187353

Community Structure and Patterns in Criminal Homicide: Exploring the Weekend Effect

Final Report
Grant Number 94-IJ-CX-0051

Submitted to

Data Resources Program
National Institute of Justice
633 Indiana Avenue, N.W.
Washington, DC 20531

by

Brian Wiersema

Violence Research Group
Department of Criminology and Criminal Justice
University of Maryland
College Park, MD 20742-8235
301-405-4735 (voice)
301-314-7912 (fax)

January 1996

FINAL REPORT Archive

Approved By: J Thomas

Date: 3/13/01

Community Structure and Patterns in Criminal Homicide: Exploring the Weekend Effect*

Introduction

Homicide is a major problem confronting American communities. Approximately 24,000 people are murdered in the U.S. each year (Federal Bureau of Investigation 1993: 13) and it occurs disproportionately in cities and metropolitan areas. In 1992, approximately 88 percent of all homicides occurred within metropolitan areas and at about twice the rate of rural counties and cities outside of metropolitan areas (10.4 vs. 5.2 or 5.4 per 100,000 population, respectively; Federal Bureau of Investigation 1993: 59).

Homicide is also a major cause of the difference in the life expectancy of black and white Americans. Approximately one-fifth of the difference between the life expectancies of black and white males is attributable to differences in homicide mortality (1.3 years out of 6.6 years; Keith and Smith 1988: Table 2). Blacks are only 12% of the U.S. population, but they suffer nearly 50% of the homicide mortality (Federal Bureau of Investigation 1993: 16). For blacks between age 15 and 24 it was the leading cause of death and fourth for blacks of all ages and genders (National Center for Health Statistics 1993: 28). For black males 15-24 years, the homicide rate in 1991 was an astounding 158.9 per 100,000 population (National Center for Health Statistics 1993: 29) in a U.S. population whose rate was about 9 per 100,000.

Finally, patterns of *when* homicides occur are not the same across race, age, and gender groups. Greenberg and Schneider (1992), for example, found that daily patterns of

---

* A preliminary version of this report was presented at the annual meeting of the American Society of Criminology, Boston, Massachusetts, November 15-18, 1995. The author is extends his thanks to both Colin Loftin and David McDowall for thoughtful comments and advice throughout this project. Errors that remain are the sole responsibility of the author.

homicide for young black males in urban areas were surprisingly evenly distributed across days of the week as opposed to patterns for white males who exhibited the well-established weekend effect of homicide. The finding is interesting because the data on which they based their estimates are counties with highly concentrated black populations that are presumably also areas with highly concentrated poverty. Their work suggests that there are differential patterns of behavior in some types of communities that may have been overlooked in less disaggregated analyses.

If these patterns are persistent, they hold important implications for homicide prevention models. They suggest that the observed differences in activity patterns may result from different underlying models of response to reward, punishment and opportunity structures. In the case of homicide, where nearly half the victims are black, policies designed to reduce violence might be largely ineffective if they were insensitive to differential mechanisms at work. It is thus important to examine the nature and extent of these differences to see if they persist within and between communities, and if so, to identify and explore crucial interactions between the detailed characteristics of these events.

In this framework, we use existing data resources in the National Criminal Justice Data Archive to investigate how community structure conditions and influences patterns of criminal homicide in American cites. Before we report these results, we discuss the context of homicide research that precedes and orients us, followed by a description of our general strategy and the specific questions we investigate. We conclude with some suggestions for new data collection efforts and for additional models to test.

Context of Study

Research on homicides in American communities falls largely into two traditions: descriptive studies of patterns in a single community and comparative studies that investigate covariation between levels of homicide and characteristics of states, metropolitan areas, cities or other units. Descriptive studies are based largely on local police records and provide detailed information about patterns of homicide incidents in a single community. Though not the first in this tradition, Wolfgang's (1958) Patterns in Criminal Homicide is the best known and most widely cited, example of a descriptive study. The major strength of this approach is the rich data available from local records. At the same time, these studies are limited by a lack of comparative data from other communities that would provide the basis for inferences about how the characteristics of communities affect the patterns of homicide.

Comparative studies draw on information from data systems such as the Uniform Crime Reports and the Census of Population to study covariation between homicide rates and other characteristics of cities, states, metropolitan areas or other areally aggregated groups.[1] The major weakness of comparative studies is that national data systems provide only limited information about the characteristics of homicide incidents.

Clearly, however, the traditions are complementary. The strengths of one are the weaknesses of the other. Comparative studies provide the logical basis for causal inferences about the effects of community characteristics, but lack detailed information. Descriptive studies provide rich and detailed information, but lack a strong comparative dimension.

[1] See Land, McCall and Cohen 1990 for a review of this literature.

Challenge

The challenge of the present study is to begin to integrate the approaches represented by these two research traditions. In other words we wish to study patterns of homicide by examining both individual level and community level effects. In so doing, our goal is to take advantage of detailed information at the individual level while using information from areal aggregates to represent the effects of community structure.

A further challenge is to do this with existing archived data. Data collected at other times and for other purposes are usually not ideally suited for new secondary analyses. We use existing data mainly for reasons of cost: studies requiring original data collection are simply extremely expensive. If existing data can address new research questions, even if they are not ideally suited to the task, they may still produce useful knowledge while minimizing costs. Therefore, the challenge is to exploit the strengths of the existing data while dealing with the weaknesses.

Data and Research Strategy

The general research strategy is divided into two phases. In the first phase we conduct an exploratory analysis of homicide at the individual level using national vital statistics mortality data.[2] These data, available in the National Archive of Criminal Justice Data as the "Mortality Detail Files" (National Center for Health Statistics, 1994), contain information on every death certificate coded and forwarded to the National Center for Health Statistics for the year 1985. From this file we selected all cases defined as homicides and legal interventions (see Rokaw, Mercy, and Smith 1990, for a description of these data and a

[2] Originally we proposed to examine the Supplementary Homicide Report data compiled by the Federal Bureau of Investigation, however, we turned to the Mortality Detail Files because our selection of the dependent variable (day of week), is not available in the national SHR data.

comparison with the FBI's Supplementary Homicide Report) The range of available variables is limited, but there is an abundant number of cases. Analysis of these data will explore structural components in the populations and their interactions to determine differences in the pattern of homicide occurrence.

In the second phase, we introduce community level information to the individual level analysis by focusing on rich, multicommunity data originally collected by Zahn and Riedel (1988; Riedel and Zahn 1982; Riedel, Zahn and Mock 1985; Zahn and Sagