the inpatient units from 3-13 with a mean of 8.26. The difference between the two groups on mean scores was in the expected direction thereby providing some concurrent prediction validity support. Internal consistency reliability was .67 for the entire sample.

Part of both the shelter and hospital studies was an open ended interview section asking women their perception of danger of being killed by their partner. Women were then asked what made them feel like they were in danger or not. The majority of women perceiving a great amount of danger in both studies mentioned choking as a tactic used against them that made them feel as if their partner might kill them. This item has been added to the scale and in preliminary evaluation affects neither the reliability nor validity of the scale.

The most recent of the completed research using the instrument as presented in Figure 2 is a Centers for Disease Control funded prospective study of abuse during pregnancy (McFarlane, Parker, et. al, 1992). This sample was primarily poor and approximately evenly divided into European-American, African-American and Hispanic (mainly Mexican-American). Of 329 women who were administered the Danger Assessment, 156 were classified as abused using the Abuse Assessment Screen developed in conjunction with the Nursing Research Consortium on Violence and Abuse (Parker & McFarlane, 1991; McFarlane, et al, 1992). This operationalization of abuse uses the criteria of any incident of physical or sexual abuse within the last year. A body map and severity score is part of the Abuse Assessment Screen.

Internal reliability of the D.A. was calculated by Alpha Coefficient at .86 in this study. All of the non-abused women (N = 173) scored either a 0 or a 1 on the instrument, while only

47 of the 156 abused women scored a 0 (25) or a 1 (22), thus giving some support for concurrent predictive validity, although not for homicide *per se*. The scores of the abused women ranged from 0 to 12 on the now 15 item scale with a mean of 3.5. There was also support for convergent construct validity in this study with correlations of .75 with the Index of Spouse Abuse Physical Subscale (Hudson & McIntosh, 1981) and .49 with the severe abuse subscale of the Conflict Tactics Scale. Interestingly, in this study the European-American women scored significantly higher than the other two groups on all measures of abuse including the Danger Assessment, with the Hispanic women second highest, and the African-American women lowest. However, in terms of prevalence of abuse, 19% of both European-American and African-American women reported abuse, and 14 percent of Hispanic did so.

In conclusion, internal consistency reliability of the Danger Assessment has ranged from .60 - .86, the lower alphas probably reflecting the smaller sample sizes as well as the relatively few items, the dichotomous format and the independent risk factor nature of the items (Knapp, 1991). In terms of item analysis, deleting the first two items on increasing severity and frequency would have increased the alpha coefficient in the two smaller studies by 3 to 5 tenths of a point. In both of those studies, the calendar was not used consistently to answer those questions because of time constraints. This suggests again that the calendar is necessary for an accurate response to the first two questions. In the two studies where temporal stability was assessed, it ranged from .89 to .94. Convergent construct validity has been consistently supported in the moderately strong correlation range with several different abuse instruments. Any higher correlations would suggest redundancy with instruments designed to measure abuse not homicide potential.

The different means in the four different groups of abused women seem to accurately reflect the severity of abuse in the different populations. The lowest scores were in the prenatal sample, a totally nonclinical group that could be expected to be early in an abuse pattern because of their relative youth and perhaps being protected from the worst of the abuse because of their pregnancy. In fact, very few women in this group reported increasing severity and/or frequency of battering during the pregnancy. The highest scores were in the hospital emergency room group, a sample going to the hospital because of serious injury from the abuse. The next highest scores were from women in shelters, who are often coming to a shelter because of fear of a fatal incident.

Development of the instrument continues. It is now being used in a major longitudinal study of women's responses to abuse that will yield further reliability and construct validity information. Future type predictive validity testing needs to be conducted before any formal prediction could be done using this instrument. Two other studies have been launched to further test the Danger Assessment. The first is a post hoc predictive validity evaluation using police homicide files of women in Detroit. This effort is hampered by incomplete police information but will give important information on the items for which police data are kept. The second will estimate concurrent predictive validity in terms of the instrument's ability to correctly discriminate between battered women at high risk of homicide by other criteria (presenting at a hospital with serious injuries from abuse, or presenting to a shelter stating fear of being killed) and battered women in the community. The ideal predictive validity study would be to administer the instrument widely in a geographic locale and monitor the resultant homicides. As previously mentioned the difficulty in predicting a relatively rare event such as homicide necessitates a huge sample size in order to obtain significant results even if the

instrument predicts accurately. However, until this sort of study is done, cutoff scores, item weighting or using the instrument for formal prediction is inadvisable.

Figure 2

DANGER ASSESSMENT RESEARCH: OVERVIEW

	Study 1	Study 2	Study 3	Study 4
Sample N	79	30	52	156
Setting	80% community 20% shelter	shelter	36% ER 64% inpatient OB/GYN	prenatal
Ethnicity	46% minority	33% minority	62% minority	Black = 71 White = 46 Hispanic = 39
Reliability	alpha = .71	test-retest = .94 alpha = .60	test-retest = .89 alpha = .67	alpha = .86
Validity	construct: r: CTS = .55 r: injury = .50 r: tactic = .43	construct: r: injury = .48	none	construct: r: ISA = .75 r: CTS = .49
Chi square	6.3	8.7	9.2 ER 8.3 inpatient OB/GYN	0.3 not abused 3.5 abused Abused: Black = 2.7 White = 4.4 Hispanic = 4.1

Thus, at this point the Danger Assessment instrument has sufficient statistical support to use it in clinical settings for informal prediction. Battered women find discussing the instrument helpful in making decisions about what to do in their situation and how to monitor what is happening. Advocates and clinicians in many settings report finding the DA useful as an empowerment strategy for women and as helping them feel more comfortable in their clinical judgment. So far, the Danger Assessment remains the only instrument or list of risk factors with a program of instrument development research supporting its use, although the Straus instrument also has promise and will no doubt be developed further.

CONCLUSIONS

It is not particularly useful to scare all battered women with dire predictions of homicide, neither is it ethically or legally responsible not to warn those in particular danger of their risk. The most difficult cases, of course, are those where the degree of danger is not clearly apparent. It is also important to realize that some couples are mutually violent and will not present as the more usual battering pattern. These cases can also result in homicide (Campbell, 1992).

Should all cases where abuse or mutual violence is detected be routinely assessed for homicide risk? Does this apply to research subjects who are abused? Since abuse is such a serious risk factor for homicide between intimates, the answer to both questions is yes. Even in cases where the risk is apparently low, knowledge of risk factors for homicide can be information used later by the potential victim in decision making if the violence escalates, as it most often does. When dealing with the abused partner, she (or much less often, he) can be an active partner in determining the degree of danger and what she should do next. The clinician can present the instrument or list of danger signs to the victim and discuss how many are present and allow her to make her own decisions since there is a current absence of definitively established cutoff scores. Then the clinician or researcher and potential victim can discuss together possible actions.

As with most areas of violence, spousal homicide presents the dilemma of clinicians and researchers being caught between having both an ethical and legal mandate to do accurate prediction without an unerring means of doing so. However, we have some information about risk factors, and both the clinical and instrument lists currently in existence are remarkably similar. All clinicians and researchers working with battered women and their abusers, whether in the mental or physical health systems, the criminal justice system, or the shelter system owe their clients a discussion of homicide risk.

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USING SURVEILLANCE IN HOMICIDE AND VIOLENCE PREVENTION

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A basic precept of public health is that the success of an intervention depends, to a great extent, on its ability to address the specific cause of the problem, on focusing on the population most at risk, and on an understanding of the context in which the problems occurs. Thus, a surveillance system that will be useful in the prevention of lethal and near lethal violence requires considerably more than simply documenting the prevalence of homicide and intentional injury; it must provide detailed information to fashion and evaluate strategies for specific groups. Some important data include, at the least, characteristics of victims and perpetrators, relationship between victim and perpetrator, modality of assault, circumstances, location (from region of country to part of city), use of drugs and alcohol, motivation or apparent cause of the incident as well as the relationship between these factors. Accurate information in these areas will not only enhance the development of technically sound and cost effective interventions, but can also dispel myths and increase ownership of the problem at the community level.

TYPES OF VIOLENCE

Using an expressive-instrumental continuum, and looking at lethal violence and "sibling" or related non-lethal offenses, Carolyn and Richard Block have a system of classifying homicides (see Block & Block, 1991) that includes Expressive, Instrumental, Gang-related and Rape Homicide Syndromes. This system of classification focuses on the motivation of the offender, and as a result, is one the most useful ways of classifying violence as it suggests interventions aimed at the origins of the violence rather than the outcome. In expressive violence, which usually starts as an argument, the goal is to hurt the person; with instrumental violence, one person is attempting to get something from the other and violence is a tool for acquisition. Gang-related homicides may include elements of both expressive and instrumental violence but is motivated by gang membership. Expressive homicides can be further refined into homicides that occur between spouses, between other family members, or between strangers and those that occur as a result of child abuse. In this particular classification, drugs do not form a separate category and may be a factor in any of these syndromes, as a disinhibitor in expressive violence or as a primary motive in instrumental violence as when violence occurs over drug business or to obtain money for drug purchases.

Different interventions are suggested for each of these homicide/violence syndromes. In general, instrumental violence seems most amenable to a law enforcement intervention and gang-related violence has been addressed with "old-fashioned" community-based gang intervention

strategies (Sulton, 1987). Expressive violence, which results primarily from poorly controlled anger and hostility and is impulsive in nature, it, much more than pre-meditated instrumental violence, can be impacted by cognitive and behavioral psychoeducational and therapeutic interventions.

A major thrust in violence prevention, particularly with youth, is the development of programs that teach non-violent conflict resolution skills, obviously aimed at reducing expressive violence (see Wilson-Brewer, *et al.*, 1990). One such program focuses on changing how the individual processes information so that they seek more information about a situation (rather than assuming that the other's intent is hostile), generate more solutions and evaluate consequences (Guerra & Slaby, 1990). Another frequently cited program is the Violence Prevention Curriculum (Prothrow-Stith, 1987), a 10-week school based intervention that explores risk factors associated with violence, the role of anger and non-violent conflict resolution techniques. One of the most unique programs in this area is the Positive Adolescent Choices Training program (Hammond & Yung, 1992) aimed specifically at African-American youth. The program teaches specific conflict resolution skills through a series of videotapes that use culturally relevant material, including black actors and conflict situations similar to those that young blacks might face. These programs are often aimed at youth at risk for violence victimization and/or perpetration or those who have already proven to be "problem" youth. Unfortunately, the type of violence that these kids are most likely to be involved in is not taken into account by these broadly applied intervention strategies. And while it is possible that such general problem solving development may assist in avoiding all types of violence, we suspect that one could get better outcomes if their efforts were specifically focused on kids at risk for expressive violence incidents.

AGE ISSUES

One of the most frequently cited statistics in the study of homicide is the age of victims and perpetrators: the young are more likely to be involved in homicide than the old. While 20-29 year old males have the highest homicide rates (Fingerhut, *et al.*, 1991) in recent years youths under 21 have seen the greatest increases. For example, in Chicago, from 1986 to 1991, the number of homicide victims age 20 and younger increased by 85 percent and the number of homicide offenders in this group increased by 80 percent (Chicago Police Department, 1987, 1992). During that same period Washington, D.C. reported an eight-fold increase in the number of 18-20 year old homicide victims and an almost four-fold increase in perpetrators in this group (Office of Criminal Justice Plans and Analysis, 1992).

However, the causes of violent death of the young, and thus the interventions, vary by ethnicity. For example, Block's analysis of murder in Chicago from 1982-1989 (Block, 1993) found that homicides among Latino youths ages 15-19 were overwhelmingly gang-related, whereas among black youth in this age group homicide most frequently resulted from an argument (expressive), followed by instrumental and gang-related. Offender rates were highest for expressive, followed by instrumental and gang-related violence. Thus, gang interventions should be particularly effective with Latino youth whereas the level of expressive violence among black youth more strongly suggests the need for anger control and conflict resolution skills, in addition to gang prevention strategies and legal ways of making money. In addition, those same figures show that among Latinos in Chicago, these adolescents had the highest homicide rate of any age group, followed by those 20-24 years old. Among blacks, the highest rates were among

young adults 20-24 years of age, followed by those 25-29 years old, 35-39 years old, and then 15-19 year old adolescent. These differences suggest that violence prevention efforts need to be spread more broadly in the black community.

GENDER/RELATIONSHIP ISSUES

Statistics show that, within race, men are much more likely than women to be homicide victims and perpetrators (FBI, 1991). However, when women are victims, the perpetrator will most likely be male and often one with whom they have a relationship. At least one-third of female victims of homicide are killed by a mate (FBI, 1991). As with other forms of violence, spousal violence is not evenly distributed across age and ethnic groups. Spousal homicide among Latinos is very low (Block, 1985), which suggests that domestic violence programs in Latino neighborhoods will not appreciably decrease homicide in this group. On the other hand, spousal violence among blacks is relatively high, about eight times that of whites (Mercy and Saltzman, 1989), which strongly suggests the need for a domestic violence intervention with this group. In addition to showing that blacks are at greater risk for spousal homicide, this research, which looked at spousal homicide from 1976 through 1985, shows that spousal violence peaks in the early 20s for blacks and that, nationally, black men were more at risk than black women for being killed in a legal or common-law marriage (Mercy and Saltzman, 1989). Such findings highlight some risk factors associated with spousal homicide and suggest the need to look at black women, who though usually responding to abuse (Mann, 1990), as potential perpetrators.

NEIGHBORHOOD, CITY AND REGIONAL VARIATIONS

Just as homicide and violence is not evenly distributed across racial and gender groups, it also varies by region, state, city (Fingerhut & Kleinman, 1990; FBI, 1991) and areas within cities. For example, an analysis of 1987 homicide rates of 15-24 year old black males in states with sizable African-American populations (Fingerhut & Kleinman, 1990), found that Michigan had a homicide rate of 231/100,000, which was almost seven times that of the state with the lowest rate. In Chicago, in 1991 six of 24 police districts, with one-fifth of the city's population (and, not coincidentally, those located in the poorest parts of the city) recorded over 40 percent of the city's murders (Chicago Police Department, 1992); in Washington D.C., the least populous ward in the city accounted for one in five of the capitol's murders (Office of Criminal Justice Plans and Analysis, 1992). In addition, cities' rates, even when they are high, may result from different types of violence. In Washington D.C., while actually decreasing for the last few years, the use and sale of drugs accounts for over one-third of the recorded homicides. In Chicago, the Police Department's yearly murder analysis indicated that 96 or 10 percent of the city's homicides were "narcotic related" (Chicago Police Department, 1992).

An accurate description of a community's violence and homicide problem is important, for while national, state or even city figures may impact policy, interventions must occur at the local level. In addition, in the absence of data on the prevalence, causes, and characteristics of participants, there is a danger of developing programs based on dramatic and sensationalized, but statistically infrequent, events. Drive-by shootings and instrumental killings in a neighborhood, while reported widely by the media (which encourages the belief that certain events are more

common than, in fact, they are) actually may be much less prevalent than spousal homicide or accidental gun deaths of children.

Not only does information on the dynamics of local violence and homicide lead to community specific interventions, but also community support and ownership of the problem. Further, specific information destroys common false beliefs about risks and causes of homicides that often-times interfere with that support. For example, within the black community there seems to be a number of beliefs about homicide that are not grounded in the facts. Based on feed back from individuals over the years, it seems as though an assumption in certain sectors of the black community is that large numbers of blacks are killed by police or hostile whites. While not to minimize the seriousness of law-enforcement and hate-crime deaths, the reality, which must be highlighted, is that over 90 percent of black homicide is intra-race; of the approximately 10,000 homicides that occur in any given year, less than 500 are committed by law enforcement officers (Rosenberg & Mercy, 1986). Similarly, there is the notion that individuals are most likely to be harmed by strangers in the commission of a drug-induced crime rather than by an acquaintance as a result of an argument, as is in fact the case. Such knowledge at least focuses prevention in the right direction and the information itself may decrease involvement in such situations.

Statistics indicating that a handgun in the home is more likely to cause the death of a family member, either intentionally or unintentionally, than that of a burglar can lead to informed policy and behavior regarding gun safety and storage. Clearly, statistics on handgun deaths are a factor in the AMA's emerging campaign for gun restriction (Koop & Lundberg, 1992; American Medical Association, 1992a). Information on spousal homicide destroys the myth that wife battering is an essentially harmless, personal matter and is part of the thrust to get hospitals and primary care physicians involved in the identification and referral of victims of abuse (Randall, 1990). Statistics on the number of kids killed in a neighborhood, and the circumstances of their deaths, can be used to get local school councils to implement violence prevention programs in their schools and provide information to local school boards on the need for crisis intervention capabilities.

While data for a surveillance system must be gotten at the local level in order to be maximally useful, particularly in impacting on policy, there needs to be consistency in the data that is collected and the categories used to describe it. "Gang-related" and "drug-related" and "domestic" violence are three such categories that vary in their definitions, and thus, types of incidents that are included. For example, in one city a "gang-related" homicide may include only those incidents that occurred over gang business, whereas other communities include all homicides involving a known gang member as gang-related violence even if the person's death resulted from a domestic argument. "Drug-related" violence must be refined to reflect, at the least, violence that occurred over the business of doing drugs versus crimes committed while a person is under the influence of drugs. Clearly, domestic violence needs to be further defined by the exact relationship between participants.

In addition to the need for coordination of systems across local, state and federal law enforcement agencies, there is also a need to implement and then coordinate data collections from various sources. For example, local police are an obvious source of information on violence victims and perpetrators but so too are hospitals and community crime surveys, with the latter two providing more information about non-lethal encounters that may never come to the attention of the police. Hospitals in particular are an excellent potential source of information on all types of

non-lethal violence, particularly general assaults and wife and elder abuse, that may never come to the attention of the police. Unfortunately, however, our work and that of others (McLeer & Anwar, 1989) indicates that hospitals do not do a very good job of identifying victims of violence, other than those which they are mandated to do so by law, for example, child abuse and sexual assault, and do not keep readily accessible statistics of the causes of injury.

IDENTIFICATION OF HIGH-RISK INDIVIDUALS

From an intervention perspective, police departments and hospitals can do much more than provide group statistics on violence and victims; they can actually identify specific individuals at risk for future victimization. The first type of data has important implications for primary prevention and program planning, whereas the latter leads to secondary intervention (that which occurs after an injury but before a more serious incident) and individual treatment. Identification, referrals, and possibly direct services at and by these agencies with which individuals come into contact involuntarily may be especially important with populations that may be difficult to reach otherwise. Two such groups that can be reached through health and criminal justice systems are battered women and high-risk adolescents.

An obvious place (and agent) of intervention with youth seems to be the educational system; however, high dropout rates among inner-city African-American and Latino youth suggest that those most at risk are probably not in school (at least, not on a regular basis). Unfortunately, (or fortunately), many will eventually show up in hospital emergency rooms where they present opportunity for intervention. One such program operating at Boston City Hospital through a Pediatric Interpersonal Violence Trauma Team, works with young victims of interpersonal violence after they have been admitted to the hospital. The young victims have a Violence Prevention Counselor who helps them work through the incident, review their conflict resolution skills and assess future risk and ways of avoiding re-victimization (Bukuras & Pittel, 1992). The program, which was in response to the number of youth victims coming into the hospital with intentional injury, treated 72 youth between the ages 13-17 in a 16 month period.

As suggested, hospitals (and other places of health care) are also an excellent point of intervention for battered women and those at risk for spousal homicide. Such victims, when presenting for treatment, through careful and thorough screening procedures, can be identified and referred for counseling and/or other services. While a survey of our county's hospital emergency rooms in the summer of 1991 found that very few had protocols for the identification and treatment of victims of domestic violence, an amendment to the Illinois Domestic Violence Act of 1986 (Illinois Public Act 87-436) requiring medical workers to make referrals of suspected victims of abuse should go a long way in remedying this. In addition, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) is requiring that its members develop policies and procedures for handling adult as well as child victims of abuse and neglect (JCAHO - Standard HO.3.2.15, 1992). As noted, more and more doctors are endorsing such ideas (American Medical Association, 1992b), which suggests that this identification and referral of women in violent relationships will extend beyond medical institutions into private medical practices.

The police and criminal justice system -- again, institutions with which individuals often have "involuntary" contact--are good sources of information about specific individuals at risk, and

under certain circumstances may provide the opportunity for direct intervention. The juvenile justice system has good potential as a place for work with high risk youth. For incarcerated youth, one has a captive audience for intervention; in addition, the courts can require that adjudicated youth participate in such programs, the completion of which can then be used to reduce their sentences.

The criminal justice system may also serve a pivotal role in domestic violence intervention. While they have less contact with violence victims than hospitals and doctors (where the cause of the injury is more easily concealed), they are obviously frequently aware of and intervene in violent situations. An often cited Police Foundation study of domestic homicide in Kansas City in 1977 found that in 85 percent of the cases, the police had been called to the residence at least once prior to the murder and five times or more in 50 percent of the cases (Police Foundation, 1977). These numbers suggest that interventions may have been made prior to the lethal violence but also that a system needs to be in place that systematically flags high risk individuals or addresses and that police may need special training in dealing with domestic violence situations. In a move in the right direction, the Attorney General of the State of Illinois has proposed several measures to strengthen the state's domestic violence law which includes protocols for police who work with domestic violence cases (Anderson, 1992).

The pattern of recurring violence that characterizes domestic violence also characterizes other types of acquaintance expressive violence (e.g. Saltzman, *et al.*, 1990) and is a critical piece of information in violence prevention. It suggests that public and private agencies and the police have a good chance of coming into contact with individuals prior to the homicide and are thus, well positioned to identify potential victims. However, this information needs to be coordinated such that these individuals who are repeatedly involved in violence but seek help from various places, for example, a person treated at two different hospitals, can be identified as high-risk victims of recurring violence. In addition, such a system (in record-keeping and treatment) needs to take into consideration that victimization and perpetration are related. That is, victims often end up as perpetrators, whether through fear, in retaliation, because they live in a violent milieu, or simply because chance accounted for them being the victim rather than perpetrator in the first place (McDermott, 1983; Singer, 1986, Wolfgang, 1958). Thus, in interventions, the victimization issue often has to be addressed and worked through before addressing the individual's involvement as perpetrator (Jenkins & Bell, 1992).

Clearly, having accurate specific information on homicide victims and perpetrators--who is doing it, why is it occurring and where--is the key to effective programs and responsible policies in the area of violence preventions. In addition, such systems (when detailed and systematic across areas) yield large data sets, the analysis of which can add immeasurably to our understanding of violence. However, from an intervention perspective is it also important to identify individuals at risk for victimization and perpetration and to monitor the occurrence of non-lethal violence so that homicides can be prevented.

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COMPUTER MAPPING AS A TOOL IN VIOLENCE REDUCTION

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The last ten or fifteen years have seen a quiet revolution in the field of criminology and criminal justice. There has been a vast improvement in the quality and quantity of data, and in the availability of that data to users. Sufficient information is now available so that basic indicators related to criminal justice issues can be measured with a degree of precision that was not only unknown a few years ago, but was even unanticipated. Thus, we are not plagued by a dearth of facts in criminal justice. However, researchers, policy makers, and citizen groups often have difficulty using these facts.

There are two obstacles that can prevent researchers and policy analysts from using information as a tool to make the most accurate decisions possible. Either the facts do not really measure what they seem to measure, or there are so many facts that it is impossible for the human mind to assimilate all of them. In Illinois, the Statistical Analysis Center of the Criminal Justice Information Authority is an active force in increasing the information available to policy makers, researchers, and citizens in general. It can be thought of as an experiment in populism. Its purpose is to help people use data -- to give them the tools they need to access and interpret information.

One of the most useful ways in which the Illinois SAC assists those who formulate and administer public policy is to search for, test, document, adapt, and if necessary develop, statistical and other methodological tools that will help to accurately summarize vast amounts of information. This is not a mechanical task, but depends upon an intimate understanding of the data sets and what they really measure. For example, the Authority is currently attempting to improve the identification of high-risk violent situations, in an area of Chicago that suffers from one of the highest rates of street gang-related violence, early enough so that interventions might save lives. This project brings together neighborhood and community agencies and the police department, and builds on a foundation of research and technical innovation in the Illinois SAC.

Over many years, SAC has been at the forefront of both violence research (the Chicago Homicide Project) and research in geographic statistics (the STAC Project). Intensive analysis of the Chicago Homicide Dataset -- the largest, most detailed and accurate dataset on violence in the country -- indicates that intervention targeted at street gang-related and competitive confrontational violence, in certain neighborhoods, occurring to young Latino and black men, might prevent a homicide spurt, if we had an early warning system for neighborhoods in crisis. SAC expertise in computer mapping, spatial statistics, and the geographical theory of violence suggests that such an early warning system could be developed, using available data in the community, organized in an automated database, and with computer-assisted methods for summarizing the data and finding Hot Spot Areas.

The Early Warning System project is now underway in Police Area Four, an area containing some of the riskiest neighborhoods for street gang violence in Chicago. The specific purpose of the project is to develop an automated early warning system for law enforcement, which will identify potential neighborhood crisis areas, areas that are at high risk for suffering a "spurt" of serious street gang-related violence and homicide. This early warning system will be based on a statistical model, which consolidates spatial information obtained from a variety of community and law enforcement sources, and uses automated Hot Spot Area identification and other geographic statistics as tools to target crisis neighborhoods.

This presentation reviews the overall goals of the Authority and its Statistical Analysis Center, in light of the Chicago Homicide Project, The Spatial Statistics project, and their product -- the Early Warning System project.

IMPROVING ACCESS TO DATA: A POPULIST EXPERIMENT

There is no lack of data about crime; state and local agencies collect buildings full of it. For example, aggregate monthly totals of specific types of police transactions, such as reported offenses or arrests, are available for specific types of offense (about 200 categories in Illinois), over time (monthly since 1972 in Illinois), for each individual jurisdiction (almost 1,000 in Illinois) and for each county and state (see Miller & Block, 1985). Another huge, largely untapped resource is the data available on personal and household victimization from the National Crime Survey (NCS) -- national-level estimates since 1973 (with state-level or monthly estimates possible) of the details of both crimes that were known to the police and crimes that were not. NCS data include, for example, not only information on the situation and victim and offender interaction in each crime, but also information on why the police were or were not notified, and longitudinal information on victimizations occurring to the same household or persons over time in sequential relationship to changes in routine activities or prevention measures.¹

If such treasure troves of data exist, why do citizens, community groups, and public agencies so often use inappropriate data, or misuse the data they have? Why do researchers, managers and policy makers seldom use, or only use a small part of, the vast storehouses of data that exist? The problem of poor data is a vicious cycle. Unfortunately, communication is often poor between the people who are in charge of maintaining and documenting that data and the people who actually try to use the data. Because they have no idea of its potential, they do not use the data. Seeing that no one uses the data, data maintainers see no reason to provide extensive documentation or explanations. This cycle can be broken by improving user access to the data, and user understanding of the data.

Once users know what exists, they will use the data more. The more they use the data, the more likely that they may discover apparent errors or discrepancies, and ask questions about them. Data maintainers will notice that their work is being used, and gradually the quality of data will improve. Instead of being a vicious cycle of increasing mediocrity, the cycle will instead begin to move towards increasing quality.

¹For a guide to the interpretation of police data in relationship to victim survey data, see Miller & Block (1985) or Block & Block (1984).

As a liaison between data users and data maintainers in criminal justice, the Illinois SAC has learned much about how to improve the quality of data-based research and public policy decisions. First, the primary goal is the improvement of data quality and availability, and the best way to improve data quality is to increase data availability. Second, it is vital that data users understand the relationship between the meaning of data and its measurement. Third, we must find (and make it easy to use) analysis tools that answer the practical questions policy-makers ask. Finally, ways must be found to communicate complicated and convoluted results to a general audience. The Early Warning System project exemplifies each of these goals.

MEANING AND MEASURES: THE FACTS DON'T SPEAK FOR THEMSELVES

Academic training in the social sciences seems designed to convince students that a collection of facts will, by itself, reveal "the obvious." Training in law or journalism may promote the opposite belief -- that, far from revealing obvious "truths," factual information in criminal justice is highly suspect as the creation of state and local officials. After they have been out in the real world for awhile, the social scientist learns that "the obvious" seldom exists, while the skeptical journalist learns that some numbers are worth a thousand words. Although "facts don't speak for themselves" (Williams, 1987), they are far from silent.

The Meaning and Measurement of Crime Data

Although one of the oldest and most generally accepted precepts in criminology is that the definition of a situation as a crime varies with the definer, criminologists often ignore that precept when conducting empirical analysis of crime. Contrary to conventional wisdom, there is no "real" figure for the number of criminal events actually occurring; there is no Platonic "ideal" robbery event, for example, that could be measured, if only we had the proper tools to do so. Despite the arguments that led to the development of the National Crime Survey (see Block & Block, 1984), there is no "dark figure" of crime. Instead, an occurrence is filtered through successive redefinitions, by participants in the incident, by observers of the incident, by societal representatives responding to notice of the incident, and so on.

A corollary to this statement is that it is incorrect to view crime or criminal justice information as right or wrong, based on some ad hoc standard for the real number of criminal events. The issue is not that official information is a poor indicator of the level of wickedness in society. Instead of wasting time blaming ("incompetent" or "perverse") officials for not measuring what sociologists think they should measure, it is more productive to see meaning in the measurements themselves. In general, officially-collected information represents a tally of administrative transactions (e.g.: crimes known to the police, arrests, criminal charges). With such data, meaning is more likely to follow from measurement, than measurement to follow from meaning. In contrast, with data collected mainly for research or analysis purposes, such as victim survey data, the opposite is true: we expect that measurement will follow meaning.

A second corollary is the danger of reification of measures of criminal incidents. Just because an indicator of crime or criminal justice transactions jumps from one month (or year) to the next, we should not immediately assume that the number of crimes or transactions has changed. Until demonstrated otherwise, it is better to assume that the measurement has

changed. For example, a few years ago, there was a rather vituperative series of articles in the quantitative criminology literature, arguing about the proper ARIMA models for several series of criminal offenses in Boston. No one noticed that the particular series at issue, armed robbery, began to increase sharply relative to comparable series, and also changed its pattern of seasonal fluctuation, just at the same time as the measurement of "armed" became more specific. In this context, it is well to remember Sir Claus Moser's (1980) injunction that, "Any figure that looks interesting is probably wrong."

The Meaning and Measurement of Spatial and Locational Clustering

Extensive research has shown that occurrences of social disorder, crime, and law enforcement activity tend not to be randomly scattered in space, but clustered in certain areas (Curtis,1974; Pyle,1974; Brantingham & Brantingham, 1984; Rose, 1979; Skogan,1991). Homicide is no exception. Geographic studies of Chicago beginning in the 20s (Lashly,1929), and continuing through the 60s (Block,1976) and the 70s (Curtis,1974:139-142; Block,1977;1979) to the 90s (Block & Block, 1991) confirm that homicides are much more prevalent in some areas than in others.²

However, it is not always recognized that various kinds of disorder or criminal activity may follow completely different spatial patterns, and that these patterns are often related to the expressive versus instrumental nature of the event. Just as offenders may specialize in a particular crime or complex of crimes (Wolfgang, Figlio & Sellin,1972; Kempf,1986), and certain potential victims may be particularly vulnerable to particular kinds of crime (Block, Felson & Block,1985), so certain types of crime may be clustered in certain locations or areas of the city. Further, certain types of crime (for example, street gang-related crime) may be characterized by a greater tendency to cluster in a small area than other types of crime (for example, spousal violence).

Spatial clustering of specific types of crime happens in two ways. A given area or location may be a preferred target for potential offenders (for example, some businesses attract commercial burglary; homes with certain characteristics attract residential burglary), or an area may have characteristics that generate specific types of crime (for example, a tavern or liquor store; an abandoned building).³ In addition to these "target locations," specific types of crime may cluster in a neighborhood or a group of city blocks as a result of community disorganization, instability, and lack of social services in the area. Different types of crime may cluster in different areas of the city, depending on the societal patterns and trends. Block and Block (1990), in fact, found that the Chicago areas where, for example, instrumental homicide was densest, were not necessarily the same areas where street gang-related homicide was densest.

²Other spatial analyses showing clustered homicide patterns within a city include Bullock (1955), Bensing and Schroeder (1960), Schmid (1960), Pyle (1976), Munford, *et al.* (1976), Swartz (1980), Harries (1991:110-112,157-162).

³The field of environmental criminology, also called the criminology of place and situational prevention, has generated numerous research studies on this topic. For a review, see Brantingham and Brantingham (1981) or Clarke (1988).

Street gang violence, for example, may cluster in certain neighborhoods that are otherwise relatively low-crime. In a study of Chicago from 1978 to 1981, Spergel (1984) found that, "gang violence appears to be a repetitive, continuous, and extremely serious problem in certain communities, while it barely touches other areas," and that, in contrast to Thrasher's (1927:5-22) pioneering study of Chicago in the 20s, high-gang violence areas are not necessarily areas of the highest social disorganization. Similarly, in their study of crime-related calls for service in Minneapolis, Weisburd, Maher and Sherman (1991:14) find that, "examination of the correlations among crime call occurrences across places raises a strong challenge to the hypothesis that all crimes are linked."

Thus, a purely empirical mapping of social disorder, crime or law enforcement activity will not be enough, by itself, to target successful strategies for homicide prevention. As Roncek and Maier (1991) argue and Maltz, Gordon and Friedman (1991) found in their pilot study of computer mapping in police departments, the successful analysis of spatial patterns of crime requires that empirical mapping tools be guided by theory linking place to crime, explaining the spatial characteristics of different types of crime, and specific information on community groups and community members who are particularly vulnerable.

INFORMATION SHARING: THE FOUNDATION OF COMMUNITY-CENTERED CRIME REDUCTION

The reduction of violence that leads to homicide requires a two-pronged approach: first, identifying the problem, and second, targeting prevention efforts on that specific problem. Neither of these can be accomplished by the police department alone. In the case of street gang-related violence and male-on-male competitive confrontation, one of the most important defining characteristics is territoriality, and the territorial unit most likely to become the site of serious violence is not a large area like a police district, but a smaller area defined by the gang (Suttles, 1972:187-201). In addition, violence changes over time, following patterns of escalation, retaliation and revenge, often across a spatial border that may also change over time (see Weisburd, Maher & Sherman, 1991:20). Therefore, up-to-the-minute information is necessary to target specific neighborhoods that are at high risk of becoming a violence crisis area, so that crisis intervention, heading off the cycle of retaliation and retribution, is possible.

Much information, such as non-lethal street gang-related activity known to the police, the location of offenses and arrests, addresses of people arrested, addresses of people released from prison, and citizen calls for service to the area, exists in law enforcement information systems. However, a pilot project utilizing spatially-related crime information in selected Chicago police districts (Maltz, *et al.*, 1987) found that additional information from neighborhood and community groups added to the richness of the spatial database, and allowed officers to identify high-activity areas more accurately.

Since street gang violence is spatially anchored and occurs as the culmination of escalating incidents of revenge and retaliation, information compiled by community and neighborhood organizations, as well as by law enforcement, could be used to develop an "early warning system" of neighborhoods in crisis (see Spergel & Curry, 1990). Continuing escalation would then be prevented by crisis intervention and dispute mediation, using both internal community influences and external police support. Such a program has shown success in two

pilot projects, in Chicago's Humboldt Park and in Philadelphia (Spergel, et al., 1984; Spergel, 1986), but requires the strong support of neighborhood agencies, churches, community groups, and the police department.

Information sharing is, therefore, a necessary foundation for the community-based violence-reduction programs. However, the mechanism of sharing information has not been addressed. Almost all community policing projects discuss, in theory, the necessity of obtaining information from citizens and community agencies, but the mechanisms for doing so have been ad hoc and poorly documented. The Early Warning System project addresses this problem. This computer-assisted system relies on address-based data from law enforcement and community sources, compiled in a computerized database that is linked to computer mapping capability (which we call a geo-archive) and set up so that it can be updated, maintained, mapped, and analyzed and used by those who are developing and implementing strategies of violence reduction in the community.

Police Area Four was chosen for the Early Warning System project because of the following three factors:

- The high level of violence in the area.
- The racial/ethnic diversity of Area Four.
- The interest and support of the commander and staff in using automated tools to reduce serious violence in the community, and to incorporate community-based information in their analyses.

In summary, the Early Warning System project identifies potential street gang-related and competitive confrontational violence crisis areas in Chicago Police Area Four, using computer mapping techniques, spatial and locational statistics (such as the Hot Spot Area), and a statistical model which is under development. The Early Warning System consolidates spatial information obtained from a variety of sources, and uses automated hot spot identification and other geographic statistics as tools to target crisis neighborhoods. The project is organizing and documenting the early warning system and the "geo-archive" database that supports it, so that not only can Area Four crime analysts use it in daily decision making, but the system will serve as a prototype for applications in other police districts in Chicago, and in other police departments throughout the nation.

How Can Neighborhoods in Crisis be Identified?

To identify neighborhoods in crisis, we must organize and sift through the vast amount of information available about an area, including different types of events (different types of offenses, different law enforcement data, data from community residents, data from other city agencies), occurring at specific locations, but changing in their distribution over time. The results of previous research studies, and the organizing constructs of criminological theories, which might provide a framework for identifying a "neighborhood in crisis," sometimes yield contradictory results, possibly because each model applies to a specific type of crisis situation. In addition, many models include change in racial/ethnic residential patterns in their measure of neighborhood disorganization. As Spergel (1984:210) points out, in a statement that agrees with George-Abeyie (1981:108-109) and Roncek and Block (1983), "We also need to clarify the notion of community

instability and distinguish it from racial/ethnic change." What is needed, therefore, is a model of neighborhood social stress that can predict a specific type of violence (street gang-related and competitive confrontational).

The social or neighborhood factors that cause an increase in one kind of homicide may have no effect on another kind. Earlier analysis of the Chicago data showed, for example, that robbery homicide and assault homicide patterns over time had different relationships to social stress indicators over time (Block, *et al.*, 1981). Further, while some neighborhood characteristics are related to levels of violence (Messner & Tardiff, 1986), neighborhood patterns of violence and social stress do not necessarily remain static over time (Bursik & Webb, 1982). Also, many models of neighborhood disorganization or social stress include crime itself as part of the instrument (see Curry & Spergel, 1988). A model designed to predict violence must analyze the relationship between neighborhood social stress in one time period and violence in a later time period.

Computer mapping technology, coupled with the technology necessary to store and organize vast amounts of geo-coded data, has expanded extremely rapidly in the last year or two, and there is no end to the expansion in sight. For example, five cities (Hartford, Jersey City, Pittsburgh, Kansas City and San Diego) have developed geographic information systems in conjunction with the National Institute of Justice's Drug Market Analysis Program, with the apt acronym of DMAP (Uchida, 1990). With the advent of the TIGER files and software to utilize them, computer mapping capability is a possibility for even small police departments. However, statistical tools for using and interpreting mapped data, especially tools applicable in practical situations, are still in their infancy. The development of statistical tools for geographic analysis has been outpaced by the creation of geo-coded datasets and the software to map them.

Computer mapping technology, no matter how sophisticated, is not enough by itself to assimilate the vast amounts of spatial and other information generated by the reality of daily interaction in a neighborhood, organizing that information so that neighborhoods in crisis can be identified and violence prevention strategies can be targeted. Two things are necessary in addition to mapping technology -- the technology must be informed by research and theory that provide a framework for assimilating, understanding and utilizing that information, and statistical tools must be available so that the computer mapping technology and the information-organizing hypotheses can be linked (figure 1).

A Statistical Tool for Identifying Hot Spot Areas in Neighborhoods

People familiar with a neighborhood (residents, community workers, patrol officers) develop a "cognitive map" containing their own assimilation of spatial relationships within the area. However, everyone's cognitive map is limited by the extent of their own experience, and by the way in which they organize their perceptions of spatial information. For example, a street gang worker may possess different information than a violent crime investigator. In addition, spatial relationships in a neighborhood change over time, but an individual's perceptions are often anchored in time. One person's perception of current spatial information may be overshadowed by the memory of events that occurred long ago. By the same token, the accumulated knowledge of an expert in historical spatial patterns in the neighborhood may be lost when the expert retires or is promoted out of the district.

A geo-archive can serve as a storehouse for a community's spatial memory. However, geo-archives can quickly grow to contain much more information than a police analyst can possibly assimilate and use for timely decisions. Even a single map of one type of event in one time period contains a huge amount of information, data that may be interpreted very differently by different observers with differing spatial perceptions (cognitive maps). Even such a seemingly simple question as whether or not the events within a certain area on the map are densely clustered, or just one permutation of random distribution, depends on the eye of the observer. In situations such as this, when the amount of information is overwhelming, a quick, efficient and objective summary of reality -- in other words, a statistical analysis -- can provide a useful guide to interpretation.

What statistics are appropriate for finding and defining the densest area on a map -- a Hot Spot Area? Statistical methods for the interpretation and the analysis of relative crime density within arbitrary areal units, such as police districts, beats, wards, census tracts, or community areas, have been available in automated systems for some years, but they all suffer from serious problems in interpretation and strong aggregation biases, and they cannot deal with a reality in which dense areas cross boundary lines or occur along a boundary line. Pin map data (locations of individual events such as offenses, traffic accidents or addresses of known offenders) can provide a wealth of information, and statistical methods exist to organize that information into a useful form. However, pin maps alone cannot define a particularly dense area. A single address with more crimes than any other address may, or may not, be located within the highest-density crime area on the map.

Neither of these approaches can solve the basic area-unit dilemma. On the one hand, analysts of spatial data often need to identify high-density areas without regard to artificial boundaries, areas that reflect the pattern of actual events even if the events cross police district or census tract boundaries or extend along a boundary (a street, for example). Predefined, arbitrary boundaries are an obstacle to the identification of such real high-density areas. On the other hand, the unit of analysis in a pin map is so detailed that "area" takes on a qualitatively different meaning, density could reflect some unique characteristic of the particular location, and irrelevant variables (such as the presence of a pay phone from which calls for service are made) can easily obscure the measurement of density. Just as the use of arbitrary area boundaries as the unit of analysis may hide spatial patterns that cross those boundaries, the use of addresses as a unit of analysis may hide patterns of density that occur across groups of contiguous addresses.

There have been some attempts to overcome the limitations of arbitrary area data by utilizing "address-level aggregations," building non-arbitrary summary areas from pin data. However, none of these approaches yields a summary, bounded, area that is calculated from individual pin map data. Other attempts have been more successful, but do not target the densest area on the map, do not develop an objective rule for combining addresses into hot spot areas, or rely on the judgement of experts. Expert opinion can certainly be useful in defining hot spots according to the given expert's cognitive map, but relying exclusively on such cognitive hot spots begs the question of an objective, database-driven tool for finding dense areas that the expert in question may not know about. Cognitive maps may provide valuable information, but they are not automated tools for decision making.

In contrast, the Hot Spot Ellipse and Isocrime routines in the STAC (Spatial and Temporal Analysis of Crime) use automation to analyze the scatter of events across a map, and then to delineate, regardless of artificial boundaries, the areas of the map that contain the densest clusters of events. The STAC package contains a number of statistical tools for analyzing the distribution of events on a map, including Nearest Neighbor Analysis (a test of significance for clustering), Mean Center, and radial searches for events occurring around an address or other location. The two STAC capabilities relevant to finding a Hot Spot Area are the Hot Spot Ellipse and the Isocrime. The Hot Spot Ellipse, which is not a simple statistic but more like an artificial intelligence iterative procedure, begins with an iterative search routine that identifies clusters of events on the map, ranked by relative density, and then calculates and maps the standard deviational ellipse that fits each cluster. The Isocrime routine produces a series of irregular lines enclosing, say, the densest 10 percent, 20 percent and 30 percent of events on the map.

The Hot Spot Ellipse and Isocrime routines in STAC were Beta tested by analysts in two departments -- Wally Briefs in the Sunnyvale, California Department of Public Safety, and by Philip R. Canter in the Baltimore County Police Department. Hot Spot Area searches were used, for example, to produce hot spot area maps of vandalism around the Halloween period for officers in a district. These tests showed the potential of Hot Spot Area identification, but also suggested modifications that should be made to the program. These modifications have been completed, and the new version tested by these two departments and by other departments that have requested STAC, including the Oak Park, Illinois, police department. The enhancements just completed in the STAC Hot Spot Ellipse module include the following:

- Data entry requirements were made friendlier. STAC now accepts comma delimited data.
- A package that translates state-plane to longitude-latitude data (and vice versa) was found and incorporated into STAC. This means that STAC can be used easily with the TIGER files and packages using them.
- The STAC Hot Spot Ellipse module was revised so that more than one hot spot can be identified and mapped (the densest, second densest, and so on). The program tells the user how many hot spots were found, and the user can decide how many to map.
- STAC now actually draws the complete standard deviational ellipse for every hot spot. The earlier version of STAC plotted only four points of the ellipse.

The Early Warning System Project - 1992 and Beyond

Currently, the Early Warning System project is continuing the development, maintenance and documentation of a geo-archive for Area Four -- a computer-assisted system, relying on address-based data from law enforcement and community sources, compiled in a computerized database linked to computer mapping capability. The geo-archive contains not only street gang incident data (lethal and nonlethal), but also a plethora of other information related to street gang crisis situations, such as gang territories, the location of vacant buildings and taverns, and so on. In addition, the project is using automated Hot Spot Area identification as a targeting tool, conducting preliminary analyses for building the predictive model. Finally, we have installed a "clone" of the computer system, complete with mapping capability, geo-archive and spatial statistics, in Area Four Headquarters, and are working very closely with investigators as they learn to manipulate and use the system.

The long-range goal of the Early Warning System project is to develop a computer-assisted early warning system for neighborhoods in crisis, which will be transferrable to other police departments and communities throughout the country. Because of the importance of transferability of this project, the geo-archive and computer-assisted early warning system are being set up so that they can be updated, maintained, mapped, and analyzed by police analysts within the Area headquarters. In Police Area Four, we hope to demonstrate the usefulness of such an early warning system in preventing serious violence, as well as the use of STAC Hot Spot Area identification as a tool to assist and inform the search for potential crisis areas. The project will, then, become a prototype for other neighborhoods and cities in developing similar automated systems for Hot Spot Area identification.

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THE CANADIAN HOMICIDE DATABASE: PROBLEMS AND SOLUTIONS

CHRISTINE WRIGHT
Statistics Canada

Canadian homicide data have been collected by Statistics Canada since 1961. Both past and present, homicide survey forms are filled out manually by a member of the police department in whose jurisdiction a homicide occurs. These forms are then forwarded to the Canadian Centre for Justice Statistics at Statistics Canada for compilation, analysis and publication. The data elements and system maintained to capture and process these data remained essentially unchanged until 1991, when both were substantially changed. The reasons are outlined below.

PROBLEMS ASSOCIATED WITH THE OLD SURVEY

Information obtained from the old survey questionnaire (Figure 1) had to be recoded onto a series of data capture forms, which would subsequently be sent for keying onto the mainframe based system. A series of edit reports would be run and corrections would require subsequent coding of forms until the database was error free. Information on incidents, victims, accused and court processes was originally collected.

The form

1. The physical layout of the old form (pre-1991) posed some problems. It attempted to collect too much information on one page, and there was not sufficient space for the information requested.
2. No provision was made on the database for some of the information collected on the survey form (e.g., time of incident; criminal code sections, sub-sections; addresses of victims and accused).
3. Due to the gradual erosion over time of the quality of the data on court processing and disposition, this information requirement had been eventually dropped from the survey.
4. Some information that was not specifically requested was nevertheless routinely captured from the narrative section of the Homicide Return (e.g., circumstances surrounding the incident such as drinking and drug use; type of firearm; type of location).
5. Particular data elements, such as marital status, occupation, employment status, were not pinpointed in time.



Canadian Centre for Justice Statistics

Homicide Return

YOUR FILE NUMBER

SEE INSTRUCTIONS ON REVERSE SIDE

Statistics Act R.S.C. 1985, c. S19

For Statistics Canada use only			
File Number			
Date Received	Yr.	Calendar Day	Doc. No.

O C C U R R E N C E	1. Offence 1. <input type="checkbox"/> Murder 2. <input type="checkbox"/> Manslaughter 3. <input type="checkbox"/> Infanticide		2. Offence Data Section Sub Section Paragraph Criminal Code () ()		
	3. Location of offence City - Town - Village - Rural County - Township - Municipality Province - Territory				
	4. Date of offence D M Y	5. Time ____ AM ____ PM	6. Means of offence 1 <input type="checkbox"/> shooting 3 <input type="checkbox"/> stabbing 5 <input type="checkbox"/> suffocating 7 <input type="checkbox"/> arson 0 <input type="checkbox"/> not stated or unknown 2 <input type="checkbox"/> beating 4 <input type="checkbox"/> strangling 6 <input type="checkbox"/> drowning 8 <input type="checkbox"/> other		

V I C T I M S	7. Apparent motive 1 <input type="checkbox"/> Revenge 4 <input type="checkbox"/> Argument or quarrel 7 <input type="checkbox"/> Self-defence 10 <input type="checkbox"/> Inadvertent act 00 <input type="checkbox"/> Not known 2 <input type="checkbox"/> Jealousy 5 <input type="checkbox"/> Robbery, theft, etc. 8 <input type="checkbox"/> Escape 11 <input type="checkbox"/> Other motive 3 <input type="checkbox"/> Anger, hatred 6 <input type="checkbox"/> Sexual assault or rape 9 <input type="checkbox"/> During commission of other offence 12 <input type="checkbox"/> Mentally ill or mentally retarded (insane)	
	8. Present standing of case 1 <input type="checkbox"/> Cleared by charge Specify 2 <input type="checkbox"/> Warrant issued 3 <input type="checkbox"/> Cleared otherwise 4 <input type="checkbox"/> Not cleared	9. Court Procedure 1 <input type="checkbox"/> Arraignment 2 <input type="checkbox"/> Preliminary inquiry 3 <input type="checkbox"/> Trial 4 <input type="checkbox"/> Other: specify: _____

A C C U S E D	10. Name in full (surname first) Address - include city, town, etc.		Sex 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female 3 <input type="checkbox"/> Not known	Age	Marital Status 1 <input type="checkbox"/> single 4 <input type="checkbox"/> divorced 2 <input type="checkbox"/> married 5 <input type="checkbox"/> separated 3 <input type="checkbox"/> widowed 1 <input type="checkbox"/> common law	Racial Origin
	1.					
	2.					

A C C U S E D	11. Name (Surname first) Address - include city, town, etc.		F.P.S. Number		Date of Arrest D M Y	
	Sex 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female	Date of Birth D M Y	Place of Birth	Marital Status 1 <input type="checkbox"/> single 4 <input type="checkbox"/> divorced 2 <input type="checkbox"/> married 5 <input type="checkbox"/> separated 3 <input type="checkbox"/> widowed 1 <input type="checkbox"/> common law	Racial Origin	Occupation
	1.					

12. Circumstances of alleged offence: Give brief details -

Contributing Police Force Signature Date
D M Y

FIGURE 1 (continued)

Homicide Return Used From 1961 to 1990



Statistics Canada Statistique Canada

CARD 1

CANADIAN CENTRE FOR JUSTICE STATISTICS

VICTIM AND OFFENCE

1. File number 1 2 3 4 5 6 7 [][][][][][][]							2. Victim seq. 8 9 10 [][][]			3. Card No. 11 [1]	4. Name of victim 12 13 14 15 16 17 18 19 20 21 22 23 [][][][][][][][][][][][][][][]							5. Sex (24) 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female 3 <input type="checkbox"/> Unknown			6. Age 25 26 [][][]	
7. Marital status (27-28) 01 <input type="checkbox"/> Married 02 <input type="checkbox"/> Separated 03 <input type="checkbox"/> Widowed 04 <input type="checkbox"/> Divorced 05 <input type="checkbox"/> Common-law 06 <input type="checkbox"/> Single							8. Racial origin (29) 0 <input type="checkbox"/> Not stated 1 <input type="checkbox"/> Caucasian 2 <input type="checkbox"/> Negroid 3 <input type="checkbox"/> Mongoloid 4 <input type="checkbox"/> Canadian Indian 5 <input type="checkbox"/> Eskimo 6 <input type="checkbox"/> Metis							9. Location of offence 30 31 32 [][][]			10. Population of location 33 34 35 36 37 [][][][][] Actual population					
11. Date of offence 38 39 40 41 [][][][] Month Year				12. Clearance of offence (42) 1 <input type="checkbox"/> By charge 2 <input type="checkbox"/> Otherwise 3 <input type="checkbox"/> Suicide 4 <input type="checkbox"/> Unsolved				13. Means of offence (43) 1 <input type="checkbox"/> Shooting 2 <input type="checkbox"/> Beating 3 <input type="checkbox"/> Stabbing 4 <input type="checkbox"/> Strangling 5 <input type="checkbox"/> Suffocating 6 <input type="checkbox"/> Drowning 7 <input type="checkbox"/> Arson 8 <input type="checkbox"/> Other 0 <input type="checkbox"/> Not stated														
14. Apparent motive (44-45) 01 <input type="checkbox"/> Revenge 02 <input type="checkbox"/> Jealousy 03 <input type="checkbox"/> Anger, hatred 04 <input type="checkbox"/> Argument or quarrel 05 <input type="checkbox"/> Robbery, theft, etc. 06 <input type="checkbox"/> Sexual assault or rape 07 <input type="checkbox"/> Self-defence 08 <input type="checkbox"/> Escape 09 <input type="checkbox"/> During commission of other offence 10 <input type="checkbox"/> Inadvertent act 11 <input type="checkbox"/> Other motive 12 <input type="checkbox"/> Mentally ill or mentally retarded (insane) 00 <input type="checkbox"/> Not known																						
15. Extra circumstances (46) 1 <input type="checkbox"/> Drinking 2 <input type="checkbox"/> Drugs 3 <input type="checkbox"/> Gangland 4 <input type="checkbox"/> None				16. Clearance of incident (47) 1 <input type="checkbox"/> By charge 2 <input type="checkbox"/> Otherwise 3 <input type="checkbox"/> By Suicide 4 <input type="checkbox"/> Unsolved				17. Relationship of suspect to victim (48) 1 <input type="checkbox"/> Immediate family 2 <input type="checkbox"/> Kinship 3 <input type="checkbox"/> Common-law 4 <input type="checkbox"/> Non-domestic (other) 5 <input type="checkbox"/> Non-domestic (criminal act) 6 <input type="checkbox"/> Unsolved														
18. Breakdown of relationship (49-51) 01 <input type="checkbox"/> Husband 02 <input type="checkbox"/> Wife 03 <input type="checkbox"/> Father 04 <input type="checkbox"/> Mother 05 <input type="checkbox"/> Son 06 <input type="checkbox"/> Daughter 07 <input type="checkbox"/> Brother (half brother) 08 <input type="checkbox"/> Sister 09 <input type="checkbox"/> Immediate family, other 10 <input type="checkbox"/> Grandfather, grandmother 11 <input type="checkbox"/> Grandson, granddaughter 12 <input type="checkbox"/> Uncle, aunt 13 <input type="checkbox"/> Nephew, niece 14 <input type="checkbox"/> Cousin 15 <input type="checkbox"/> Stepfather, Stepmother 16 <input type="checkbox"/> Stepson, stepdaughter. 17 <input type="checkbox"/> Stepbrother, stepsister 18 <input type="checkbox"/> Father or mother, in-law 19 <input type="checkbox"/> Son or daughter, in-law 20 <input type="checkbox"/> Brother or sister, in-law 21 <input type="checkbox"/> Foster parent 22 <input type="checkbox"/> Foster brother or sister 23 <input type="checkbox"/> Kinship, other 24 <input type="checkbox"/> Common-law husband 25 <input type="checkbox"/> Common-law wife 26 <input type="checkbox"/> Common-law father 27 <input type="checkbox"/> Common-law mother 28 <input type="checkbox"/> Common-law son 29 <input type="checkbox"/> Common-law daughter 30 <input type="checkbox"/> Common-law, other 31 <input type="checkbox"/> No domestic relationship (other) 32 <input type="checkbox"/> No domestic relationship (criminal act) 33 <input type="checkbox"/> Unsolved 34 <input type="checkbox"/> Estranged lovers or love triangles 35 <input type="checkbox"/> Close friends 36 <input type="checkbox"/> Casual acquaintances 37 <input type="checkbox"/> Business relationships																						
19. Type of firearm (51-52) 01 <input type="checkbox"/> Handgun 02 <input type="checkbox"/> Rifle 03 <input type="checkbox"/> Saw/rifle 04 <input type="checkbox"/> Shotgun 05 <input type="checkbox"/> Saw/stutgun 06 <input type="checkbox"/> Unknown 07 <input type="checkbox"/> Not applicable							20. If restricted was it registered (53) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Unknown 4 <input type="checkbox"/> Not applicable															
21. Actual location of offence (54-55) 01 <input type="checkbox"/> Victim's home 02 <input type="checkbox"/> Suspect's home 03 <input type="checkbox"/> Other private place or work-place 04 <input type="checkbox"/> Penal institution-provincial 05 <input type="checkbox"/> Penal institution-federal 06 <input type="checkbox"/> Mental institution 07 <input type="checkbox"/> Public place 08 <input type="checkbox"/> Other 09 <input type="checkbox"/> Unknown																						
22. Initial offence (56-57) 00 <input type="checkbox"/> Unsolved murder 01 <input type="checkbox"/> Murder (Jan.-Sept. 1961) 02 <input type="checkbox"/> Capital (Sept. 1, 1961 - Dec. 1967) 03 <input type="checkbox"/> Capital (Dec. 1967) 04 <input type="checkbox"/> Non-capital (Sept. 1, 1961 - Dec. 1967) 05 <input type="checkbox"/> Non-capital (Dec. 1967) 06 <input type="checkbox"/> Murder - Suicide 07 <input type="checkbox"/> Manslaughter 08 <input type="checkbox"/> Infanticide 09 <input type="checkbox"/> Murder - 1st. degree 10 <input type="checkbox"/> Murder - 2nd. degree						23. Blanks (58-79) 58 59 60 61 62 63 64 65 66 67 68 [][][][][][][][][][][] 69 70 71 72 73 74 75 76 77 78 79 [][][][][][][][][][][]				24. Card code 90 D <input type="checkbox"/> U <input type="checkbox"/> I <input type="checkbox"/>												

FIGURE 1 (continued)

Homicide Return Used From 1961 to 1990



Statistics Canada / Statistique Canada

Canadian Centre for Justice Statistics

Homicide Return

YOUR FILE NUMBER

SEE INSTRUCTIONS ON REVERSE SIDE

Statistics Act R.S.C. 1985, c. S19

CONFIDENTIAL

For Statistics Canada use only			
File Number			
Date Received	Yr.	Calendar Day	Doc. No.

O C C U R R E N C E	1. Offence 1. <input type="checkbox"/> Murder 2. <input type="checkbox"/> Manslaughter 3. <input type="checkbox"/> Infanticide			2. Offence Data Section: _____ Sub Section: () Paragraph: () Criminal Code: _____		
	3. Location of offence City - Town - Village - Rural: _____ County - Township - Municipality: _____ Province - Territory: _____					
	4. Date of offence D M Y		5. Time ____ AM ____ PM		6. Means of offence 1 <input type="checkbox"/> shooting 3 <input type="checkbox"/> stabbing 5 <input type="checkbox"/> suffocating 7 <input type="checkbox"/> arson 0 <input type="checkbox"/> not stated or unknown 2 <input type="checkbox"/> beating 4 <input type="checkbox"/> strangling 6 <input type="checkbox"/> drowning 8 <input type="checkbox"/> other	
7. Apparent motive 1 <input type="checkbox"/> Revenge 4 <input type="checkbox"/> Argument or quarrel 7 <input type="checkbox"/> Self-defence 10 <input type="checkbox"/> Inadvertent act 00 <input type="checkbox"/> Not known 2 <input type="checkbox"/> Jealousy 5 <input type="checkbox"/> Robbery, theft, etc. 8 <input type="checkbox"/> Escape 11 <input type="checkbox"/> Other motive 3 <input type="checkbox"/> Anger, hatred 6 <input type="checkbox"/> Sexual assault or rape 9 <input type="checkbox"/> During commission of other offence 12 <input type="checkbox"/> Mentally ill or mentally retarded (insane)						
8. Present standing of case 1 <input type="checkbox"/> Cleared by charge Specify: _____ 2 <input type="checkbox"/> Warrant issued _____ 3 <input type="checkbox"/> Cleared otherwise _____ 4 <input type="checkbox"/> Not cleared _____			9. Court Procedure Court: _____ Location: _____ Date if known: D M Y 1 <input type="checkbox"/> Arraignment 2 <input type="checkbox"/> Preliminary inquiry 3 <input type="checkbox"/> Trial 4 <input type="checkbox"/> Other: specify: _____			
V I C T I M S	10. Name in full (surname first)		Address - include city, town, etc.		Sex 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female 3 <input type="checkbox"/> Not known	
	Age		Marital Status 1 <input type="checkbox"/> single 4 <input type="checkbox"/> divorced 2 <input type="checkbox"/> married 5 <input type="checkbox"/> separated 3 <input type="checkbox"/> widowed 1 <input type="checkbox"/> common law		Racial Origin	
	1.		2.		3.	
A C C U S E D	11. Name (Surname first)		Address - include city, town, etc.		F.P.S. Number	
	Date of Arrest D M Y		Sex 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female		Date of Birth D M Y	
	Place of Birth		Marital Status 1 <input type="checkbox"/> single 4 <input type="checkbox"/> divorced 2 <input type="checkbox"/> married 5 <input type="checkbox"/> separated 3 <input type="checkbox"/> widowed 1 <input type="checkbox"/> common law		Racial Origin	
Occupation		Education Give grade or degree completed		Relationship to victim		
1.		2.		3.		
12. Circumstances of alleged offence: Give brief details - _____ _____ _____						
Contributing Police Force				Signature		
				Date D M Y		

6. The survey lacked information in relevant areas, particularly the type of influence drugs or alcohol played in a homicide incident, previous criminal records of victims and accused, and previous domestic violence in family related homicides.
7. The system was unable to identify current spouse versus ex-spouse in spousal homicides.
8. The system was unable to distinguish between acquaintances and strangers when a homicide occurred during the commission of another criminal offence, such as sexual assault, arson or robbery.
9. Due to poor coding instructions, some deaths due to arson were coded as such, while others were coded as suffocation.

Problems with the data management system

1. Due to the complete overhaul of the survey questionnaire, it was determined that a completely new system would be required.
2. Because of the relatively small size of the database, a microcomputer-based system, which could be maintained by survey personnel, was developed to increase control and facilitate data retrieval.

THE REDEVELOPED SURVEY

The new questionnaire (Figure 2) was developed to correct the above problems.

1. All information requested on the questionnaire is captured on the system. Conversely, all information captured is specifically requested.
2. The relationship category is expanded and much more specific, particularly in relation to the current status of spouse and degree of closeness between the victim and accused.
3. All information is requested as of the time of the incident.
4. Coding vagueness is mostly eliminated, as all possible responses are available on the form (closed versus the previous open-ended questions).

FIGURE 2



Homicide Survey

Canadian Centre for Justice Statistics
Law Enforcement Program
Homicide Return Used From 1991

Confidential when completed
Version française disponible

Incident Questionnaire

Please provide incident information as of time of the homicide.
For items indicated with an asterisk (*), see instructions on reverse.

Statistics Canada use only

Incident identifier _____

Province Code _____

Police Force Location _____

CMA _____

Data entry date [][][][][][]

Amendment date [][][][][][]

Record status _____

1. Name of force _____		2. CCJS UCR Respondant code _____		3. Incident file number _____	
4. Number of victims _____		5. Number of accused _____		6. Date of incident [][][][][][] <input type="radio"/> Exact <input type="radio"/> Approximate or <input type="radio"/> Unknown	
7. Time of incident (*) A. Exact time _____ : _____ AM H M PM B. If exact time is unknown, estimate the approximate time. <input type="radio"/> Between 00:01 and 4:00 <input type="radio"/> Between 4:01 and 8:00 <input type="radio"/> Between 8:01 and 12:00 <input type="radio"/> Between 12:01 and 16:00 <input type="radio"/> Between 16:01 and 20:00 <input type="radio"/> Between 20:01 and midnight <input type="radio"/> Unknown		8. Specific location of incident (choose one only) <input type="radio"/> Single house <input type="radio"/> Duplex, townhouse, semi-detached house <input type="radio"/> Apartment building <input type="radio"/> Hotel, motel <input type="radio"/> Convenience store <input type="radio"/> Gas bar <input type="radio"/> Gas bar/convenience store <input type="radio"/> Bank, trust company <input type="radio"/> Bar, restaurant <input type="radio"/> Other commercial/corporate place <input type="radio"/> Parking lot <input type="radio"/> School <input type="radio"/> Correctional facility <input type="radio"/> Community correctional facility <input type="radio"/> Public institution <input type="radio"/> Privately owned automobile <input type="radio"/> Taxi <input type="radio"/> Public transportation and/or connected facility <input type="radio"/> Street, road, highway <input type="radio"/> Open area <input type="radio"/> Other — specify _____ <input type="radio"/> Unknown			
9. Location of incident (be as specific as possible; if rural, give section, township and range or distance to nearest town) City-Town-Village _____ County-Township-Rural Municipality _____					
10. Most serious violation <input type="radio"/> Murder — 1st degree <input type="radio"/> Murder — 2nd degree <input type="radio"/> Manslaughter <input type="radio"/> Infanticide <input type="radio"/> Unknown		11. Clearance status (*) <input type="radio"/> Cleared by charge <input type="radio"/> Cleared by suicide <input type="radio"/> Cleared otherwise _____ <input type="radio"/> Not cleared <input type="radio"/> Unknown		12. Clearance date Y M D [][][][][][] or <input type="radio"/> Not applicable <input type="radio"/> Unknown	
13. Evidence that the (an) accused was involved in another offence leading to homicide (precipitating crime)? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown					
14. Description of precipitating crime (check the most serious offence) <input type="radio"/> Not applicable, no precipitating crime <input type="radio"/> Sexual assault <input type="radio"/> Other assault <input type="radio"/> Kidnapping/abduction, etc <input type="radio"/> Robbery — personal <input type="radio"/> Robbery — bank, other commercial institution <input type="radio"/> Other violent crime <input type="radio"/> Arson <input type="radio"/> Break and enter <input type="radio"/> Theft <input type="radio"/> Other property crime <input type="radio"/> Prostitution <input type="radio"/> Other criminal code <input type="radio"/> NCA and/or FDA <input type="radio"/> Other Fed/Prov Statute, Municipal By-Law <input type="radio"/> Unknown					
15. Evidence of drug trafficking or settling of drug related accounts? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		16. Specify drug(s) involved (check all applicable) <input type="radio"/> Not applicable, no drugs <input type="radio"/> Cannabis <input type="radio"/> Cocaine (include crack) <input type="radio"/> Heroin <input type="radio"/> Other NCA drugs _____ <input type="radio"/> Other FDA drugs _____ <input type="radio"/> Suspicion of drugs; type unknown <input type="radio"/> Unknown			
17. Evidence of a gang killing involved in this incident? (*) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		19. Apparent motive related to the incident (*) (check one only) <input type="radio"/> Revenge <input type="radio"/> Jealousy <input type="radio"/> Argument/quarrel <input type="radio"/> Financial or personal gain/protection <input type="radio"/> Bigotry/discrimination <input type="radio"/> During other offence <input type="radio"/> Terrorism/political cause <input type="radio"/> No apparent motive <input type="radio"/> Other — specify _____ <input type="radio"/> Unknown			
18. Evidence that the incident was linked to a politically-motivated terrorist attack? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		Officer Signature _____ Date _____			

FIGURE 2 (continued)



Homicide Survey

Homicide Return Used From 1991

Canadian Centre for
Justice Statistics
Law Enforcement Program

Confidential when completed
Version française disponible

Victim Questionnaire

Please provide victim information as of time of offence for each victim.
For those items indicated with an asterisk (*), see instructions on reverse.

Statistics Canada use only

Incident identifier _____

Province Code _____

Police Force Location _____

CMA _____

Victim Identifier _____

Data entry date [] [] [] [] [] [] [] [] [] []

Amendment date [] [] [] [] [] [] [] [] [] []

Record status _____

1. Incident file number _____	2. Name of victim Surname _____ First Name _____ or <input type="radio"/> Unknown	3. Gender of victim <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Unknown	4. Country of residence of victim <input type="radio"/> Canada <input type="radio"/> Other country <input type="radio"/> United States <input type="radio"/> Unknown
5. Date of birth of victim A. Y M D [] [] [] [] [] [] B. If victim's date of birth is unknown, enter estimated age at time of incident. _____ years or <input type="radio"/> Unborn fetus <input type="radio"/> Less than one year <input type="radio"/> Unknown	6. Marital status of victim <input type="radio"/> Single (never married) <input type="radio"/> Married (legal) <input type="radio"/> Married (common-law) <input type="radio"/> Divorced <input type="radio"/> Separated (legal or informal) <input type="radio"/> Widowed <input type="radio"/> Unknown	7. Ethnic origin of victim (*) <input type="radio"/> 01 European <input type="radio"/> 02 Black <input type="radio"/> 03 East/South East Asian <input type="radio"/> 04 South Asian <input type="radio"/> 05 West Asian/Arab <input type="radio"/> 06 Latin American <input type="radio"/> 07 North American Indian <input type="radio"/> 08 Métis <input type="radio"/> 09 Inuit <input type="radio"/> 10 Other — specify _____ <input type="radio"/> 99 Unknown	
8. Occupation of victim (*) (Be specific) _____ or <input type="radio"/> Not applicable <input type="radio"/> Unknown	9. Employment status of victim (choose first category that applies) <input type="radio"/> 01 Employed (include part-time, casual) <input type="radio"/> 02 Not in labour force — under 15 yrs of age <input type="radio"/> 03 Not in labour force — student <input type="radio"/> 04 Not in labour force — retired <input type="radio"/> 05 Not in labour force — homemaker <input type="radio"/> 06 Not in labour force — other <input type="radio"/> 07 Unemployed <input type="radio"/> 99 Unknown		
10. Occupancy of residence in which homicide took place. <input type="radio"/> 00 Not applicable, homicide did not occur in a residence <input type="radio"/> 01 Joint occupancy by this victim and one or more of the accused <input type="radio"/> 02 Occupied by this victim <input type="radio"/> 03 Occupied by one or more of the accused <input type="radio"/> 04 Neither this victim nor any of the accused were occupants <input type="radio"/> 99 Unknown			
11. Accused-Victim Relationship. Accused was: (if more than one accused, the closest relationship should be scored). <input type="radio"/> 00 Not applicable, no accused <input type="radio"/> 01 Husband (legally married) <input type="radio"/> 02 Common-law husband <input type="radio"/> 03 Separated husband <input type="radio"/> 04 Divorced husband <input type="radio"/> 05 Wife (legally married) <input type="radio"/> 06 Common-law wife <input type="radio"/> 07 Separated wife <input type="radio"/> 08 Divorced wife <input type="radio"/> 09 Father <input type="radio"/> 10 Step-father <input type="radio"/> 11 Mother <input type="radio"/> 12 Step-mother <input type="radio"/> 13 Son <input type="radio"/> 14 Step-son <input type="radio"/> 15 Daughter <input type="radio"/> 16 Step-daughter <input type="radio"/> 17 Brother <input type="radio"/> 18 Sister <input type="radio"/> 19 Other family <input type="radio"/> 20 Boyfriend <input type="radio"/> 21 Girlfriend <input type="radio"/> 22 Extra-marital lover <input type="radio"/> 23 Estranged lover <input type="radio"/> 24 Other intimate relationship <input type="radio"/> 25 Close friend <input type="radio"/> 26 Acquaintance (neighbour) <input type="radio"/> 27 Acquaintance (legal business relationship) <input type="radio"/> 28 Acquaintance (illegal business relationship) <input type="radio"/> 29 Acquaintance (other) <input type="radio"/> 30 Stranger <input type="radio"/> 31 Other, specify _____ <input type="radio"/> 99 Unknown			
12. History of domestic violence (spousal abuse or child/parent battering) involving victim and accused in a family relationship? <input type="radio"/> 00 Not applicable, no accused <input type="radio"/> 01 No family relationship <input type="radio"/> 02 Yes <input type="radio"/> 03 No <input type="radio"/> 99 Unknown	13. Victim's history of prior involvement in criminal activities (check as many as applicable) <input type="radio"/> 00 Not applicable, no criminal record <input type="radio"/> 01 Criminal record involving homicide offences <input type="radio"/> 02 Criminal record involving other violent offences <input type="radio"/> 03 Criminal record involving property offences <input type="radio"/> 04 Criminal record involving drug offences <input type="radio"/> 05 Criminal record involving other CC or Fed Stat offences <input type="radio"/> 99 Unknown		14. Apparent cause of death <input type="radio"/> 01 Shooting <input type="radio"/> 02 Stabbing <input type="radio"/> 03 Beating <input type="radio"/> 04 Strangulation, suffocation, compressing <input type="radio"/> 05 Poisoning or lethal injection <input type="radio"/> 06 Smoke inhalation/burns <input type="radio"/> 07 Other cause, specify _____ <input type="radio"/> 99 Unknown
15. Type of weapon used to kill the victim (check only one) <input type="radio"/> 00 Not applicable, no weapon used <input type="radio"/> 01 Fully automatic firearm <input type="radio"/> 02 Sawed-off rifle/shotgun <input type="radio"/> 03 Handgun <input type="radio"/> 04 Rifle — includes shotgun <input type="radio"/> 05 Other firearm-like weapons <input type="radio"/> 06 Knife <input type="radio"/> 07 Other piercing/cutting instrument <input type="radio"/> 08 Club/blunt instrument <input type="radio"/> 09 Explosives <input type="radio"/> 10 Fire <input type="radio"/> 11 Hands, feet <input type="radio"/> 12 Poison, drugs <input type="radio"/> 13 Other weapon — specify _____ <input type="radio"/> 99 Unknown			



Homicide Survey

FIGURE 2
(continued)

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Canadian Centre for Justice Statistics
Law Enforcement Program

Homicide Return Used From 1991

Statistics Canada use only

Incident identifier _____
 Province Code _____
 Police Force Location _____
 CMA _____
 Accused identifier _____
 Data entry date [][][][][][][][][]
 Amendment date [][][][][][][][][]
 Record status _____

Accused Questionnaire

Please provide accused information as of time of offence for each accused.
For those items indicated with an asterisk (*), see instructions on reverse.

1. Incident file number _____		2. Name of accused Surname _____ First Name _____ or <input type="radio"/> Unknown		3. Gender of accused <input type="radio"/> Male <input type="radio"/> Female	
4. Date of birth of accused A. Y M D [][][][][][][][][] B. If accused's date of birth is unknown, enter estimated age at time of incident. _____ years or <input type="radio"/> Unknown		5. Marital status of accused <input type="radio"/> Single (never married) <input type="radio"/> Separated (legal or informal) <input type="radio"/> Married (legal) <input type="radio"/> Widowed <input type="radio"/> Married (common-law) <input type="radio"/> Unknown <input type="radio"/> Divorced			
6. FPS number of accused [][][][][][][][][] or <input type="radio"/> Unknown		7. Country of residence of accused <input type="radio"/> Canada <input type="radio"/> Other country <input type="radio"/> United States <input type="radio"/> Unknown		8. Occupation of accused (*) (Be specific) _____ or <input type="radio"/> Not applicable <input type="radio"/> Unknown	
9. Employment status of accused <input type="radio"/> Employed (include part-time, casual) <input type="radio"/> Not in labour force — under 15 yrs of age <input type="radio"/> Not in labour force — student <input type="radio"/> Not in labour force — retired <input type="radio"/> Not in labour force — homemaker <input type="radio"/> Not in labour force — other <input type="radio"/> Unemployed <input type="radio"/> Unknown		10. Clearance status of accused <input type="radio"/> Charged or charges recommended <input type="radio"/> Cleared by suicide of accused <input type="radio"/> Cleared otherwise, specify _____ <input type="radio"/> Unknown		11. Ethnic origin of accused (*) <input type="radio"/> European <input type="radio"/> Black <input type="radio"/> East/South East Asian <input type="radio"/> South Asian <input type="radio"/> West Asian/Arab <input type="radio"/> Latin American <input type="radio"/> North American Indian <input type="radio"/> Métis <input type="radio"/> Inuit <input type="radio"/> Other — specify _____ <input type="radio"/> Unknown	
12. Most serious charge laid or recommended against the accused <input type="radio"/> Murder 1st-degree <input type="radio"/> Murder 2nd-degree <input type="radio"/> Manslaughter <input type="radio"/> Infanticide <input type="radio"/> Unknown		13. Secondary charge against the accused <input type="radio"/> Not applicable, no secondary charge <input type="radio"/> Other violent offence <input type="radio"/> Property offence <input type="radio"/> Drug related offence <input type="radio"/> Other Criminal Code offence <input type="radio"/> Other offence _____ <input type="radio"/> Unknown		14. Accused's history of prior involvement in criminal activities (check as many as applicable) <input type="radio"/> Not applicable, no criminal record <input type="radio"/> Criminal record involving homicide offences <input type="radio"/> Criminal record involving other violent offences <input type="radio"/> Criminal record involving property offences <input type="radio"/> Criminal record involving drug offences <input type="radio"/> Criminal record involving other CC or Fed Stat offences <input type="radio"/> Unknown	
15. Indicate the criminal status of the accused at the time of the offence <input type="radio"/> Not applicable, no criminal status <input type="radio"/> Incarcerated <input type="radio"/> Incarcerated, under temporary absence <input type="radio"/> Incarcerated, unlawfully at large		<input type="radio"/> On mandatory supervision <input type="radio"/> On full parole <input type="radio"/> On probation <input type="radio"/> On bail <input type="radio"/> Other _____ <input type="radio"/> Unknown		16. Most serious offence for which this accused was under sentence or bail <input type="radio"/> Not applicable, no criminal status <input type="radio"/> Homicide offence <input type="radio"/> Other violent offence <input type="radio"/> Property offence <input type="radio"/> Drug related offence <input type="radio"/> Other CC offence <input type="radio"/> Other offence <input type="radio"/> Unknown	
17. Alcohol/drug consumption by accused <input type="radio"/> Not applicable, no alcohol/drugs <input type="radio"/> Alcohol consumption <input type="radio"/> Drug consumption <input type="radio"/> Both alcohol and drug consumption <input type="radio"/> Unknown		18. Indicate the type of drug consumed by the accused <input type="radio"/> Not applicable, no drugs <input type="radio"/> Other FDA drugs <input type="radio"/> Cannabis <input type="radio"/> Cocaine include "crack" <input type="radio"/> Evidence of drugs; type unknown <input type="radio"/> Heroin <input type="radio"/> Unknown <input type="radio"/> Other NCA drugs		19. Indicate the blood-alcohol level of the accused _____ or <input type="radio"/> Not applicable <input type="radio"/> Unknown	
Officer Signature _____					Date _____



Homicide Survey

Canadian Centre
for Justice Statistics
Policing Services Program

Homicide Return Used From 1991

Confidential when completed
Version française disponible

Police Officers Killed

Include only those police officers who were killed for reasons related to their occupation, regardless of whether the officer was on or off duty at the time.

Statistics Canada use only

Incident identifier _____

Province Code _____

Police Force Location _____

CMA _____

Date entry date _____

Amendment date _____

Record status _____

1. Incident file number _____		2. Name of victim Surname _____ First name _____	
3. Number of years of service as a police officer _____ or, <input type="radio"/> less than one year		4. Number of years of service with present force _____ or, <input type="radio"/> less than one year	
5. Victim's Rank <input type="radio"/> Officer <input type="radio"/> Non-commissioned officer <input type="radio"/> Constable <input type="radio"/> Special constable <input type="radio"/> Cadet <input type="radio"/> Auxiliary	6. Type of assignment <input type="radio"/> Foot patrol <input type="radio"/> One-officer vehicle <input type="radio"/> Two-officer vehicle <input type="radio"/> Detective <input type="radio"/> Special assignment <input type="radio"/> Undercover <input type="radio"/> Off-duty <input type="radio"/> Other (specify) _____ <input type="radio"/> Unknown		7. Victim in Uniform <input type="radio"/> Yes <input type="radio"/> No
			8. Priority given to dispatch <input type="radio"/> Not dispatched <input type="radio"/> High <input type="radio"/> Low <input type="radio"/> Unknown
9. Involvement of other officers <input type="radio"/> Alone, no assistance requested <input type="radio"/> Alone, assistance requested <input type="radio"/> Assisted by other officers <input type="radio"/> Unknown		10. Did victim use firearms? <input type="radio"/> Yes, fired <input type="radio"/> Yes, drew, displayed <input type="radio"/> No <input type="radio"/> Unknown	
11. Did victim attempt to fire? <input type="radio"/> Not applicable, victim fired <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown		12. Was victim disarmed? <input type="radio"/> Not applicable, victim fired <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	
13. Did other officers use firearms? <input type="radio"/> Yes, fired <input type="radio"/> Yes, drew, displayed <input type="radio"/> No <input type="radio"/> Unknown		14. Was offender shot by a police officer? <input type="radio"/> Not applicable, officer(s) did not shoot <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	
15. Had victim received firearm training? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	16. Victim's firearm <input type="radio"/> Revolver <input type="radio"/> Semi-automatic <input type="radio"/> Rifle <input type="radio"/> Shotgun		17. Did victim carry a back-up weapon? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
18. Type of back-up weapon <input type="radio"/> Not applicable, no backup <input type="radio"/> Firearm <input type="radio"/> Other (specify) _____ <input type="radio"/> Unknown		19. Did victim use back-up weapon? <input type="radio"/> Not applicable, did not have one <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	



Homicide Survey
 Homicide Return Used From 1991
 Canadian Centre for Justice Statistics
 Law Enforcement Program

FIGURE 2 (continued)

Confidential when completed
 Version française disponible

Correctional Workers Killed

Include only those correctional workers who were killed for reasons related to their occupation, regardless of whether the worker was on or off duty at the time. Include all persons working within the confines of a correctional institution.

Statistics Canada use only

Incident identifier _____
 Province Code _____
 Police Force Location _____
 CMA _____
 Data entry date [] [] [] [] [] [] [] []
 Amendment date [] [] [] [] [] [] [] []
 Record status _____

<p>1. Incident file number</p> <p>_____</p>	<p>2. Name of victim</p> <p>Surname _____ First Name _____</p> <p>or <input type="radio"/> Unknown</p>	
<p>3. Number of years of service in correctional field</p> <p>_____ years or <input type="radio"/> Less than one year <input type="radio"/> Unknown</p>	<p>4. Number of years of service with present institution</p> <p>_____ years or <input type="radio"/> Less than one year <input type="radio"/> Unknown</p>	
<p>5. Specific occupation of correctional worker</p> <p><input type="radio"/> Correctional officer (guard) <input type="radio"/> Parole officer <input type="radio"/> Warden, deputy warden, supervisor <input type="radio"/> Nurse/medical staff <input type="radio"/> Educational worker <input type="radio"/> Social or psychiatric worker <input type="radio"/> Volunteer worker <input type="radio"/> Other occupations within institution <input type="radio"/> Unknown</p>		
<p>6. Type of correctional institution</p> <p>Adult correctional institution</p> <p><input type="radio"/> Federal institution — high maximum security <input type="radio"/> Federal institution — maximum security <input type="radio"/> Federal institution — medium <input type="radio"/> Federal institution — minimum <input type="radio"/> Federal community based institution <input type="radio"/> Provincial institution — maximum security <input type="radio"/> Provincial institution — medium <input type="radio"/> Provincial institution — minimum <input type="radio"/> Provincial community based institution</p> <p>Youth correctional institution</p> <p><input type="radio"/> Secure custody <input type="radio"/> Open custody</p> <p><input type="radio"/> Unknown</p>		
<p>7. Source of weapon used to kill correctional worker</p> <p><input type="radio"/> Not applicable, no weapon used <input type="radio"/> Smuggled into institution <input type="radio"/> Fabricated in institution <input type="radio"/> Property of the institution <input type="radio"/> Other — specify _____ <input type="radio"/> Unknown</p>	<p>8. Circumstances surrounding killing of correctional worker</p> <p><input type="radio"/> Escape attempt <input type="radio"/> Riot (disturbance) <input type="radio"/> Hostage taking <input type="radio"/> Transporting prisoner <input type="radio"/> Other — specify _____ <input type="radio"/> Unknown</p>	<p>9. Correctional worker held as hostage?</p> <p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown</p>
<p>Officer Signature _____ Date _____</p>		

5-1100-142.1: 1991-01-25 STC-CCJ-135-04374

THANK YOU FOR YOUR CO-OPERATION

5. The following items felt to be essential were added to the survey questionnaire:
 - history of domestic violence
 - criminal histories of victim/accused
 - criminal status of accused at time of offence
 - victim precipitation
 - more precise influence of drugs/alcohol
6. Additional questionnaires were developed to capture information on homicide incidents involving police officers and correctional workers.

PERSISTENT PROBLEMS

1. As this survey relies on police-reported data, its accuracy and completeness depend to some degree on the following:
 - subjective information such as that supplied for motive, drug/alcohol involvement and influence, and victim precipitation and,
 - the degree of effort that the reporting officer is willing to expend to obtain all required data, such as employment status, occupation, and previous reports of domestic violence.
2. As a result of an emphasis on producing timely information, outcome data became increasingly difficult to obtain. Therefore, despite the usefulness of such information, it was determined that a police-reported survey was not the vehicle to obtain it.
3. Due to controversy over the usefulness of racially based data collected by police and the uses to which it will be put after extensive consultation, it was determined to reduce the ethnic origin variable to the collection of Aboriginal persons and Non-aboriginal persons for both the victim and accused files.
4. Due to the conditions, particularly confidentiality provisions, under which data are collected by Statistics Canada, only aggregate data are presently available, and only at a level that could not identify an individual incident. These confidentiality provisions eliminate the possibility of linking data from the homicide survey with other databases. Measures are presently being taken to develop a useful microdata research file to be used by the justice and research community.

5. In a given incident, only the closest relationship to a given victim is coded.

DISCUSSION AND CONCLUSIONS

Despite past and current limitations, the Canadian homicide database is a very rich source of high quality, historical data that is used extensively by researchers to examine the nature and extent of this, the most violent of all crimes. For an example of some analysis using this database, and for more detailed information about the Canadian homicide dataset, see the annual series of reports, Homicide in Canada: A Statistical Perspective, which were published from 1962 (using 1961 data) through 1988 (using 1987 data) by Statistics Canada. Beginning in 1989, a briefer overview of homicide data highlights has been published annually as bulletins, entitled Juristat Service Bulletin: Homicide in Canada. For example, Homicide in Canada 1991 (a Service Bulletin published in October, 1992) contains data on trends from 1961, geographic comparisons across Canadian provinces and urban areas, data on weapon use trends, location and victim/accused relationship, as well as basic victim and accused characteristics (gender, age, marital status, alcohol or drug use, employment status, previous criminal history). In addition, more detailed reports and bulletins have been published on specific subjects, such as Children as Victims of Violent Crime (Service Bulletin vol. 11, no. 8), and a "Court Outcome Study of the Accused," a study that followed all homicide defendants in one year of cases through the criminal justice system.

THE NATIONAL INCIDENT-BASED REPORTING SYSTEM AND ITS APPLICATIONS TO HOMICIDE RESEARCH

JOHN PATRICK JARVIS

Federal Bureau of Investigation, Uniform Crime Reporting Section

The Uniform Crime Reports (UCR) compiled by the Federal Bureau of Investigation reflect the number of Index crimes that are reported to law enforcement. The UCR tabulations include the offenses of murder, forcible rape, robbery, assault, burglary, larceny, motor vehicle theft, and arson. These data, excepting arson, have been collected since 1930 and, in conjunction with other justice systems data, provide the basis for many substantive studies of crime and criminal justice. In an effort to improve the quality, quantity, and usefulness of this data, in 1986 the FBI initiated an effort to revise the Uniform Crime Reporting System. Since that time, the design, technical specifications, and implementation of a new system for reporting uniform crime data has evolved. This new system is known as the "National Incident-Based Reporting System" (NIBRS). This presentation will focus on the current design and implementation of NIBRS. In this discussion, particular attention will be paid to the contributions that NIBRS data may provide for studies of homicide and other violent crime.

The National Incident-Based Reporting System (NIBRS) was born out of an effort to revise and modernize the Uniform Crime Reporting Program to provide more information on a wider variety of criminal behaviors. NIBRS, like the traditional UCR summary data, will continue to be a measure of the criminal behavior that becomes known to law enforcement. The focus of this effort, however, will no longer be on only the number of offenses and arrests that become known, as was the case in the former summary system. The survey methodology utilized in NIBRS will also remain the same as the census methodology of the UCR summary system, but the units of analysis have been expanded.

NIBRS is designed to collect data from local law enforcement agencies through state reporting programs on selected characteristics of criminal incidents. Offenses are divided into two major groups, Group A and Group B crimes. Group A adds to the 8 crimes presently classified as Part I offenses in the UCR data. Fourteen additional crime categories such as drug and narcotics violations, weapons offenses, and counterfeiting are also reported. These 22 categories are further divided into a total of 46 separate offense classifications (for example, aggravated and other assaults are subdivided). Group B offenses generally consist of less serious crimes and the available information is restricted only to arrests.

The expansion of the units of analysis associated with these incidents, however, does not end with further delineations of offenses. NIBRS also includes information relative to the victims of crime, property loss and recovery associated with crime, characteristics of the offender, the multiplicity of crimes within incidents, and a fuller description of the criminal offense. A complete enumeration of the information that NIBRS entails can be found in the *National Incident Based Reporting System: Volume 1 - Data Collection Guidelines*.

Like the former UCR summary system, NIBRS continues to be a voluntary program. The implementation of NIBRS, however, will be at a pace commensurate with the resources, abilities,

and limitations of the contributing law enforcement agencies. Guidelines for the implementation of NIBRS are found in subsequently-published volumes available from the FBI (Volumes 2, 3, and 4). These publications describe the technical aspects of the NIBRS Program.

In terms of progress to date, the FBI was able to accept NIBRS data as of January 1989, and four state-level UCR Programs (Alabama, Idaho, North Dakota, and South Carolina) are now supplying data in the NIBRS format. An additional 13 state agencies and the Department of Interior have submitted test tapes containing the expanded data. Twenty-seven other programs are in various stages of planning and development, with eight of those expected to submit test tapes during 1992 (*Crime in the United States, 1991*;3).

NIBRS clearly has relevance for researchers who study homicide as well as other crimes. When fully implemented, NIBRS is intended to replace most or all of the current UCR system, including the Supplemental Homicide Reports. All of the summary data currently available through UCR should be reproducible in the NIBRS data, in addition to a variety of data elements related to crime incidents that are not contained in current UCR data. A listing of all of the data elements available in the current design of NIBRS is given in Table 1.

NIBRS is still in its early stages of implementation. Therefore, homicide researchers may find it fruitful to review the current design of NIBRS and become active in making suggestions for future revisions to NIBRS. These suggestions may promote avenues of research that will assist in our understanding of violent criminal behavior. Additionally, some researchers may find opportunities to design studies that could draw upon the NIBRS data and to use NIBRS data to produce comparative studies.

The interest in using NIBRS data for criminal justice research, however, is not limited to improving, complimenting, or extending research on homicide and violent crime. Exploratory applications of NIBRS data to other current theoretical, quantitative, and qualitative studies in criminal justice are clear. Among the research interests that the availability of NIBRS data has spawned are more detailed studies of drug-related criminal behavior, weapons involvement in violent crime, child abuse, and the role of bias motivations in specific criminal incidents. The various applications of criminal incident-based reporting in assisting in the apprehension of criminals and prevention of criminal behavior are also continuing to evolve, but some demonstration projects such as the integration of incident-based data with expert systems technology to develop investigative tools and a planned Bureau of Justice Statistics (BJS) supported project designed to investigate the applications of incident-based data reporting systems to local criminal justice operations are some directions that are underway.

Since the release of the data requirements of NIBRS in July 1988, many practitioners have been inspired to investigate the use of NIBRS in criminal justice research. Among these, the Office of National Drug Control Policy, the National Center for Juvenile Justice, the Center for Disease Control, BJS, and many other research groups have investigated the applications of NIBRS data. This relatively new data collection effort involving incident-based reporting combined with information from other justice system components will likely assist in answering a variety of research and policy questions for criminal justice in the next several years.

Table 1. Variables Available In the National Incident-Based Reporting System

I. **Administrative Segment**

1. ORI Number
2. Incident Number
3. Incident Date/Hour
4. Cleared Exceptionally
5. Exceptional Clearance Date

II. **Offense Segment**

- [1 ORI Number]
- [2 Incident Number]
6. UCR Offense Code
7. Offense Attempted/Completed
8. Offender(s) Suspected of Using
- 8A. Bias Motivation
9. Location Type
10. Number of Premises Entered
11. Method of Entry
12. Type of Criminal Activity
13. Type Weapon/Force Involved

III. **Property Segment**

- [1 ORI Number]
- [2 Incident Number]
14. Type Property Loss/Etc.
15. Property Description
16. Value of Property
17. Date Recovered
18. Number of Stolen Motor Vehicles
19. Number of Recovered Motor Vehicles
20. Suspected Drug Type
21. Estimated Drug Quantity
22. Type Drug Measurement

IV. **Victim Segment**

- [1 ORI Number]
- [2 Incident Number]
23. Victim (Sequence) Number
24. Victim Connected to UCR Offense Code(s)
25. Type (of Victim)
26. Age
27. Sex

28. Race
29. Ethnicity
30. Resident Status

IV. **Victim Segment**

31. Aggravated Assault/Homicide Circumstances
32. Additional Justifiable Homicide Circumstances
33. Type of Injury
34. Offender Number(s) to be Related
35. Relationship(s) of Victim to Offender(s)

V. **Offender Segment**

- [1. ORI Number]
- [2. Incident Number]
36. Offender (Sequence Number)
37. Age
38. Sex
39. Race

VI. **Arrestee Segment**

- [1 ORI Number]
- [2 Incident Number]
40. Arrestee (Sequence Number)
41. Arrest (Transaction) Number
42. Arrest Date
43. Type of Arrest
44. Multiple Clearance Indicator
45. UCR Arrest Offense Code
46. Arrestee was Armed With
47. Age
48. Sex
49. Race
50. Ethnicity
51. Resident Status
52. Disposition of Arrestee Under 18

However, given the few states that have implemented incident-based reporting systems and the continuing effort to field the program, little resources, to date, have been allocated to considering specifications and recommendations for analyzing the relational data that NIBRS contains. In this light, the first suggestions of analyses were derived from a volume entitled *National Incident-Based Reporting System: Select Statistical Information Capabilities*, published by the FBI in August 1991. Subsequent to this publication, the FBI has prepared selections of these tables to demonstrate the scope of analyses that will become available in future FBI publications. Further, the University of Delaware, with support from the Bureau of Justice Assistance, has developed a user's guide for NIBRS that outlines an approach to data analyses using the Statistical Package for Social Sciences (SPSSX). This user's guide is currently under review and the algorithms contained in this guide are being tested for internal use by the FBI. It is anticipated that once the validity and reliability of this analysis package is fully tested, then this user's guide will become publicly available through the Bureau of Justice Assistance.

Analysis of NIBRS data, however, poses several unique challenges. Attention must now be paid to the attributes of criminal incidents, rather than to simply enumerating offenses and arrests. The hierarchy rule for determining the seriousness of offenses within an incident is no longer applicable under NIBRS. NIBRS requires the enumeration of all offenses involved in an incident. As a result the crime rate may be subject to change depending upon the operationalization of the term "crime rate." As noted earlier, the enumeration of victim characteristics for all victims involved in the incident is also a mandatory requirement within NIBRS. The distinction between offense types and the number of offenses may appear to be subtle, yet the empirical enumeration of these variables is likely to be considerably different.

Complicating these challenges are the reliability and validity issues that are yet to be measured by the NIBRS program. Given that NIBRS is a new data collection effort, limited external validity checks are available for establishing the validity of the data reported. The FBI has developed rudimentary conversion algorithms to transform NIBRS data into the usual UCR summary system counts. However, these conversion programs are still under development and testing.

Overall, the incident-based approach to the collection of crime data clearly expands the kinds of information available for studying the causes and correlates of criminal behavior. This additional information provided by incident-based data systems similar to NIBRS will inevitably contribute to new avenues of research in criminal justice. However, the applications, research findings, and policies that may result from the analysis of NIBRS data are still in their infancy. It is anticipated that as NIBRS is more fully implemented, as researchers analyze various aspects of these data, and as the validity, reliability and availability of such data are further established, the real advantages and hardships incurred with analyzing incident-based crime data will become better known. In the mean time, NIBRS is an evolving national crime data system that may provide opportunities for a variety of criminological studies.

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COLLECTING DATA FROM INVESTIGATION FILES: DESCRIPTIONS OF THREE LOS ANGELES GANG HOMICIDE PROJECTS

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Social Science Research Institute
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My purpose in this presentation is to describe the methodology of three homicide research projects. All three were situated in Los Angeles, utilized law enforcement homicide investigation files, and focused upon examining aspects of gang, as compared with nongang, violence. My colleagues and I have reported the findings from these studies in various publications, so I won't report substantive results here. Instead, I'll take advantage of the opportunity presented by this gathering of homicide researchers to address several methodological issues confronted during the process of data collection from homicide investigation files.

Unfortunately, there are relatively few of us engaged in this type of data collection. It is an expensive and time consuming process and there are, most certainly, limitations to the substantive issues that can be addressed with information extracted from law enforcement records. My hope is that as a group, we can develop some common strategies to move us further along the path of producing comparable data from different cities across the country. Some of the difficulties we faced in Los Angeles originated from our interest in gang and drug aspects of homicide, but the issues I'll discuss have implications beyond any particular type of homicide as well as implications for comparisons of homicides with nonlethal violent incidents.

I'll begin with a brief overview of the three Los Angeles data sets, describe the nature of case investigation files and touch upon the process of maintaining relationships with law enforcement officials. I've selected three examples of collection and coding challenges that we confronted in these often complex case materials: establishing opposing victim and offender sides in the incident, the nature of the relationship between participants, and identifying motives or circumstances. I'll conclude with a discussion of concerns about the reliability and validity of the data collection procedures.

DATA DESCRIPTIONS AND ACCESS

Appended to this paper are charts that describe the nature of the data from the three research projects (Figures 1-3). Case numbers, geographic areas and time periods covered, and sampling designs are included. I've listed the types of variables that were coded from the investigation records and noted the file structures.

In all three projects, gang cases were designated by law enforcement gang units utilizing the definitional approach adopted by Los Angeles law enforcement many years ago. This approach includes most incidents with gang involvement on either the victim or the suspect side, rather than limiting the gang designation to cases with clearly established gang motives. The implications of the two definitional approaches have captured our interest for some time (Maxson

and Klein, 1990; Maxson, Klein and Cunningham, 1992). In two of the projects (innovatively labelled #1 and #3 in the appended charts), we gathered detailed gang information from the case files in order to examine the source of the case gang designation and to subdivide the data sets using the more narrow motive criterion.

For those interested in drug aspects of homicide, the second and third projects included an extensive list of drug indicators. We wanted to examine differences in the nature of drug involvement in gang and nongang incidents and therefore, extracted information about participants' drug use and sales, drug aspects of the location, and drug motives for the homicide. In the third project, we included variables representing Paul Goldstein's tripartite framework to permit comparisons with his data from New York. Our comprehensive approach to drug involvement also allowed some comparisons to the St. Louis data collected by Rick Rosenfeld and his colleagues (Maxson, Klein and Cunningham, 1991).

Law enforcement investigation files represent a rich source of data for homicide researchers. In Los Angeles, the case files can extend to several hundred pages, and often include initial and supplemental reports by investigators; witness, informant and suspect statements (sometimes interview transcripts); autopsy reports with toxicological results; arrest record checks; photographs and handwritten notes or journals maintained during the course of the investigation. The volume and type of materials varies with the length and complexity of the investigation; the allocation of resources to homicide investigation may also differ from one department to the next.

We were concerned about differences between the two jurisdictions included in our studies, particularly since one department had a centralized homicide investigation unit while the other allocated this responsibility either to detectives assigned to the individual station areas of the occurrence or to specialized units (for example, gang or child abuse). We conducted a pilot study during the first project and found the contents of the investigation files, relative to the variables of interest, to be quite comparable (Klein, Maxson and Gordon, 1984). On the other hand, the more limited scope of investigatory material commonly available for assaults and robberies constrained our objective of comparing the differences between gang and nongang homicides with those in nonlethal violent incidents.

Another advantage of homicide case files is their availability. These records are retained by the department or in storage facilities for much longer periods of time (sometimes indefinitely), than are the materials for other types of crime. There were a few instances wherein access to the case files was precluded by ongoing legal proceedings, but if the researcher is willing to search investigators' desks and the occasional car trunk and cardboard boxes in basements, the truly missing investigation file is rare. In addition to persistence on the part of the research team, the search process requires cooperation from law enforcement personnel. Collaborative relationships between researchers and law enforcement are tested in all phases of the study.

Obtaining access to homicide investigation files is a continuing process. Initially, we approach the chief executive with our request. A brief description of the topic, the collection requirements and carefully constructed procedures to ensure the confidentiality of records are necessary elements of the request. At this point, research questions may be solicited from law enforcement officials to increase their stake in the collaboration.

We've addressed concerns about the legality of access to records by obtaining minute orders from the presiding judge of the juvenile court, negotiating nonremunerative contracts with a citizen commission associated with one department (access in exchange for a report of the study findings), providing copies of federal requirements for data confidentiality, developing confidentiality agreements that are signed by all research staff and having the staff fingerprinted for arrest checks in federal, state and local record systems. While sometimes we ask ourselves which hoop we will need to jump through next, amenability to the confidentiality concerns of law enforcement officials and their records managers is part and parcel of access negotiations. We've found that these concerns and resistance to research accessibility, particularly to the sensitive material contained in homicide files, can emerge at any point in the data collection process. It's better to confront and resolve these issues at the front end rather than face mid-collection delays.

Armed with a letter of support from the chief executive, we continue the negotiation process through the departmental hierarchy to whomever has possession of the materials necessary for sampling and data collection. The focus of the discussions shifts from access and confidentiality issues to more pragmatic concerns.

Maximum flexibility in scheduling (we've worked night shifts), space for data collectors (sitting in the basement on the occasional cardboard box) and file retrieval usually disarms even the most resistant records manager. To minimize disruptions to departmental personnel, the data collection supervisor is the conduit for all questions about the case file location and contents. By and large, our experiences in data collecting at police stations have been quite positive and the conflicts, few. Many officers seem to enjoy the presence of university students (occasionally, to the detriment of collection efficiency) notwithstanding their bafflement as to why anyone would want to spend so much time reading homicide files!

It has been our practice to provide draft copies of the final report to our law enforcement collaborators. We solicit their reactions and offer to meet with them to discuss the study findings. We maintain continuing relationships by participating in committees, task forces and frequent phone contacts.

DATA COLLECTION ISSUES

The collection and coding of any one of the variables listed in Figures 1 to 3 (appended) could be used as exemplar of methodological issues in homicide data collection. I've selected three that illustrate coding difficulties in the gang arena, but also are applicable to other types of violent incidents.

There are at least two levels of analysis imbedded in every violent incident: the incident and the participant. Our data files are structured accordingly, and characteristics of the participants can be aggregated as incident characteristics. In order to report participant characteristics such as the number of people on the offender versus victim side, mean age of victims or the ethnic composition of the suspects, we needed to develop coding procedures to establish "sides" and to define levels of participation.

Gang cases often involve multiple participants on the opposing sides, and sometimes injuries (occasionally lethal) on both sides. Third parties, not aligned with either of the two major groups, appear as well. Law enforcement usually designates injured individuals as "victims" and the suspected perpetrators as "suspects," but we also encountered such appellations as "victim/suspect" and "subject" (a juvenile suspect or sometimes, a witness). In addition to homicide "suspects," we found "suspects" charged with only assault, robbery, child endangerment, or drug offenses and some very involved participants that were called only "witness."

Because we wanted to compare characteristics of the victims and suspects, we needed to establish sides, sometimes arbitrarily. We counted all people involved in the incident as "participants," but collected demographic information only on those labelled as "suspect" or "victim" (or some combination thereof). These designated participants were coded further as to their role in the homicide versus associated case offenses. In the third project, we added a code to distinguish the perpetrator(s) from other suspects. This coding scheme created the maximum amount of flexibility for our analysis, allowing us to look at characteristics of the participants in different clusters.

Levels of participation and establishing sides became issues in coding the nature of the relationship between the opposing parties. In the first project, we developed coding schemes for two dimensions of relationship, personal and gang. Priority was given to the closest relationship between any two participants on opposing sides. Our focus on gangs led us to exclude the numerous gradations of familial and romantic attachments often included in other studies. Instead, we coded for clear prior personal relationship, minimal familiarity, and no known relationship (excluding body found and other cases where there was no information about the suspect(s) available to the detectives). Later on, we added a category for third party associations including incidents with an innocent bystander victim associated with the intended victim.

The gang dimension of the relationship was intended to capture those situations wherein a gang rather than any particular individual, is the target. The "drive-by" shooting of a gang hangout or neighborhood, sometimes resulting in victims not affiliated with gangs, would exemplify this type of relationship. Sometimes a victim becomes a target only by virtue of clothing, incidental gang behavior or location; the lack of a prior personal relationship does not preclude a gang relationship that is quite relevant to the circumstances of the homicide.

In the third project, we added a variable to capture the relationship between the homicide victim and the identified perpetrator. In gang cases, the participant who becomes the homicide victim is often a matter of chance rather than design, so the closest relationship between any two participants is probably the better indicator.

Finally, the area of motive or case circumstances has challenged our collection efforts. Our primary interest has been in gang motives and to a lesser extent, drug motives. The challenge is to sort out these elements as "causes" of the incident versus background or context to the incident. Ongoing conflict between gangs might be context for an incident, but the escalated argument is over a common love interest. A robbery may be pursued for personal gain or under pressure for status in the gang, perhaps with a gang companion as a lookout or with a weapon traded among several members of the gang. Is the robbery of a drug dealer drug-motivated if the intent is to acquire only cash and the target could have just as easily been a liquor store clerk?

In the case investigation files, we found multiple motives and conflicting statements about motives. We found speculation by witnesses, informants and homicide investigators, and sometimes the clear, unambiguous confession of the perpetrator. And in every project, we have the data collector questions about what to do with obvious lies.

Our general approach to these issues is to capture any statements or mentions of motives and reflect confirmation as the clear "cause" of the incident separately. Again, this allows us greater flexibility in the analysis where final decisions can be made in the context of other variables.

These three areas of coding were arguably the most difficult. We've gained experience over the three projects, refined and collapsed coding categories, and given up on some variables. An underlying theme of the above discussion of all three areas is the amount of interpretation and judgement required of the data collection staff. This brings me to some final remarks about the reliability of data collection from homicide investigation files.

RELIABILITY

The advice I would offer to those of you that are planning to embark upon this type of data collection is to hire a compulsive operational supervisor! The careful construction of forms and instruction manuals and thorough training of data collectors are necessary but not sufficient to master the ambiguities presented by a complex homicide investigation. In our projects, the data collection process is supervised closely, with all coding judgments filtered through the highly experienced team leader. Coding decisions are documented thoroughly in the field, then reviewed and discussed with other senior members of the project staff for concordance with conceptual approaches and consistency. The decision logs have proved valuable for maintaining uniform coding decisions across the three projects.

For all collection and coding operations, we select a random sample of cases for a duplicate pass to assess inter-coder reliability. The close field supervision usually pays off with high reliability rates and sometimes, we're pleasantly surprised about items that have generated a lot of staff discussion. At times, information derived from the reliability analysis has informed our analysis (for example, collapsing problematic codes into more general categories) and interpretation of the results.

Clearly, the validity of the data collected in these three projects depends upon the type and quality of the information contained in the homicide investigation files. In contrast with Goldstein's approach, we've avoided supplementing this information with direct contact with the case detectives, due to concerns about recall and retrospective interpretation. Instead, we place most of our eggs in a closely woven data collection basket, relying on careful supervision and systematic procedures to produce the best reflection of the information available to us. Of course, there are limitations to this approach, but the coherence of gang versus nongang patterns in homicide revealed by the data in these three projects provides some validity to our method.

FIGURE 1

L. A. HOMICIDE (Project 1)

Number of Cases: LASD - 226 gang; 200 nongang
LAPD - 135 gang; 148 nongang

Source: Police investigation case files

Geographic Areas: LASD - 19 stations (entire jurisdiction)
LAPD - 3 stations (77th, Newton, Hollenbeck)

Time Period: LASD - 1/1/78 to 6/30/82
LAPD - 1979 to 1981

Sampling Strategy: All incidents designated as "gang-involved" by law enforcement gang units using standard criteria, common to both jurisdictions. "Nongang" homicides were selected randomly, but stratified by the proportion of gang homicides per station.

Sample Exclusions: All incidents that did not have at least one named suspect between the ages of 10 and 30 years; officer involved (as victim or shooter of an assailant); a few cases assigned to special units in LAPD; investigation files not available. Exclusions in nongang sample were replaced; ineligible gang cases were dropped without replacement.

Variables:

- Incident - date and time of occurrence, setting, automobile involvement, number and type of weapons, associated case offenses, number of participants on victim's and suspect's side, relationship between victim's and suspect's side (both personal and gang dimensions), other victim injuries, threat/fear of retaliation, gang unit involvement, number of arrests, interviews (juvenile/adult; witnesses/informants), witnesses' addresses obtained, pages of investigative material.
- Gang - statements of gang-relatedness, presence of gang motives (nine types), gang affiliation (specific identification or behavioral evidence; participants and nonparticipants involved in the investigation), gang references to physical setting, gang terminology or physical evidence.
- Drug - None
- Participant - Age, ethnicity, gender, gang affiliation and police charges on all suspects and victims (includes related offenses).

File Structure: LASD incident - 426 cases
LASD participant - 1,141 individuals
LAPD incident - 283 cases
LAPD participant - 700 individuals

Availability: From P.I.s

FIGURE 2

L. A. HOMICIDE (Project 2)

Number of Cases: 123 gang incidents; 136 nongang incidents

Source: Police investigation case files

Geographic Areas: 2 LASD stations (Lennox, Lynwood); 3 LAPD stations (77th SE, SW). All 5 stations selected as high gang and high drug sales areas in South Central L.A.

Time Period: 1984-85

Sampling Strategy: 136 incidents were designated as "gang-involved" by law enforcement gang units using standard criteria, common to both jurisdictions. All gang cases sample. 136 cases were sampled randomly from the remaining 477 "nongang" incidents.

Sample Exclusions: Officer-involved (as victim or shooter of an assailant); a few cases assigned to special units in LAPD; investigation files not available. Fourteen nongang cases replaced; thirteen gang cases dropped without replacement.

Variables: Incident - date, setting, presence of firearms, number of participants on suspect side.
Gang - None beyond sample group identification.
Drug - Use and distributive paraphernalia, drugs physically discovered in the investigation (including autopsy), use of sales involvement of primary participants, presence of drug motives (six types), drug aspects of location. All were coded relative to type of drug (rock, other cocaine, other drug).
Participant - Age, ethnicity and gender on all suspects and victims of the homicide event (not related offenses).

File Structure: Incident - 259 cases
Participant - 1,349 individuals

Availability: National Archive of Criminal Justice Data

FIGURE 3

L. A. HOMICIDE (Project 3)

Number of Cases: 201 gang incidents; 201 nongang incidents

Source: Police investigation case files

Geographic Areas: 2 LASD stations (Lennox, Lynwood); 3 LAPD stations (77th, SE, SW). All 5 stations selected as high gang and high drug sales areas in South Central L.A.

Time Period: 1988-1989

Sampling Strategy: Random sample of 200 from 328 incidents designated as "gang-involved" by law enforcement gang units using standard criteria, common to both jurisdictions. Another 200 cases were sampled randomly from the remaining 422 "nongang" homicide incidents.

Sample Exclusions: Officer-involved (as victim or shooter of an assailant); a few cases assigned to special units in LAPD; investigation files not available. All dropped cases were replaced by random selection from the nonsampled population.

Variables:

- Incident - date and time of occurrence, setting, automobile involvement, number and type of weapons, associated case offenses, number of participants on victim's and suspect's side, relationship between victim and offender (and between participants on either side), other victim injuries, threat/fear of retaliation, innocent bystander, escalated altercation, domestic relationship.
- Gang - presence of gang motives (5 types; suggested/confirmed), same gang on both sides.
- Drug - Use and distributive paraphernalia, drugs physically discovered in the investigation (including autopsy), use or sales involvement of primary participants, presence of drug motives (six types), drug aspects of location. All were coded relative to type of drug (rock, other cocaine, other drug).
- Participant - Age, ethnicity, gender, and gang affiliation on all suspects and victims (includes related offenses).

File Structure:

- Incident -402 cases. Secondary analyses concerning effects of differential approaches to gang definitions produced additional data sets comprising the 128 identified gang motive cases and 128 nongang cases, sampled randomly from a reconstituted population of the remaining homicides.
- Participant - 1,395 individuals.

Availability: Not yet.

PROJECT PUBLICATIONS AND REPORTS

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OVERVIEW OF THE CHICAGO HOMICIDE PROJECT

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The Chicago Homicide Dataset, one of the largest and most detailed datasets on violence ever collected in the United States, contains information on every homicide in police records from 1965 to 1990 -- over 200 variables and nearly 20,000 homicides. This unique set of data has been collected with the close cooperation of the Chicago Police Department over many years by Carolyn Rebecca Block of the Illinois Criminal Justice Information Authority and Richard L. Block of Loyola University Chicago. Researchers from the University of Chicago Law School and MacMaster University also have contributed to data collection, and numerous researchers have used the data for policy analysis or causal modeling.

Since 1979, the Chicago Homicide Dataset has been maintained by the Illinois Criminal Justice Information Authority. The 1965 through 1981 dataset, which includes 12,875 homicides, is available in the National Archive of Criminal Justice Data at the University of Michigan. Support for the Chicago Homicide Project has been provided over the years by Loyola University Chicago and the Illinois Criminal Justice Information Authority, under grants from the National Institute of Justice, the Ford Foundation, the Bureau of Justice Statistics, the National Institute of Mental Health, and the Harry Frank Guggenheim Foundation.

HISTORY

The establishment of the Chicago Homicide Dataset, and the collection of data from 1965 to 1978, were carried out over several years under grants from the Ford Foundation and the National Institute of Mental Health to the University of Chicago Law School (Frank Zimring and Richard Block). In 1984, under a grant from the Bureau of Justice Statistics to the Illinois Criminal Justice Information Authority (project director: Carolyn Rebecca Block), three years were added to the data (1979 to 1981), the years from 1971 to 1978 were updated, and a comprehensive codebook was published as a guide to the total dataset (Chicago Homicide Codebook by Carolyn Rebecca Block, Illinois Criminal Justice Information Authority, 1984, revised 1987). However, data in the years 1965 to 1970 were not updated or cleaned at that time.

In 1989 and 1990, supported by a grant from the Harry Frank Guggenheim Foundation to MacMaster University (co-directors: Margo Wilson, Martin Daly, Richard Block and Carolyn Block), data from 1982 through 1989 were added to the file, and cases from 1965 to 1981 were updated. In addition, a number of variables -- such as the Drug Use and Drug-Related variables, specific circumstances of domestic altercations, and variables indicating Expressive versus Instrumental motive -- were tested, checked for coder reliability, and coded or recoded throughout the 25 years.

In 1991 and 1992, under a grant from the National Institute of Justice (NIJ) to Loyola University of Chicago (co-directors: Richard Block and Carolyn Rebecca Block), the entire 25 year/18,500 case dataset (1965 to 1989) was cleaned, all cases were geocoded for computer mapping, and the entire dataset was combined from the earlier individual year files into one large file.

Currently, documentation and a completely revised codebook are being completed, 1990 is being added to the dataset, and a special analysis of street gang-related homicide is being written for an NIJ Bulletin. In addition, under a grant from the Bureau of Justice Statistics to the Illinois Criminal Justice Information Authority, the Chicago Homicide Project is combining lethal with nonlethal and other social indicator data, to develop an automated Early Warning System for law enforcement, which will identify potential neighborhood crisis areas, areas that are at high risk for suffering a "spurt" of serious street gang-related violence and homicide. This early warning system will be based on a statistical model, which consolidates spatial information obtained from a variety of sources, and uses automated hot spot identification and other geographic statistics as tools to target crisis neighborhoods. The project will then organize and document the early warning system and the "geo-archive" database that supports it, so that it will serve as a prototype for application in communities throughout the nation.

DATA AND DATA COLLECTION

The current Chicago Homicide Dataset contains over 200 variables (some of them recodes of other variables) and almost 20,000 cases. Data include all homicide cases known to the Chicago police department and occurring in Chicago from 1965 to 1990, except justifiable homicides. The source of the data is police investigation files; based on the preponderance of the evidence, the police determined that a homicide occurred in these incidents. Victims and offenders are those identified by police investigation. Victims are the people who died. Offenders do not include all known suspects, but only those suspects for whom the police found probable cause that they had committed the homicide. However, many offenders in the database were not arrested. This happens with exceptional clearances (the offender died, fled the country or was otherwise unavailable for prosecution). It is not uncommon for offenders to commit suicide during the incident, to be killed in the incident, or to die before being prosecuted.¹

In general, these homicides are defined at the police investigation stage, without regard to later criminal justice decisions (although some dispositional data are included in the dataset). The standard of proof required by the courts is not the same as the "preponderance of evidence" standard required at the police level. For example, in the 1960s, police investigation determined that an arson homicide, in which 14 elderly people in a nursing home were killed, was perpetrated by a nurse's aide. Although there was enough evidence to prosecute the aide, she was not convicted. These 14 victims are included in the Chicago Homicide Dataset, with the aide as the offender, because by police standards of proof a murder occurred committed by the aide.

¹Preliminary analysis shows that the death rate of homicide offenders is many times higher than the expected death rate for comparable age/gender/race groups. Murder/suicides are particularly frequent for white male offenders in domestic homicides. For a copy of this analysis, please contact the senior author.

The ultimate source of all information for all years is the Murder Analysis Report (MAR), a one-page (front and back) summary of each homicide, maintained since 1965 by the Crime Analysis Unit of the Chicago Police Department. In addition, in cases where there is some ambiguity in the MAR or a question arises, the research staff consults with officers in the Crime Analysis Unit as to the correct codes and definitions. The complete investigation file is available in the Crime Analysis Unit for current years, and is consulted when necessary to clarify details. Since 1982, the CPD has maintained data on murder cases in an automated system accessed by the "RAMIS" mainframe database management program. Beginning in 1982, data collection has begun by downloading RAMIS information to DBF (Dbase) files, which are then converted into SPSS DataEntry files. Using DataEntry, coders check the RAMIS information against the MAR for each case, and add variables not already coded in RAMIS (see discussion below). All coding and data entry are carried out in the Crime Analysis Unit.

Data are organized in order of date of occurrence, although date of death and date of police booking of the case are also available on the dataset. CPD Crime Analysis Unit data are organized by booking date. Because cases may become known to the police months or even years after the initial occurrence, or may be delayed because of a lengthy investigation or because the victim died some time after the attack, monthly or yearly totals based on the Chicago Homicide Dataset may not equal official police department totals based on booking date. Also because of the frequency of long investigations, we usually do not begin data collection for a year until at least June of the following year (depending on funding). When data for a new year are collected we also update the information on any earlier case that has been cleared in the interim. Updating for cases booked in a given year will increase the number of dataset cases occurring in previous years.² Therefore, the most recent years in the dataset should be considered preliminary.

After data collection in the Crime Analysis Unit, the dataset is geocoded, which means that each incident is located by longitude and latitude coordinates. The geocoding uses a Chicago street file, based on the Census TIGER file, but with numerous edits and corrections added by Richard Block to increase the accuracy of the file. All but four of the almost 20,000 cases from 1965 to 1990 have been successfully geocoded. Although, because of privacy constraints, the address data will not be available in the newly archived dataset, Census tract identifications will be included for each case.

Coders are supervised closely and trained continuously. The research staff (usually Richard and Carolyn Block) chooses cases randomly for reliability coding, and runs standard inter-variable consistency checks on the data. For example, if the victim's relationship is "son" the victim should be male and younger than the offender; most codes of "drug business motive" are instrumental homicides; if the victim was "killed while committing a predatory crime" the specific crime should be coded under Causative Factor; if "victim is a prostitute" under Causative Factor, then the victim's relationship should be prostitute and the offender's relationship is probably pimp, client or business partner. The research staff also checks for an unusual frequency of codes such as "general altercation," which an inattentive coder may use to "dump" cases, to assure that no other information is available, for police codes such as "sexual

²Four cases booked in 1965 actually occurred in 1964. They remain in the dataset, but are usually excluded from analysis.

perversion" or U.U.W. (Unlawful Use of Weapon), for which more specific detail must always be gathered (see below), and for a coder's neglect of completing the "remarks" section in situations when remarks are required (more than five offenders, id numbers of other related cases, explanations of "probable drug involvement" and so on). Staff and coders then meet periodically to discuss and clarify the results of these coder reliability analyses, and changes may be made in the coding instructions or additional categories added to variables as a result.

Unit of analysis: victim, offender, incident

Three types of risk need to be considered in the analysis of homicide -- the risk of becoming a victim, the risk of becoming an offender, and the risk of a given type of victim being killed by a given type of offender. The first is measured by victimization rates, and the second, by offender participation rates. Measuring the third (who is killing whom) involves calculating two different types of risk -- the likelihood that given offender groups are responsible for murders of various groups of victims versus the types of victims chosen by various groups of offenders. For example, we can ask, "What proportion of the murders of females are accounted for by male offenders?" or "What proportion of the victims of male offenders are female?" Because the denominators differ, the answer to these two types of question will not necessarily be the same.

In addition, there is a difference between offender participation rates (the risk of becoming an offender) and offender damage rates (the number of people murdered by a particular group of offenders). Because some offenders murder multiple victims and some victims are murdered by multiple offenders, participation rates of some groups (for example, Latino young men) may be relatively high, while the rate of homicides attributed to that group is lower.

A dataset organized for the most efficient analysis of victim rates will be cumbersome in producing offender participation rates, and vice versa. However, both perspectives are vitally important and should not be ignored. The risk of becoming a victim and the risk of becoming an offender are not necessarily the same for a given individual (for example, women and girls are at a higher risk of becoming a victim than of becoming an offender, while the opposite is true for men and boys). Further, the difference in these risks depends upon the Homicide Syndrome.³ In many kinds of expressive violence, the people who are at highest risk of becoming a victim and the people who are at the highest risk of becoming an offender may be the same people. In instrumental violence, the target tends to be rationally chosen by criteria such as vulnerability or potential gain, and as a result those who are at risk of becoming a victim and those who are at risk of becoming an offender may be different groups. The question of who is killing whom may be immaterial for expressive violence but vital for understanding instrumental violence. If we are to understand the process of violence and develop successful strategies for intervention, we must first accurately describe risk patterns.

The archived 1965-to-1981 dataset is victim level. It includes demographic data on up to four offenders, and victim-offender relationship data on the first offender. The current version (1965-to-1990) is also victim level, but includes demographic variables and relationship for up to five offenders on each victim record, and information on additional offenders in the "Remarks."

³For a definition of Homicide Syndrome, see R. Block and C. R. Block (1992).

Also, when the entire dataset was cleaned, we updated and checked the identification links between incident, victim and offender, and systematized the ID coding (this varies from year to year in the earlier archived dataset). Thus, we can link multiple victims and multiple offenders by incident. This allows us to calculate all of the types of risk outlined above (for examples, see C. R. Block, 1992). However, it is still cumbersome to calculate offender-based rates or to conduct incident-based analysis with a victim level file. Therefore, we plan to construct a separate offender level file, which includes one record per offender, deleting the duplicate records stemming from multiple-victim incidents, and including most of the victim and incident variables as well as offender information.

Consistency in definitions over time

The Chicago Homicide Dataset contains data compiled over many years, with some changes in definition over time. However, every effort has been made to produce key variables in which the definitions and interpretation are consistent over the entire time span. Some variables such as weapon, relationship, and causative factor or altercation have two sets of codes, the code used in the original 1965-1981 archive and the one used in the Crime Analysis Unit's "RAMIS" database (edited and expanded by the Chicago Homicide Project). In general, the categories in the two schemes are directly comparable, though the code numbers may differ. For example, the RAMIS weapon code for "22 caliber automatic" is A22, and the original 1965-to-1981 code for the same thing is "11". However, to avoid confusion and make it easier to use the final archived 1965-to-1990 version, in the recent cleaning and updating process, we not only cleaned the original codes for these variables back to 1965 but also added the new RAMIS-coded variable to 1965-to-1981 cases as well as to the recent years.

Motive, circumstance, and situation

This section outlines the variables and coding instructions developed and tested over the years for motive, circumstance and situation. In the early years, coding was based on a short check-list on the MAR, which was expanded in 1982 to a detailed variable, CAUSFACT. In this section, we describe all of the variables that are still part of the current dataset, and include excerpts from the codebook for clarification.

Many of these variables required extensive care in coder supervision and training, reliability checking, and the development of coding instructions. An important overriding coding instruction, particularly applicable to motive and circumstance variables but also applying to relationship, is to code only those circumstances or relationships that were relevant to the incident. For example, if the victim is a member of a street gang, but the incident did not involve a street gang motive, then the coder should indicate the actual motive (love triangle or strongarm robbery, for example), and the corresponding relationship (boyfriend/girlfriend, for example). Similarly, cases in which known drug dealers or prostitutes were killed should be coded according to the actual motive of the incident. In addition however, coders are asked to record "contextual" information, such as that the victim was a known drug dealer, or the gang affiliation of the victim, in the Remarks.

The MARs (Murder Analysis Reports) maintained by the CPD Crime Analysis Unit have contained information on a number of motive or circumstance variables. Some of these, such as "teen gang altercation," armed robbery, strongarm robbery, burglary, child abuse, UUW (unlawful use of a weapon) and rape or sexual assault, have appeared on the MAR since 1965 as codes to be checked by the investigating officer (child abuse was added in 1967). In coding the MARs for the original 1965-to-1981 archive, we relied heavily on these police codes, as well as on the narrative and any other collaborative information in the files.

Excerpts from the current Chicago Homicide Codebook for robbery and burglary show that the definition and meaning of these variables are fairly straightforward. Coders do have to be trained to differentiate robbery from burglary, and strongarm from armed robbery.

MOTVROB: MOTIVE ROBBERY?

Instructions: Code according to MAR.

- | | |
|---|--|
| 1 STRONG ARM (no weapon) | 2 ARMED (with any weapon, including |
| 3 VICTIM IS A ROBBER (eg:
robber kills a robber) | firearm, knife, blunt instrument,
etc.) |
| 0 ROBBERY NOT INVOLVED | |

MOTVBURG: BURGLARY MOTIVE?

Instructions: Code according to MAR.

- | | |
|---|---|
| 1 BURGLARY INVOLVED
(Causative factor 200) | 2 VICTIM IS A BURGLAR
(Causative factor 805) |
| 0 BURGLARY NOT INVOLVED | |

Since 1965, the MAR has included a "sexual perversion" motive for police investigators to check, and since 1982, "sexual perversion" has been one of the CAUSFACT codes. Analysis of these cases indicates that the definition and usage has always been extremely ambiguous. General coder instructions are to determine the exact situation in all "sexual perversion" cases, and code appropriately. See the notes to the MOTVSEX excerpt, below.

MOTVSEX: WAS RAPE, SEXUAL ASSAULT OR PROSTITUTION INVOLVED?

Instructions: Code according to MAR. Code "sexual assault" if a male or female victim was killed during a sexual assault or an attempted sexual assault.

- 1 SEXUAL ASSAULT OF A MALE⁴
- 2 SEXUAL ASSAULT OF A FEMALE⁵
- 3 INVOLVING HOMOSEXUALITY⁶
- 4 INVOLVING PROSTITUTION⁷
- 9 UNDETERMINED -- some evidence of sexual assault, but unclear
- 0 NOT INVOLVED

When the Crime Analysis Unit automated the murder analysis reports, they added a general "CAUSFACT" variable, which greatly expanded the short list of motives used previously. The coding for the current version of the Chicago Homicide Dataset uses both CAUSFACT and the original motive codes, edits and expands the CAUSFACT codes, and adds a variable for a secondary causative factor (CAUSFAC2). Although the original motive and circumstance variables are still being collected in the current dataset, CAUSFACT is an important source of information. The following excerpt from the codebook describes the specific codes and coding instructions.

⁴If MAR indicates "sexual perversion," but the incident involved sexual assault or attempted sexual assault of a male, use this code.

⁵If MAR indicates "sexual perversion," but the incident involved sexual assault or attempted sexual assault of a female, use this code.

⁶Cases coded "sexual perversion" in the MAR by police investigators, which cannot be determined to have involved sexual assault of a male or female, should be coded here.

⁷A rape or sexual assault of a prostitute should be coded 1 or 2 above, as appropriate.

CAUSFACT: TYPE OF ALTERCATION

Instructions: Use codes given in the MAR, but add detail according to total information available. Code according to the circumstance or motive that is relevant to the specific homicide incident. For example, "800" codes should be used only if the victim's occupation as a robber, cartage thief, and so on, was part of the cause of the homicide incident. If in doubt, use the MAR code. See Notes.

100 ALTERCATION OVER CHILDREN ⁸	105 ALTERCATION OVER GAMBLING
110 GENERAL DOMESTIC ALTERCATION	115 ALTERCATION OVER LIQUOR ⁹
117 ALTERCATION OVER DRUGS	120 ALTERCATION OVER MONEY ¹⁰
125 ALTERCATION OVER POLITICS	130 RACIAL/HATE ALTERCATION ¹¹
135 ALTERCATION OVER SEX ¹²	137 SEXUAL JEALOUSY ¹³
140 TEEN GANG ALTERCATION ¹⁴	
145 ALTERCATION OVER (ALLEGED) THEFT ¹⁵	
147 DRIVE-BY SHOOTING ¹⁶	150 TRAFFIC ALTERCATION ¹⁷
155 LOVE TRIANGLE ALTERCATION ¹⁸	157 SEXUAL RIVALRY ¹⁹
160 OTHER ALTERCATION	
167 ALTERCATION OVER DESERTION OR TERMINATING A RELATIONSHIP	
200 BURGLARY	300 ARMED ROBBERY
305 STRONGARM ROBBERY	400 SEXUAL ASSAULT OF WOMEN
405 SEXUAL PERVERSION ²⁰	

⁸This indicates a fight between adults about the children. In cases where the child was the victim, code 915 (child abuse), or other appropriate code.

⁹A fight or argument over drinking. Whether the participants have been drinking is not relevant to this code.

¹⁰This does not include robbery or attempted robbery.

¹¹Definition of hate crime: member(s) of one group attack member(s) of another group for no other reason than the group membership. Eg: gay bashing, racial attacks, religious or ethnic attacks. If a hate crime was the only motive, code it as the first causative factor. If the incident was a fight, brawl or argument between friends or acquaintances, but it was precipitated by a racial slur, code "Hate crime" under CAUSFAC2.

¹²Do not code rape or sexual assault here. If it really is an "argument" or altercation over sex, determine if the actual issue was a love triangle, sexual jealousy or sexual rivalry, and code accordingly.

¹³The offender is jealous of real or imagined infidelity. Homosexual relationships included.

¹⁴If the MAR code is "teen gang altercation," never change it. You may, however, indicate another second causative factor.

¹⁵This is an argument centered on an accusation of a theft. If a thief is killed in the act, code instead 905 (attempted theft) or other appropriate code.

¹⁶Shooting from a moving vehicle. If there is evidence that the motive was street gang-related or some other motive, CAUSFACT should be coded the appropriate code (eg: 140), and CAUSFAC2 should be coded 147.

¹⁷An altercation on the highway about right-of-way, being cut off, etc. Not a drive-by shooting.

¹⁸A triangle altercation differs from sexual rivalry and sexual jealousy in that there is clear evidence that infidelity was involved (not just the offender's perception). Includes homosexual as well as heterosexual triangles.

¹⁹Two people competing for or arguing over the affections of a third person, homosexual relationships included.

²⁰"Sexual Perversion" is an MAR code used since 1965. In cases of male-on-male rape or sexual assault, including attempts, code MOTVSEX=1 (sexual assault of a male). In cases of same-sex lovers or acquaintances, code the cause of the altercation (eg: 167, altercation over terminating relationship), and also code the appropriate

500 U.U.W. (INCLUDING CARELESS USE OF A WEAPON)²¹

600 UNDETERMINED

700 ORGANIZED CRIME	800 VICTIM IS AN ARSONIST
805 VICTIM IS A BURGLAR	810 VICTIM IS A CARTAGE THIEF
815 VICTIM RUNS A CHOP SHOP	820 VICTIM IS A COUNTERFEITER
825 VICTIM IS A FENCE	830 VICTIM IS A GAMBLER
835 VICTIM IS A LOAN SHARK	840 VICTIM IS DEALING NARCOTICS
845 VICTIM IS A PROSTITUTE	846 VICTIM IS A RAPIST
850 VICTIM IS A ROBBER	

900 ARSON VICTIM ²²	905 ATTEMPTED THEFT
910 BLACKMAIL (EXTORTION)	
915 CHILD ABUSE (BATTERED CHILD)	
917 MEDICAL TREATMENT ²³	
920 DECEPTIVE PRACTICE	925 VICTIM KILLED BY FLEEING FELON
930 INSURANCE FRAUD	935 VICTIM INTERCEDING IN A FELONY
940 MENTAL DISORDER	945 MERCY KILLING
950 RANSOM	955 SUICIDE PACT
960 RETALIATION	965 CONTRACT KILLING

Expressive versus instrumental motive

Expressive violence, whether the outcome is lethal or not, is violence that begins as an interpersonal confrontation; instrumental lethal or nonlethal violence begins as a predatory attack. In an expressive violent confrontation, violence or injury is the assailant's immediate and primary goal; other motives are secondary. In contrast, the primary purpose of an act of instrumental violence is not to hurt, injure or kill, but to acquire money or property. The expressive/instrumental extremes are "ideal types" that seldom occur in their pure form. Nevertheless, the degree to which either the expressive or the instrumental motive predominates illuminates much that seems paradoxical in lethal violence data. An increasing body of evidence suggests that expressive and instrumental violent confrontations follow distinctive patterns. They vary differently over time and across space, and relate differently to the descriptive and explanatory variables usually found in studies of violence. It is not surprising, then, that research studies that fail to

"RELATION" category.

²¹Random shootings, for example, at a schoolyard or into a crowd. If there is evidence that the motive was street gang-related or some other motive, CAUSFACT should be coded the appropriate code (eg: 140), and CAUSFAC2 should be coded 500.

²²In an arson murder, the second causative factor should always be "900" (arson). Use the first causative factor to code the kind of situation that led to the arson (eg: some altercation, burglary, insurance fraud, etc.).

²³For example: malpractice, illegal abortion.

distinguish between expressive and instrumental violence may fail to find significant explanatory patterns, or may find conflicting patterns from study to study.

The Chicago Homicide Project developed and tested the CIRCUM variable to capture whether an expressive or an instrumental motive was the offender's immediate and primary goal at the time of the incident. Because sexual assault often contains aspects of both, the CIRCUM variable puts rape/sexual assault into a separate category. Also, the infrequent cases in which there is another primary motive (for example, a suicide pact) are coded separately. The codebook instructions for CIRCUM are given below.

CIRCUM: CIRCUMSTANCES - EXPRESSIVE VERSUS INSTRUMENTAL

Instructions: What was the offender's primary goal at the time of the incident? Code according to the offender's immediate primary motive, regardless of the actual consequences (even if a bystander, not the "intended" victim, was killed). Code according to the definitions below, with attention to the notes.

- | | |
|------------------------|------------------------------------|
| 1 FIGHT OR BRAWL | 2 OTHER EXPRESSIVE |
| 3 INSTRUMENTAL MOTIVE | 4 BOTH EXPRESSIVE AND INSTRUMENTAL |
| 5 RAPE, SEXUAL ASSAULT | 6 OTHER KNOWN OFFENDER MOTIVE |
| | 9 NOT ENOUGH INFORMATION TO TELL |

(1) Fight or brawl: An expressive altercation in which both the intended victim and the offender participated. Primary and immediate goal of participants is to hurt, injure, or kill. Examples: street gang fight, barroom brawl, domestic fight, bystander killed in crossfire of such a fight.²⁴

(2) Other Expressive: Offender's immediate and primary goal was to hurt, kill or maim either the actual victim or someone else. No clear evidence of a fight. Not a contract killing. Examples: spouse abuse, child abuse, elder abuse, revenge or retaliation (saving "face" or honor), arson to injure or for revenge, "hate" killings (gay bashing, racial killings), "random" killings (firing a gun into the street), drive-by killings, murder/suicide, bystander killed by "accident" in such situations.²⁵

(3) Instrumental Motive: Offender's immediate and primary goal was to obtain money or property. Examples: robbery, burglary, attempted theft, arson for profit, contract killing. Street gang-motivated killings may also be instrumental, for example killings to support a gang enterprise such as a drug business.

(4) Offender's immediate motive included both expressive and instrumental aspects. Attempt to determine and code the primary motive - expressive or instrumental. However, if both motives were clearly present, code here. **Record details in "Remarks"**.

(5) Rape murder: Offender's goal was sexual assault (any kind), of a male or female victim. Code even if sexual assault was only threatened or attempted.

(6) Other Known Offender Motive: for example: mercy killing (euthanasia), medical treatment (eg: malpractice, illegal abortion), suicide pact.²⁶ **Record details in "Remarks."**

(9) Not enough information to code offender's motive. No "altercation," "causative factor," or other relevant narrative in Murder Analysis Report. Eg: Body found on street, no evidence of robbery.

²⁴If the choice is unclear between 1 (fight or brawl) and 2 (other expressive), code 2.

²⁵Ibid.

²⁶Only code "suicide pact" if there is evidence in the MAR of an actual agreement (pact) between victim and offender. Otherwise, code "murder/suicide" under DEATHOF and appropriate goal under CIRCUM.

Though expressive/instrumental orientation is a fundamental variable, it is certainly not the only important situational variable in violence. Homicides involving drugs or liquor are expressive homicides if they involve a fight, brawl, or argument. Homicides involving drugs are instrumental homicides if the motive is to obtain drugs or money to buy drugs, or to further a drug business. Similarly, street gang-motivated homicides may be either expressive (turf battles) or instrumental (drug business or other entrepreneurial gang activity); instrumental attacks occur among family and friends as well as strangers, and strangers may attack each other in an expressive "confrontational competition." Detailed definitions and coding of drug-related, street gang-motivated and relationship are given below.

Homicide syndromes

Almost all homicides correspond to a sibling offense -- similar incidents in which a fatal outcome did not occur. Expressive homicides, had they not had a fatal outcome, would have been assaults, and instrumental homicides would have been a robbery or a burglary. The primary determining factor in the Homicide Syndrome taxonomy is position on the expressive/instrumental continuum, which is determined by the offender's immediate and primary motive. Each Homicide Syndrome is similar to a sibling offense as a consequence of their common position on the expressive/instrumental continuum.

The Homicide Syndrome codes used in Chicago Homicide Project reports vary somewhat in the specific syndromes of interest, but a frequent classification is the following: Spousal-expressive, child abuse, other family-expressive, friend-expressive, stranger-expressive, street gang-motivated, rape/sexual assault, instrumental, other and mystery.

- Spousal-expressive homicides, including spouses, ex-spouses, common-law and ex-common-law relationship, and boyfriend/girlfriend, and ex-boyfriend/ex-girlfriend (see "relationship variables," below), accounted for 12 percent of all homicides in Chicago from 1965 to 1989.
- Child abuse homicides accounted for two percent of the total. Child abuse is coded only when the child was battered, not when a child was killed in another circumstance such as a robbery or in gang crossfire. (See CAUSFACT code 916, above.)
- Expressive homicides by other family members (for example, brothers, adult children and parents, cousins) accounted for four percent of Chicago homicides from 1965 to 1989, including only expressive homicides (CIRCUM codes 1 or 2, above).
- Expressive homicides by friends, neighbors and acquaintances accounted for 32 percent of 1965-to-1989 Chicago homicides. Again, these include only expressive homicides (CIRCUM codes 1 or 2, above). Street gang-expressive homicides are categorized separately.
 - Expressive homicides by strangers accounted for seven percent of total Chicago homicides from 1965 to 1989. These also include only expressive homicides (CIRCUM codes 1 or 2, above). Common examples are barroom brawls, hate crimes, or attacks by groups of strangers on the street.
- Instrumental homicides, predatory homicides to obtain money or property, accounted for 18 percent of the total over the 25 years. This number can be sub-divided into specific

relationship or situation, such as stranger-instrumental, neighbor or friend-instrumental, legal versus illegal business-instrumental, and so on. Street gang-instrumental homicides are categorized separately.

- In a rape/sexual assault homicide, the offender's goal was sexual assault (any kind) of a male or female victim (CIRCUM code 5, MOTVSEX 1 or 2, above). Rape homicide accounted for 1.6 percent of total homicides in Chicago from 1965 to 1989. In cases in which there was more than one motive (for example, a robbery/rape), we categorize the homicide syndrome as rape.
- In street gang-motivated homicides, there must be positive evidence that gang activity or gang membership was the motive of the incident. Neither gang membership nor age is a determining factor. See CAUSFACT code 140, above, and the detailed discussion in the following section. Although street gang-motivated homicides accounted for 6.5 percent of all homicides in Chicago from 1965 to 1989, the proportion ranged from only 1.8 percent in 1975 to 10.2 percent in 1984. Street gang-motivated homicides may be further divided into gang-instrumental and gang-expressive.
- Other homicide syndromes include murder-suicide pacts and mercy killings, and comprised only 0.4 percent of all Chicago homicides over the 25 years.
- Mysteries are unsolved homicides, cases in which the identity and characteristics of the offender(s) were unknown to the police, or in which an offender was identified but there was no evidence as to motive. Overall, mystery homicides accounted for 16 percent of homicides over the 25 years, ranging from 4.0 percent in 1965 to 22.6 percent in 1980.

Street gang-motivated homicide

The Chicago Police Department (CPD) defines street gang as "an association of individuals who exhibit the following characteristics in varying degrees: a gang name and recognizable symbols, a geographic territory, a regular meeting pattern, and an organized, continuous course of criminality" (CPD, 1992:1). This definition is not limited by the size of the gang or the age of the members. Analyses by Spergel (1990) and Block (1992), for example, found that a substantial number of street gang members and street gang-related homicide victims and offenders were in their thirties or older.

The Chicago Police Department's definition of an offense as "street gang-related" is based upon the motive of the offender. The preponderance of evidence must indicate that the incident grew out of a street gang function. Gang membership of either party is not enough, by itself, to determine gang-relatedness, unless other elements of the case establish a relationship. The determination is made according to the following investigatory process:

When a crime is reported to or discovered by the police, an investigation is initiated during which the reporting officer may note some evidence of street gang involvement. . . . When a case flagged as street gang related arrives at the Gang Crimes Section the report contents are carefully reviewed for evidence of criminal trademarks and traits normally indicative of street gang related offenses. These cases are further reviewed by application of a set of descriptors which delineate the circumstances of the event, and then are machine coded for report generation. . . . As a quality control measure, those cases reviewed for inclusion in the gang

crimes data base are periodically audited by a unit supervisor who assures a reasonable and consistent application of the definitions and criteria required by the system (Bobrowski, 1988:6-7).²⁷

Investigators reviewing a case report to determine gang-relatedness by the following descriptors of possible street gang motives (CPD, 1992:11-12; Bobrowski, 1988:15-29):

1. Representing: the offense (frequently robbery or assault) grew out of a signification of gang identity or alliance (by hand signs, language, clothing, and so on);
2. Recruitment: offense related to recruiting of members for a street gang;
3. Intimidation: (eg: of a victim or witness);
4. Turf Violation: offense committed to disrespect another gang's territory, often the defacing of one street gang's logo by another;
5. Prestige: offense committed either to glorify the street gang or to gain rank within the gang;
6. Personal conflict: within the rank and file of a gang, either conflicts over leadership or punitive action when violation of street gang rules results in a member being "violated" by other gang members;
7. Extortion: efforts to compel membership or to exact tribute for the gang, including protection money from local business or a "street tax" from independent narcotics dealers within the street gang's turf;
8. Vice: generally the street level distribution of narcotics by street gang members; and
9. Retaliation: repayment for offenses against the gang by rival gang members, non-gang victims or complaining witnesses, often resulting in a cycle of violence.

Although street gang members may commit many crimes, not every crime committed by a street gang member is related to the street gang affiliation. A street gang member who beats his girlfriend has not committed a street gang-motivated crime unless his action was inspired by membership in the street gang. A drug deal among street gang members that goes bad and results in death is not a street gang homicide unless the drug deal was street gang-motivated (for example, an argument over street gang marketing turfs).

The Los Angeles City and County Police Departments define street gang-related offenses by affiliation rather than motivation (Maxson & Klein, 1990). Street gang crimes are crimes committed by street gang members, whether or not the incident had any relationship to a street gang function. This definitional difference is one reason for the substantially greater number of

²⁷An exception applies only to "vice" offenses (narcotics, prostitution, gambling, and so on). In 1987, the Gang Crime Section began to count vice offenses as gang-related if they involved a known gang member (Bobrowski, 1988:14). Fortunately, this policy does not apply to homicide (even drug-related homicide) or to any other offense except vice offenses.

"street gang-related" crimes in Los Angeles than in Chicago. The accuracy of a membership definition depends on the accuracy of the list of street gang members. Such lists may be outdated, may not differentiate between core and peripheral members, and may expand or contract according to police resources rather than actual street gang membership. For example, an officer in the Los Angeles County Police Department told the Juvenile Justice Digest (Jan. 24, 1990) that, "one reason for the higher number of gang-related killings was the growing list of known gang members that enables police to blame more killings on gang activity."

Both definitions of street gang-related crime are reasonable, depending on the question being asked. To discover the rates of gang membership within a neighborhood or the vulnerability of gang members to become a victim or an offender, we would need data on offenses attributed to gang members (the Los Angeles definition). On the other hand, to accurately describe the harm done (people murdered, thefts committed, vandalism) by street gang activity, and to discover patterns across time or place of offenses generated by street gangs, we need data on offenses motivated by street gang activity (the Chicago definition).

Victim Precipitation

Marvin Wolfgang (1958:252) defined victim precipitation in the following way: The term **victim-precipitated** is applied to those criminal homicides in which the victim is a direct, positive precipitator in the crime. The role of the victim is characterized by his having been the first in the homicide drama to use physical force directed against his subsequent slayer. The victim-precipitated cases are those in which the victim was the first to show and use a deadly weapon, to strike a blow in an altercation -- in short, the first to commence the interplay of resort to physical violence.

Although this concept seems clear, it is difficult to apply in practice. Victim precipitation, as Wolfgang defined it, was an integral part of the Chicago Homicide Project from its inception. For many years and through several phases of data collection, project staff made an earnest and persistent effort to determine whether or not each incident was victim precipitated. However, it was difficult to resolve reliably and objectively the issue of identifying who struck the first blow or who was the first to show and use a deadly weapon. Despite our efforts, inter-coder reliability remained very low. Finally, during data collection of 1979-to-1981, we gave up.

The current codebook has dropped victim precipitation as a separate variable, but retains items that capture related information, such as victim **participation** (victim was committing either a predatory or a "victimless" crime in the incident),²⁸ vengeance (victim killed in revenge for an earlier predatory crime), and retaliation (victim killed in reaction to an earlier confrontation), as well as information on the past arrest record of the victim and liquor or drug use in the incident. The following variables give some indication of victim participation. Also see the "800" codes under CAUSFACT, above, and the liquor and drug-related variables, below.

VICINTER: VICTIM KILLED WHILE INTERVENING IN A CRIME?

²⁸Examples of victims committing a predatory crime during the incident are robbers, burglars and arsonists. Examples of victims committing a "victimless" crime during the incident are gamblers or clients of a prostitute. Drug buyers and sellers are included in a separate category (see VICCRIME, below).

Instructions: Code if victim was a third person intervening in another crime.

- 1 YES, VICTIM IS A POLICE OFFICER
- 2 YES, VICTIM IS NOT A POLICE OFFICER (eg: Good Samaritan assisting victim of robbery; person intervening in a fight)
- 3 YES, VICTIM WAS A PASSIVE BYSTANDER (eg: person caught in gang crossfire, person killed as a witness to another crime)

- 0 NOT INDICATED; NOT INVOLVED

VICCRIME: WAS VICTIM KILLED WHILE COMMITTING A CRIME?

Instructions: Code if victim killed while committing or as a result of committing a predatory crime (eg: robbery, rape). Do not count assault (fight, brawl, altercation), or an alleged theft as a predatory crime.

- 1 VICTIM KILLED WHILE COMMITTING A PREDATORY CRIME
(see "800" codes under Causative Factor)
- 2 NO, VICTIM NOT INVOLVED IN COMMITTING A CRIME
- 3 VENGEANCE;
OFFENDER'S MOTIVE WAS REVENGE FOR AN EARLIER PREDATORY CRIME
- 4 VICTIM WAS COMMITTING A "VICTIMLESS" CRIME
(eg: using drugs, visiting a prostitute)
- 5 VICTIM INVOLVED IN A DRUG TRANSACTION²⁹

- 0 NOT INDICATED; NOT INVOLVED; NO INFORMATION

Thus, while we have found it possible to capture the victim's participation in the incident, we have not found it possible to capture reliably the victim's precipitation of the incident. In fact, we question whether the concept of victim precipitation is measurable or even definable. There are several reasons for this. First, in most cases, only one of the key participants is alive to testify about "who started it." This is the offender, whose account of events may be biased. The other key participant is dead, and there are often no other witnesses or available evidence. Second, even when witnesses and other evidence are available, it may be difficult or impossible to determine the exact temporal sequence of events in a confrontational situation in which many things are happening simultaneously or in quick progression. Finally, as victimization survey methodologists have discovered, it is often difficult to distinguish between successive incidents, in order to differentiate between precipitation of the specific incident versus retaliation or revenge for some earlier incident.

²⁹A prior drug transaction (eg: the victim failed to deliver) is also included here.

Drug and alcohol involvement in incident

The Chicago Homicide Dataset contains variables that measure separately and distinguish between 1) liquor use by participants (intoxication during the incident), 2) drug use by participants (being high during the incident), and 3) drug-related motive for the incident (see Goldstein, 1985). In addition, other variables capture "altercation over liquor," "altercation over drugs" and "victim is dealing narcotics" (see CAUSFACT), "drug pusher/ drug buyer or user" (see VRAMREL and ORAMREL) and "victim involved in a drug transaction" (see VICCRIME).

Since 1965, the Chicago Homicide Project has collected information on alcohol involvement in the incident, based on police investigation records. Occasionally, there is information from the Medical Examiner's Office, but this is rare. The usual case is a designation based on evidence at the scene. Unfortunately, the determination of whether the victim, the offender, both, or neither were intoxicated is not possible with any reliability, though we have attempted to gather that information over the entire time period (see LIQUOR, below). However, the aggregate information as to whether or not either victim or offender (or both) were intoxicated is more reliable. DRUGUSED (see below) was developed in the current data collection effort, but all cases back to 1965 were coded. It's interpretation and limits are similar to LIQUOR.

LIQUOR: WHO WAS USING ALCOHOL AT TIME OF INCIDENT?

Instructions: Was victim or offender intoxicated during the incident? Indicate in remarks if evidence is based on blood tests.

- 1 YES, VICTIM; NO, OFFENDER (or no information about offender)
 - 2 NO, NEITHER; NO INVOLVEMENT INDICATED
 - 3 NO, VICTIM; NO INFORMATION ABOUT OFFENDER
 - 4 NO, VICTIM; YES, OFFENDER
 - 5 YES, BOTH VICTIM AND OFFENDER
 - 6 YES, UNDETERMINED WHO
- 0 CAN'T TELL, NO INFORMATION

DRUGUSED WHO WAS USING DRUGS AT TIME OF INCIDENT?

Instructions: Was victim or offender high during the incident? Indicate in remarks if evidence is based on blood tests.

- 1 YES, VICTIM
 - 2 NO, NEITHER VICTIM NOR OFFENDER
 - 3 NO, VICTIM; BUT NO OFFENDER INFORMATION
 - 4 NO, VICTIM; YES, OFFENDER
 - 5 YES, BOTH VICTIM AND OFFENDER
 - 6 YES, UNDETERMINED WHO
- 0 NO INFORMATION; CAN'T TELL

The variable capturing drug-related motive, DRUGSINV, was intended to be analogous (in conjunction with DRUGUSED) to Goldstein's tripartite taxonomy. In an incident with a drug-related motive, there is positive evidence that drugs formed a motivation or cause of the incident. For example, the cause could have been the business of drugs (a dealer putting out a contract on another dealer), an argument over drugs (a couple fighting over using limited money to buy drugs versus feed the baby), the acquisition of drugs (robbery of drugs or robbery to get money to buy drugs), or other types of causation (a baby starving to death because the parents were high).

DRUGSINV: DRUGS INVOLVED IN THE INCIDENT?

Instructions: If there is positive evidence that drug involvement was a cause of the incident, code 1, 2, 3, or 4. If there is some indication, but no positive evidence, code 5 and describe the situation in "Remarks." If the victim or the offender was high, but there is no other involvement, code under DRUGUSED, not here.

- 1 INVOLVED: SELLING OR DRUG BUSINESS³⁰
- 2 ARGUMENT OVER POSSESSION, USE OR COST OF DRUGS
- 3 GETTING MONEY FOR DRUGS, ACQUIRING DRUGS FOR PERSONAL USE
- 4 OTHER DRUG INVOLVEMENT³¹
- 5 PROBABLE DRUG INVOLVEMENT, BUT NO POSITIVE EVIDENCE³²
- 0 NO INVOLVEMENT INDICATED; NO INFORMATION

The development of DRUGSINV involved extensive testing and reliability checking. In 1988, Officer Jack Gavin of the Crime Analysis Unit coded all cases drug-related versus not drug-related as they were booked. He explained his decision process to us, and we attempted to capture those decisions in the draft of the DRUGSINV codes. He went on to use the same scheme in 1989, while the coders used DRUGSINV to code the years 1982-to-1989. Following extensive inter-coder reliability checking and checking of Project codes against Officer Gavin's designation in 1988 and 1989, we coded all cases back to 1965. As an example of the development of DRUGSINV, in reviews of coding errors and meetings with coders, it became apparent that many coders were coding drug motive when there was circumstantial evidence only. Therefore, we provided a new code for incidents in which there was circumstantial, but not positive, evidence that drugs were a motive, such as a known dealer being found dead with no other evidence. (In addition, coders are encouraged to explain such situations in the Remarks.) This mechanism retained the integrity of the four "positive evidence" codes, while providing some information about ambiguous situations.

³⁰Code when the business is the motive for the incident. Eg: both victim and offender involved in dealing, victim killed as a bystander, victim killed because he interfered with the business. Acquiring drugs for personal use is coded as 3.

³¹Example: baby dies of malnutrition because parents high.

³²Examples: victim found in room strewn with needles and other paraphernalia; victim was known dealer and found dead at usual place of business.

Relationship variables

In the original 1965-to-1981 dataset, the offender-to-victim relationship was coded in a single code (see RELATION, below). In the current 1965-to-1990 dataset, these original codes are retained, but in addition all 20,000 cases are also coded with two separate variables for victim relationship and offender relationship (see, for example, VRAMREL, below). In addition, the current version has included additional variables to clarify the exact victim/offender relationship -- the surnames of victim and offender, whether or not they co-reside, and the victim's and offender's marital status (for detail, see below).

RELATION: RELATIONSHIP OF FIRST OFFENDER TO VICTIM (1965-to-1987 codes)

Instructions: Enter **OFFENDER-to-VICTIM** relationship, using the codes below. Code only relationships that are relevant to the incident. See Notes.

0	UNDETERMINED BY POLICE, MYSTERY, RELATIONSHIP NOT ESTABLISHED				
1	FRIENDS	2	NEIGHBORS	3	SOME ACQUAINTANCE
4	NO RELATIONSHIP, STRANGER				
5	MOTHER-IN-LAW/SON-IN-LAW	6	DAUGHTER-IN-LAW/FATHER-IN-LAW		
10	HUSBAND/WIFE - LEGAL	11	HUSBAND/WIFE - COMMONLAW		
12	WIFE/HUSBAND - LEGAL	13	WIFE/HUSBAND - COMMONLAW		
14	EX-HUSBAND/EX-WIFE COMMONLAW	15	EX-WIFE/EX-HUSBAND - COMMONLAW		
17	STEPDAUGHTER/STEPFATHER	18	NEPHEW/UNCLE		
19	SISTER-IN-LAW/BROTHER-IN-LAW				
20	FATHER/DAUGHTER	21	FATHER/SON	22	MOTHER/SON
23	SON/FATHER	24	SON/MOTHER	25	DAUGHTER/MOTHER
26	DAUGHTER/FATHER	27	STEPFATHER/STEPSON		
		28	STEPSON/STEPFATHER		
29	BROTHER/BROTHER	30	SISTER/BROTHER		
		31	HALF-BROTHER/HALF-BROTHER		
32	HALF-BROTHER/HALF-SISTER	33	GREATAUNT/GRANDNEPHEW		
34	UNCLE/NEPHEW	35	AUNT/NEPHEW	36	NIECE/UNCLE
37	FATHER-IN-LAW/SON-IN-LAW	38	BROTHER-IN-LAW/BROTHER-IN-LAW		
39	SISTER-IN-LAW/SISTER-IN-LAW				
40	EX-HUSBAND/EX-WIFE-LEGAL ³³	41	EX-WIFE/EX-HUSBAND-LEGAL ³⁴		
42	GIRLFRIEND/BOYFRIEND	43	BOYFRIEND/GIRLFRIEND		
44	EX-BOYFRIEND/EX-GIRLFRIEND	45	EX-GIRLFRIEND/EX-BOYFRIEND		
46	MOTHER/DAUGHTER	47	COUSIN/COUSIN		
48	GRANDFATHER/GRANDSON	49	GRANDSON/GRANDFATHER		
50	EMPLOYER/EMPLOYEE	51	TENANT/LANDLORD or LANDLADY		
52	LANDLADY/TENANT	53	LANDLORD/TENANT		
54	HOTEL CLERK/TENANT	55	CO-WORKERS OR BUSINESS PARTNERS		
56	BABY-SITTER/BABY	57	CUSTOMER/PROPRIETOR OR STAFF		
58	PROPRIETOR OR STAFF/ CUSTOMER	59	SON-IN-LAW/FATHER-IN-LAW		
60	EMPLOYEE/EMPLOYER	61	GRANDUNCLE/GRANDNEPHEW		
62	BROTHER/SISTER	63	POLICE (OFF-DUTY)/SUSPECT		
64	PATIENT/DOCTOR	65	HALF-SISTER/HALF-BROTHER		
66	FATHER-IN-LAW/DAUGHTER-IN-LAW	67	FARE/CAB DRIVER		
68	SUSPECT/POLICE	69	LEGAL GUARDIAN or FOSTER PARENT/CHILD		
70	UNCLE/NIECE	71	SON-IN-LAW/MOTHER-IN-LAW		
72	DAUGHTER-IN-LAW/MOTHER-IN-LAW	73	BOTH PARENTS/CHILD		
74	BROTHER-IN-LAW/SISTER-IN-LAW	75	SUSPECT/SECURITY GUARD		
76	NEPHEW/AUNT	77	STEPFATHER/STEPDAUGHTER		
78	STEPBROTHER/STEPBROTHER	79	STUDENT/TEACHER		
80	SECURITY GUARD/SUSPECT	81	GRANDDAUGHTER/GRANDMOTHER		
82	NIECE/AUNT	83	GRANDSON/GRANDMOTHER		
84	DOCTOR/PATIENT	85	HOMOSEXUAL - LONG TERM, DOMESTIC		
86	HOMOSEXUAL - ACQUAINTANCES	87	AUNT/NIECE		
88	STEPMOTHER/STEPSON	89	SISTER/SISTER		
90	FOSTER CHILD/FOSTER PARENT or LEGAL GUARDIAN				

³³Include separated couples under "ex-husband and ex-wife" relationships, if there is evidence in the MAR that the couple has established separate residences.

³⁴Ibid.

In the 1965-to-1981 archive, only information on the first offender's relationship to the victim was collected, but in the 1965-to-1990 dataset, separate variables are included for up to five offenders per victim. Information on additional offenders is included under the "remarks." This reduces the likelihood of one of the most frequent coder errors (reversing the victim and offender relationship, such as husband/wife versus wife/husband). In addition, the current coding scheme includes relationship detail not previously captured, such as drug buyer/ drug pusher, prostitute/ pimp, contract killer/ witness, or gang member/ rival gang member.

VRAMREL1: RELATIONSHIP OF VICTIM TO FIRST OFFENDER (current codes)

Instructions: Enter **VICTIM'S** relationship to offender, using RAMIS codes. Code only relationships that are relevant to the incident.

Note: There are up to ten victim/offender relationship variables collected, VRAMREL1 and ORAMREL1 for the first offender, VRAMREL2 and ORAMREL2 for the second offender, and so on. Information for the sixth or more offender is recorded in the "Remarks" narrative.

101 HUSBAND (LEGAL)	102 WIFE (LEGAL)	
103 HUSBAND (COMMON-LAW)	104 WIFE (COMMON-LAW)	
105 EX-HUSBAND	106 EX-WIFE	
201 FATHER	202 MOTHER	203 SON
204 DAUGHTER	205 BROTHER	206 SISTER
209 UNCLE	210 AUNT	211 NEPHEW
212 NIECE	213 COUSIN	214 GRANDFATHER
215 GRANDMOTHER	216 GRANDSON	217 GRANDDAUGHTER
218 MOTHER'S BOYFRIEND	301 STEPFATHER	302 STEPMOTHER
303 STEPSON	304 STEPDAUGHTER	307 FOSTER FATHER
308 FOSTER MOTHER	309 FOSTER SON	310 FOSTER DAUGHTER
311 FATHER-IN-LAW	312 MOTHER-IN-LAW	313 SON-IN-LAW
314 DAUGHTER-IN-LAW	315 BROTHER-IN-LAW	316 SISTER-IN-LAW
401 BOYFRIEND	402 GIRLFRIEND	
501 LANDLORD	502 LANDLADY	503 TENANT
504 JANITOR	505 ROOMER/ROOMMATES	507 EMPLOYER
508 EMPLOYEE	509 CO-WORKERS,PARTNERS	510 PROPRIETOR
511 CUSTOMER	601 FRIENDS	602 NEIGHBORS
603 ACQUAINTANCES		
604 RELATIONSHIP NOT ESTABLISHED	605 NO RELATIONSHIP,STRANGERS	
617 CHILD		
701 HALF-BROTHER	702 HALF-SISTER	
703 EX-BOYFRIEND	704 EX-GIRLFRIEND	
705 CHILD (BEING WATCHED)	706 BABYSITTER, SITTER	
707 TEACHER	708 STUDENT	
709 SECURITY GUARD	710 POLICE	
711 SUSPECT(ROBBER,BURGLAR,ETC.)	712 CAB DRIVER	
713 FARE IN CAB	714 RESTAURANT/BAR STAFF	
715 CUSTOMER/DINER/DRINKER	716 PROSTITUTE	
717 PROSTITUTE'S CLIENT	718 GAMBLER	
719 DRUG PUSHER	720 DRUG BUYER/USER	
721 DOCTOR	722 PATIENT	
723 GANG MEMBER (SAME GANG)	724 MEMBERS OF RIVAL GANGS	
725 PIMP	726 SEXUAL RIVALS	
727 CELL MATE	728 HIRED KILLER	
729 TARGET FOR CONTRACT	730 NONGANG MEMBER,TARGET OF GANG	
731 HOMOSEXUAL ACQUAINTANCES	732 HOMOSEXUAL LOVERS (LONG-TIME)	
734 WITNESS,INFORMANT OF CRIME	735 EX-COMMONLAW WIFE	
736 EX-COMMONLAW HUSBAND	738 FIREMAN	

In order to specify a more specific relationship between the victim and the offender, particularly in intimate violence cases, the following variables were added to the current 1965-to-1990 dataset:

SAMESUR1: ARE VICTIM'S AND OFFENDER'S SURNAMES THE SAME?

Instructions: Code as indicated, using all available information in MAR.

- 1 YES - FIRST OFFENDER HAS SAME SURNAME AS VICTIM
- 2 NO - FIRST OFFENDER AND VICTIM HAVE DIFFERENT SURNAMES
- 0 NO INFORMATION; OFFENDER NOT IDENTIFIED

SAMEADD: DOES VICTIM RESIDE WITH OFFENDER?

Instructions: Code as indicated, using all available information in MAR. Assume "no" unless there is positive evidence or strong indication otherwise.

- 1 YES
- 2 NO
- 3 NO INFORMATION, CANNOT BE DETERMINED

VMARITAL: VICTIM'S MARITAL STATUS

Instructions: Code as indicated, using all available information in MAR.

- 1 MARRIED - LEGAL
- 2 MARRIED BUT SEPARATED
- 3 WIDOWED
- 4 DIVORCED
- 5 SINGLE³⁵
- 6 COMMONLAW MARRIAGE³⁶
- 7 COMMONLAW BUT SEPARATED
- 0 NO INFORMATION, CANNOT BE DETERMINED

OMARITAL: FIRST OFFENDER'S MARITAL STATUS

Instructions: Code as indicated, using all available information in MAR.

- 1 MARRIED - LEGAL
- 2 MARRIED BUT SEPARATED
- 3 WIDOWED
- 4 DIVORCED
- 5 SINGLE³⁷
- 6 COMMONLAW MARRIAGE³⁸
- 7 COMMONLAW BUT SEPARATED
- 0 NO INFORMATION, CANNOT BE DETERMINED

³⁵If there is no information about marital status, but the victim is aged 15 or younger, code "single".

³⁶With no other evidence, do not assume commonlaw, even if they have been co-residing for many years. Maintain the police definition, but note length of time co-residing in "remarks".

³⁷If there is no information about marital status, but the victim is aged 15 or younger, code "single".

³⁸With no other evidence, do not assume commonlaw, even if they have been co-residing for many years. Maintain the police definition, but note length of time co-residing in "remarks".

SELECTED PRODUCTS

Possibly the best guide to the attributes of a dataset is a review of the reports and other publication that have used it. Below, we include a selected bibliography of some of the more significant pieces of research that have been based on the Chicago Homicide Dataset. We would like to invite the reader to obtain a copy of the dataset from the National Archive of Criminal Justice Data, and to add to this list of publications. Please do not hesitate to contact either one of us with questions about the data, and please send us a copy of your report or publication for our files.

The Chicago Homicide Dataset has been widely used by researchers and decision makers interested in the analysis of violence. Some of the more significant research products are listed below.³⁹ In addition to the codebook, these reports include extensive and detailed coding instructions, and also further detail about the Chicago Police Department's use of specific terms (such as "street gang-related" homicide). Please see this documentation before attempting to interpret the data.

- Block, Carolyn Rebecca (1985). Race/ethnicity and patterns of Chicago homicide: 1965 to 1981. *Crime and Delinquency*, 31(1,January):104-116.
- Block, Carolyn Rebecca (1987a). *Homicide in Chicago*. Chicago: Loyola University of Chicago, Urban Insights Series.
- Block, Carolyn Rebecca (1987b). Lethal Violence at Home:Racial/Ethnic Differences in Domestic Homicide: Chicago, 1965 to 1981. Paper presented at the annual meeting of the American Society of Criminology.
- Block, Carolyn Rebecca (1988). Lethal Violence in the Chicago Latino Community: 1965-1981. Pp. 31-66 in *Violence and Homicide in Hispanic Communities*, Jess Kraus, Susan Sorenson & Paul Juarez (eds.), Office of Minority Health, U.S. Dept. of Health and Human Services.
- Block, Carolyn Rebecca (1992). Lethal violence in the Chicago Latino Community. Chapter in *The Dynamics of the Victim-Offender Interaction*, Anna V. Wilson (ed.). Cincinnati: Anderson Publishing Co.
- Block, Carolyn Rebecca and Richard L. Block (1980). Patterns of Change in Chicago homicide: The Twenties, the Sixties, and the Seventies. Chicago: Illinois Criminal Justice Information Authority.
- Block, Carolyn Rebecca and Richard L. Block (1980). Preliminary Analysis of Chicago Homicide Data, 1965 to 1989. Report prepared for the Panel on the Understanding

³⁹Because, unfortunately, ICPSR cannot maintain a record of users of particular datasets, it is not possible to compile a comprehensive inventory of publications based on the Chicago Homicide Dataset. This list, therefore, is a sample of the more significant publications known to the author.

and Control of Violent Behavior of the National Academy of Sciences, Neil Alan Weiner, Senior Research Associate.

- Block, Carolyn Rebecca and Richard Block (1992). Beyond Wolfgang: An Agenda for Homicide Research in the 1990s. *The Journal of Criminal Justice* 14:31-70.
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- Roncek, Dennis W., Richard L. Block and James S. Vassar (1981). Ethnic change and homicide: Structural conditions and individual behavior. Paper 2presented at meetings of the Law and Society Association.
- Roncek, Dennis W. and Pamela A. Maier (1991). Bars, blocks, and crimes revisited: Linking the theory of routine activities to the empiricism of "hot spots." Manuscript.
- Zimring, Franklin E. (1979). American youth violence: Issues and trends. Chapter 3 in Norval Morris and Michael Tonry (eds.), *Crime and Justice: An Annual Review of Research*. Chicago: University of Chicago Press.
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THE BALTIMORE CITY HOMICIDE FILE

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THE DATA AND UNIT OF ANALYSIS

The data in the Baltimore City Homicide File are drawn from the Violent Crimes Unit of the State's Attorney's Office for the City of Baltimore. The file consists of select data on all criminal homicides (murder and non-negligent manslaughter) committed in the city between January 1, 1974, and December 31, 1986. The original data also contain all non-criminal homicides (including self-defense and police homicides), but due to limitations of time these were not entered into the data set. The final Baltimore data set consists of 2,219 homicide events in which information is known to the police as to the gender, race, and age of the victim or the offender.

The unit of analysis is the homicide event. For each event, the variables coded include the age, race, and gender of the victim (or all victims involved) and the same information for all offenders involved. Event characteristics include the day, month, and year of the offense and whether there was a concurrent felony committed with the homicide. Offense characteristics coded include the cause of death, the number of offenders per event, and the number of victims per event.

The use of the homicide event as the unit of analysis allowed us to consider the relationship between coded variables for victims and for offenders. Thus we could analyze age differences between offenders and victims in any combination, and could consider age differences among the victims or offenders in multiple victim or multiple offender homicides as well. In addition, we could examine gender and race combinations of offenders and victims with the event as the unit of analysis, which overcame some of the problems associated with aggregated data. Because the data file was derived from a prepared homicide logbook rather than the original case files, we were not able to code such variables as "victim-offender relationship." Also, due to the nature of the original materials, we were not able to specify the nature of the concurrent felony.

Data were gathered at two points in time. The first was in 1984-1985 when the data were gathered back to 1974. The second phase was in 1987, when the data were updated to 1986. Fortunately, no changes in structure or organization at the Violent Crimes Unit occurred during that time.

THE VIOLENT CRIMES UNIT - ALTERNATE SOURCES OF DATA

The data were derived from the information system employed in the State's Attorney's Office. In 1972, under the direction of Milton B. Allen, the elected State's Attorney for the city of Baltimore, a direct working relationship was formally instituted between a Violent Crimes Unit established within the State's Attorney's Office and the Baltimore City Police Department. Mr. Howard Gersh was the first director of this Violent Crimes Unit, and was the essential contact allowing access to the data.

Because of the nature of the relationship between this Unit and the Police Department, the information in this file is as accurate and complete as is known to the police.

It is important to note that this file in the State's Attorney's Office contains information on all homicides in the city, not just those which are eventually prosecuted. It is identical to the police department's material on the homicide, and contains information on suspects in the offenses. As a result, instances arise where information is known as to the gender and race of an unknown offender, for example, but not his or her age. In our data set, as in the Uniform Crime Reports and the Supplemental Homicide Reports, we undoubtedly have offenders who were arrested for a homicide but were subsequently found not guilty. Short of using final court data, which have even more drawbacks than data in the form we employed, there is no way to avoid this problem.

Access to the data through this source provided an important lesson in finding resources. There are any number of points within the criminal justice system at which data may be available. Problems with the policy or procedure of any one component of the system may, of course, block a researcher from access to data in that agency. However, there may also be more pragmatic problems of manpower, accessibility, and organization of the necessary data sought which may block access. Other components of the system, however, may have a different organization and thus provide an avenue of availability to essentially the same data.

The original purpose for which the Baltimore data were sought was to test the seasonality of homicide patterns. To gain access to the information from the police would legitimately have required access to working case files, and would have mandated time and effort on the part of police personnel who were already fully engaged. However, as part of the record keeping of the Violent Crimes Unit, this information, along with the other information we obtained, was entered into a log book. This log book proved accessible to one researcher without undue interference in the daily operation of the agency. With normal conditions of anonymity, it enabled information to be gathered that would have proven impossible to obtain otherwise.

In addition, it is impossible to overstate the enthusiastic support of the director of the Violent Crimes Unit, Howard Gersh. Quite simply, he embodies the fact that one of the major keys in securing access to potentially sensitive data is finding a supportive, cooperative individual with whom, and through whom, the researcher can work.

THE VARIABLES

To eliminate problems of coder interpretation, the data were taken directly from information sheets in the office, without alteration of official variable categories. As a result, we have highly consensual data. On the other hand, since the data were not taken from the full homicide files, there is no information regarding more subtle aspects of the cases. This is a disadvantage only if one wishes the data to do more than they are intended to do. The general consensual validity of the data, on the other hand, makes them quite comparable across jurisdictions. As such, the file is easily accessible to examine regional or local variation in homicide patterns, or change in homicide patterns over time within Baltimore or across jurisdictions. The absence of a need to secure multi-coder agreement makes these data easier to collect and more reliable in temporal or spacial comparisons.

With the exception of age, rate, or percentage data our variables are nominal or ordinal, and as such require appropriate statistical techniques.

Based upon the original file, supplemental files were created deriving age, gender, and race rates per year for the city. The detail of the information also allowed us to create precise combinations, so we were able to compute age/gender/race specific offending and victimization rates by year, for example. Maryland's Department of State Planning provided the population data needed for the calculation of rates. Population data for Baltimore City were derived from interpolation of census data for the years 1974 through 1979. For the years 1981 through 1984 population estimates produced by the Maryland Department of State Planning were employed. Estimates for the years 1981 through 1984 were also calculated by extrapolation of census data, but the differences between these latter two sets of figures were not substantial, and conversations with personnel of the Department of State Planning confirmed our perception that their data more accurately reflected some non-linear changes occurring during the period. For that reason, their figures for post-1980 population data were used. During the years under study the overall population of Baltimore City declined. The most consistent decrease was that of the population of whites. The black population expanded at the same time, a trend that reflects growth primarily in the adult black population.

With the data available, a number of significant questions have been addressed regarding change over time in the relationship of age, gender, race, weapon use, and presence of a concurrent felony. We have also been able to examine some of the most basic assumptions underlying criminal justice policy based on some of these very fundamental factors.

ANALYSES AND POLICY IMPLICATIONS

These files have been thoroughly analyzed given the limits of the variables available. We cannot repeat here all the findings which appear in those articles, but we can point out three of the more important policy implications derived from these analyses.

First, the perception that juveniles accounted for much of the increase in homicides from 1974 to 1986 proved incorrect. Neither the percentage of juvenile homicides nor the juvenile homicide rate changed significantly during those years. However, the homicides represented by the age group of 18 to 24 did increase substantially, driving the average age and modal age of offenders and victims down. It is in this age group of young adults that the major changes occurred up to 1986, and not among juveniles.

Second, weapon use had changed noticeably from the levels reported in a 1964 study by the Criminal Justice Commission in Baltimore to the levels found in our data beginning in 1974. Specifically, the use of firearms by black males showed a substantial increase. Although this increase only brought the rate of firearm use by black males up to equal the rate of firearm use already present among white males, the resultant increase in lethality coupled with the increase in the proportion of the population represented by this group had an effect on the level of lethal violence in the city. Further, during the 1974 to 1986 period, the only gender-race combination that showed a statistically significant drop in homicide involvement rates was black females, which strengthens the conclusion that it is an interaction of firearm use, race and gender that constitutes a volatile problem.

Third, changes in multiple offender patterns of homicide may have an impact on the criminal justice system, which normal recording measures (or research measures) may not expose. If the percentage of multiple offender homicides increases substantially (which it has done in at least two years in the data), then counts of homicides based on victims or events will not accurately reflect the increase in offenders the criminal justice system will actually have to process. A two percent increase in homicides as measured by victim count for reporting in the Uniform Crime Reports in one year, for example, actually resulted in a seventeen percent increase in homicide offenders to be processed by the criminal justice system due to the increase in multiple offenders that year.

PROJECT REPORTS AND PUBLICATIONS

Block, Kathleen J. (1990). "Age-Related Correlates of Criminal Homicides Committed by Women: A Study of Baltimore," *Journal of Crime and Justice*, XIII #1 (Spring): 42-65.

Cheatwood, Derral. (1992). "Notes on the Empirical, Theoretical, and Policy Significance of Multiple Offender Homicides," in Anna V. Wilson, ed., *Victim Offender Dynamics in Homicide*. Cincinnati: Anderson.

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“CLEARING” HOMICIDES IN PHILADELPHIA THE PHILADELPHIA HOMICIDE PROJECT¹

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After many years of examining and analyzing (Philadelphia) homicide data it is our considered opinion that **meaningful** homicide research should meet certain unarguable desiderata. These are:

1. The researcher should use multiple time periods. (We, for example, always have analyzed our homicide data for two time periods: 1978 and 1988.)

2. It is our firm conviction that almost all studies of homicide **require** not simply police data but the systematic records of selected other agencies in the criminal justice system. While police department records are probably necessary for homicide research, we have found it to be an absolute necessity to access Medical Examiner records. In Philadelphia the Medical Examiner's Offices records contain considerable significant information on felonious homicides, which simply is not to be found in even the most extensive police homicide unit files.

Beyond the Medical Examiner's (or coroner's) records, one might argue that prosecutorial records are the third most desirable source of information. We have not found this to be true, for a number of reasons. Such records always engender enormous problems of confidentiality, because legal appeals for homicide convictions seem to go on forever. There is also enormous variability in the amount and type of information that such files contain because it would seem that such records are characterized by idiosyncratic record keeping of individual assistant district attorneys. Further, the physical maintenance of District Attorney case records, until recently, has been extremely disorganized. Finally, the prosecutor's files typically contain comparatively little information on the victim but, of course, a great deal on the accused. In the face of the above, we have opted for court records [**Court of Common Pleas**], which do not involve any of the aforementioned problems.

3. Depending on the particular research topic, it is most desirable to use multiple measures of the phenomena under investigation. As an example, we are at present in the early stages of dealing with an amorphous classification: **"drug-related" homicides**. Police, Medical Examiner and Court records produce a variety of data elements that suggest a killing may be "drug-related." We have, by this time, classified such various bits of "information," in the **following order** of decreasing value in persuading the reader that drug involvement was an important element in the killing:

A. The "immediate circumstances" of the killing, as recorded by the police, (and sometimes, by the Medical Examiner) reveals that a statement was made by

¹The discussion here is based on the Philadelphia Homicide Project, a collaborative effort of the author and Leonard D. Savitz and Stanley H. Turner.

the victim, offender or on-the-scene witness(es) to the effect that drug trafficking or drug use was an important factor in the killing;

- B. Drugs were found in the possession of the victim or the offender (if he or she is arrested at the scene of the crime);
- C. The Medical Examiner finds a measurable amount of an illegal drug in the body of the victim;
- D. Information that the victim and/or the offender were, at the time of killing, in some drug treatment program;
- E. The prior criminal record of the offender and/or the victim reveals arrest(s) for the possession or sale of drugs;
- F. People in the area of the crime (not witnesses to the killing) tell the police that the victim and/or offender "were known to be" involved in drugs;
- G. The police file contains a statement by an officer/detective that the area of the killing is "known" to be high in drug trafficking.

Moving now to our current research project, "**clearing**" homicides, it is obvious that all homicide information falls into one of three categories: victim information, offender information (if the case is "**cleared**") and information on the immediate circumstances of the homicide.

We have the following pieces of information, which may determine whether or not a homicide is cleared by an arrest:

1. Information from the victim prior to his or her death, which may be a statement of what took place and/or some specific identification of the offender;
2. Information given by the offender involving an "admission" or a confession;
3. Information from persons who were witnesses to the killing as to the perpetrator;
4. Information offered by others in the area of the killing who did not personally witness the killing;
5. "Evidence" beyond the above. It may be obtained on the actual scene of the crime or at some later time. Evidence ranges from the quite peripheral to "unique linking information." Such evidence may be secured by either the first police officer on the scene or by detectives at some later time.

In ascertaining how homicides are cleared, we are particularly concerned with the role of the **first** policeperson(s) who arrive on the scene. We label these "**Officers**." The officer may secure information from the (dying) victim, the offender at the scene of the crime, or from witnesses who vary in number, roles played in the homicide interchange, whose side they were on (victim, offender, or neutral), the details they produce regarding the killing and any disagreements in these matters among

several witnesses. The officer attempts to secure identifying details of the killer, which range from extremely vague statements to "unique linking information," to very specific information such as offender's name, address, car license plate number, or some other unique information that effectively "solves" the case, or for the killer on the scene of the crime.

In the later case, the officer may secure one of the types of statements from a person who immediately or perhaps later is identified as the "offender." There may be an "Admission," in which the person admits to being "significantly involved" in the killing. (Such an admission, obviously, focuses attention upon the admitter and, not infrequently, results in an arrest.) The offender, also, may confess to the killing. Such a confession may either involve the perpetrator agreeing that the killing was felonious or the confession may involve claim that the act was self-defense or a (non-culpable) accident. It is often the case that after a serious admission or confession the officer will arrest the person making the statement and the case is effectively "**solved**" without detectives being involved at all.

Finally, the officer may secure a variety of elements of "evidence," which will later prove useful in the subsequent clearing of the case.

Essentially, this first aspect of our "clearance" study involves the comparative role of the Officer compared to the (homicide unit) Detective in the "clearing" of homicide cases.

Related to the above but representing a distinctive issue is the important question of whether or not "cleared" homicides are an atypical subset of all homicides and are significantly different from homicides for which no one is ever arrested. For this project, we examine and classify statements by victims and witnesses. As regards witnesses, we deal with the number of such persons, whose side they take, the nature of statements made and the detailed information they offer about the participants. (Our data confirm the rather obvious fact that the witness's ability to identify the several parties in the killing is the single most important value that witnesses have in clearing cases.) Beyond the above, data being analyzed include victim's age, sex, race, marital status, drug involvement and prior criminal record. Among the "immediate circumstances" of the killing that are proving important are location of killing (particularly bars, and victim being killed in a dwelling not his/her own), provocation and character contests, drug involvement, method of killing, and victim's possession (and possibly display) of a weapon.

For "cleared" cases, we examine the normal demographic characteristics of the offender, but we pay extremely close attention to victim-offender relationship. Historically, such a category seems to us to have been an almost valueless. However, after much manipulation of our data, we found that a "natural" (and empirically valuable) classification is the following:

1. **Family** (all consanguinal and current affinal relationships, whether or not parties are actually living together);
2. **Non-Family Lovers** (including all POSSLQS, lovers, homosexual lovers, and former family members [particularly ex-spouses]);
3. **Acquaintances/Friends** (The usual differentiation of "**acquaintances**" from "**friends**" has regularly eluded us, since such classifications by officers or detectives are usually based on flimsy and, not infrequently, contradictory bits of information);

4. **Stranger** (This is not a residual category but is applied only if after a police investigation, the detective notes, in official files, that he or she is convinced that the killer was someone not known to the victim);
5. **Unknown** (These are residual cases where all available official data did not permit classifying the offender in any of the above four categories).

APPENDIX I

AGENDA: Ann Arbor Meeting, June 14 - June 16, 1992 Homicide Research Working Group

Host: ICPSR (Inter-university Consortium for Political and Social Research)

Place: Michigan League, Ann Arbor

June 14 (Sunday), 7:30 - 9:00 Michigan League, Kalamazoo Room

Reception sponsored by ICPSR.

Registration, distribution of materials.

Welcome and introductions (about 8:30).

June 15 (Monday) Michigan League, Library

8:00 - 9:00

Coffee and doughnuts. Host: ICPSR

Registration, distribution of materials

Informal discussion

Welcome and introductions (about 8:45)

9:00 - 10:30

Organizational Meeting: Homicide Research Working Group

Topics for Discussion:

- Working Group purpose (lethal and nonlethal?)
- Are we: interdisciplinary? international?
- How to maintain autonomy, but affiliate with other groups.
- NIJ Publication of Working Group Proceedings.
- Budget and sources of funds.
- Status of communication network.
- Proposed ASC affiliation: A Working Group Division?
- Working Group sessions at the 1992 ASC meetings.
- Working Group sessions at other meetings.
- Should we publish a newsletter?
- Place for 1993 meeting - Quantico?
- Future coordination of the project.
- Schedule for future meetings, events.

11:00 - 12:30

Roundtable Discussion: Users and Maintainers of National Datasets

FBI/UCR - John Jarvis

Statistics Canada - Christine Wright

-- A hands-on session on national criminal justice homicide data. -- Distribution of NIBRS manuals, copies of data-quality assessment studies, codebooks, other relevant materials.

-- Access, analysis, interpretation - what are the problems? what are some solutions?

-- Linking police to other data - public health, crime survey, prosecutorial & judicial, field studies

-- Common measurement and analysis errors, and how to avoid them.

-- Roundtable discussion with "heavy users" of these data, and the audience.

12:30 - 1:30

Lunch and informal discussion

Michigan League Cafeteria

Go through the cafeteria line (your cost);

Gather in a private room.

1:45 - 3:45

Tutorial: Violence Datasets in the National Archive of Criminal Justice Data (Part I)

-- Vicki Schneider

Introduction to all the Archive datasets containing relevant data.

4:00 - 5:30

Tutorial: Problems of Measuring Drug-Related Crime

-- Paul Goldstein

-- A hands-on, practical tutorial in using the tripartite system. What are the difficulties and how can they be overcome?

-- Separating drug-related from drug use; how to relate alternative measures of drug use and drug-related crime.

-- Measuring drug use versus liquor use; differentiating between use by victim and use by offender.

-- Applications in different environments: corrections, law enforcement, field studies.

-- Linking public health and justice data.

-- The tripartite system in practice; validity and reliability indicators.

-- Replications (Cheryl Maxson and others attending).

6:00 - 8:30

Dinner

Informal discussion, review of first day.

June 16 (Tuesday)
Michigan League, Library

8:00 - 9:00

Coffee and doughnuts. Host: ICPSR

Distribution of materials;

Informal discussion;

Introduction to second day (about 8:45).

9:00 - 10:30

Methodology of Local Research Projects

St. Louis - Scott Decker, Rick Rosenfeld

Chicago - Becky and Dick Block

Los Angeles - Cheryl Maxson

Baltimore - Derral Cheatwood

-- Specific data captured with specific definitions, availability to other users.

-- Problems of completeness and coder reliability (and how solved), evolution of data collection methods.

-- Relationship of research project to local agency: feedback, interactive studies, maintaining a good working relationship.

-- Theory or problem studied, evolution of theory or problem, relation of theory to method and data.

-- Distribution of codebooks.

-- Discussion and questions by working group participants.

-- Short reviews of additional local studies, by representatives who are present.

10:45 - 11:30

Open Forum: A "Town Meeting" of homicide researchers.

-- Moderator: Richard Block

This is the place to air problems, suggest solutions, vent frustrations, voice hopes for the future.

An issue to start the ball rolling:

In violence research, does data drive theory or does theory drive data?

11:45 - 12:45

Lunch and informal discussion.

Michigan League Cafeteria.

Go through the cafeteria line (your cost);

Gather in a private room.

1:00 - 3:00

Roundtable Discussion: Data for What?

The use of violence data in violence prevention, reduction, and intervention programs.

-- Jackie Campbell

-- Becky Block

-- Carl Bell

-- Can escalation patterns be identified while there is still time to intervene? What data are necessary to support the identification of crisis situations?

-- Overview of the "Danger Assessment" instrument for identifying potential crisis situations of intimate violence.

-- Practical problems of linking datasets -- public health and police, community and public agency, spatial and aggregate

-- Information as the foundation for crisis intervention; overview of the Early Warning System project in Chicago.

-- Mobilizing community and public agencies to reduce levels of violence.

-- What works? Evaluation of violence intervention policies and programs.

3:15 - 4:45

Tutorial: Violence Datasets in the National Archive of Criminal Justice Data (Part II)

-- Vicki Schneider

-- Discussion of data retrieval, interpretation, and analysis problems.

-- Distribution of codebooks.

-- Tour of the Archive.

-- Questions and answers; audience discussion.

APPENDIX II

Participants in the Ann Arbor Meeting of the Homicide Research Working Group, June, 1992

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APPENDIX III

Homicide Research Working Group Organizational Issues Decided at the June, 1992, Workshop

Name:

The name the group is the Homicide Research Working Group. In deciding in favor of "homicide" versus "violence," the feeling of the group was that, because lethal violence cannot be studied with data about homicide alone, any investigation of homicide necessarily includes both lethal and non-lethal violence.

Purposes:

- generate a strong working relationship among homicide researchers,
- encourage efficient sharing of techniques for measuring and analyzing homicide,
- promote improved data quality, support the linking of diverse homicide data sources, and support the maintenance of databases that are comparable over time and place,
- foster collaborative, interdisciplinary research on lethal and nonlethal violence,
- forge links between research and practical programs to reduce levels of mortality from violence, and
- create and maintain a communication network among those collecting, maintaining or analyzing homicide datasets.

Membership:

Membership in the Homicide Research Working Group is open to anyone who agrees with the above goals, and pays a ten-dollar annual membership fee.

Affiliation:

The Working Group is interdisciplinary, which means that there should be no explicit or implied compulsion for a Working Group member to also be a member of any other group. We realize, however, that it was the American Society of Criminology (ASC), which itself is an interdisciplinary organization, that provided the home for our charter meeting in November 1991, and that the ASC and the Working Group share many purposes and goals. Because of the importance of our interdisciplinary focus, it was decided that the Working Group could not be a "division" of the ASC, but that we would seek a link with the ASC as an affiliated organization.

In principal, the Working Group could seek a similar affiliation with other academic and professional groups. In addition, we encourage association between the Working Group and a wide variety of other groups. For example, sessions like the Working Group session at the ASC could be held at the meetings of many other organizations, and announcements in our newsletter should include activities of interest from many disciplines.

Structure:

The operation of the Homicide Research Working Group is guided by a steering committee, consisting of anyone who is willing to do the work.

1992 Steering Committee (with committee responsibilities):

Carolyn Rebecca Block - Working Group coordinator, Planning for ASC workshop & Quantico meeting, Proceedings editor, ASC liaison.

Richard Block - Working Group coordinator, Telecommunications network, Membership, Proceedings editor, Treasurer for expenditures and grant funds.

Paul Goldstein

Jay Corzine

Cheryl Maxson - Treasurer for dues collection.

Chris Rasche - Planning for ASC workshop & Quantico meeting.

Jackie Campbell

Margaret Zahn

Rick Rosenfeld - Newsletter, Quantico meeting program committee.

Scott Decker - Newsletter.

Derral Cheatwood - Recording secretary, Quantico meeting program committee.

Sub-Committees:

At the June, 1992, Ann Arbor meeting, the Working Group decided to form two subcommittees, one to develop a planning grant to make use of data that have been collected nationwide, and the other to explore how homicide researchers could participate in the development of the FBI's National Incident-Based Reporting System (NIBRS). Members of these committees are listed below.

Planning Grant Proposal Committee:

Margaret Zahn (coordinator)

Jay Corzine

Cheryl Maxson

Paul Goldstein

Richard Block

Rick Rosenfeld

Harold Rose

Data Needs Committee:

Rick Rosenfeld (coordinator)

Bob Flewelling

Cheryl Maxson

Paul Goldstein

John Jarvis

Don Faggiani

Mike Rand

APPENDIX IV

Issues Discussed at the Ann Arbor Workshop

by Derral Cheatwood
University of Maryland, Baltimore County

A highlight of the 1992 Ann Arbor meetings of the Homicide Research Working Group was the opportunity for roundtable discussions and "brainstorming" sessions throughout the intensive three-day period. While these discussions covered a great deal of ground, a few central or critical themes emerged. The following is not a comprehensive review of all discussions, but notes on some of those that seemed most central.

Assessment and Prevention

A number of participants with a public health approach as well as those working at state and federal reporting agencies were particularly concerned with useable approaches to assessing dangerousness on a clinical level, and to devising workable programs to prevent potential lethal violence. They pointed out that a number of risk factors are known: women are most likely to be killed when they leave their husbands or talk of leaving; children who have been victimized are most likely to engage in violence; homicides are not random events but are focused in place and time. The key to prevention, then, is to have a comprehensive information system by which you can determine the settings and peoples at highest risk, and target that group with intervention strategies based upon their particular form of risk. This involves taking the information to schools, clinics, and counseling centers.

The Role of the Media

Carl Bell, however, pointed out that public policy is driven by the media, and not by people who study homicide. As other city researchers confirmed, the members of the community believe they know their own neighborhood and what is causing the violence, and they don't want to know what the experts say. As Becky Block and Scott Decker pointed out, the community wants to see the killer as a drug crazed gun wielding stranger. Communities are united in dealing with this stereotype, but split when they consider the more common assault based homicides involving acquaintances, friends, or family.

Carl Bell noted a significant observation he had made in his dealings with the community. Since television is the key, in his presentations to community groups he finds much greater acceptance of what he has to say when he prefaces his remarks with a slide of him appearing on television. The fact that he has been on TV grants him an authority that other credentials do not.

The Need for Both Acute and Chronic Intervention

In a number of discussions, the need for short term, clinical or "street workable" intervention strategies was noted. Yet the working group also noted the need for long-term solutions to the chronic problem. This, again, led to considerations of the purpose and immediate goals of the organization.

In this regard, the discussions concerned the need for developing greater specificity in the definitions of such basic concepts as neighborhood, motive, and even homicide. Participants also recognized the need to clarify the roles played by such structural features as the national and local economies, continual long-term as well as short-term public policy and criminal justice activity, and medical resources and structure in the neighborhood.

APPENDIX V

**Homicide Research Working Group
Members in Good Standing as of May 3, 1993**

William C. Bailey	Paul J. Goldstein	Marc Riedel
Hugh D. Barlow	Keith D. Harries	Dean G. Rojek
Carl Bell, MD.	Darnell F. Hawkins	Harold Rose
Wm. Reed Benedict	W.S. Wilson Huang	Richard Rosenfeld
Daniel Bibel	Lin Huff-Corzine	Linda E. Saltzman
Leigh Bienen	John Patrick Jarvis	Robert J. Sampson
Beth Bjerregaard	Esther Jenkins	Leonard D. Savitz
Carolyn Rebecca Block	Lynn Jenkins	Victoria Schneider
Richard Block	Eric L. Jensen	Donald Schwarz
Alfred Blumstein	Matti Joutsen	Leonore Simon
Russell Boxley	Marianne Junger	M. Dwayne Smith
Victoria E. Brewer	Leslie W. Kennedy	Howard N. Snyder
Henry H. Brownstein	David R. Kent	Barry Spunt
David Cantor	Gary Kleck	Steven Stack
Albert P. Cardarelli	Patti Klein	Darrell J. Steffensmeier
Dawn Castillo	Carol Kohfield	Heather Strang
Duncan Chappell	Korni S. Kumar	Abraham N. Tennenbaum
Derral Cheatwood	Gary LaFree	Stanley Turner
Roland Chilton	Kenneth C. Land	Kimberly Vogt
Katherine Kaufer	Simha F. Landau	Vince Webb
Christoffel, M.D.	Pamela K. Lattimore	Neil A. Weiner
Jeffery Clark	Colin Loftin	Brian Wiersema
Obie Clayton	Coramae Richey Mann	Margo Wilson
Dov Cohen	Susan E. Martin	Marvin E. Wolfgang
Chip Coldren	Brian Mattson	Christine Wright
James Collins	Anthony R. Mawson	Margaret Zahn
Philip Cook	Cheryl Maxson	Frank Zimring
Mark Cooney	John P. May, M.D.	
Jay Corzine	Patty McCall	
David N. Cowan	Bill McCarthy	
Susan Crimmins	Paula D. McClain	
G. David Curry	Allen R. McMillan	
Maurice Cusson	James Mercy	
Martin Daly	Steven F. Messner	
John Dawson	Lois Felson Mock	
Scott Decker	Ron Moser	
Donald Faggiani	Candice Nelsen	
Richard Felson	Richard Nisbett	
Lois Fingerhut	Ruth Peterson	
David Finkelhor	Kenneth E. Powell, M.D.	
Daniel J. Fischer	Giora Rahav	
Robert Flewelling	Michael Rand	
James Alan Fox	Elizabeth Rapaport	
Craig Fraser	Christine Rasche	
Kathleen Gale	Andrew L. Reaves	
Rosemary Gartner	Roland Reboussin	

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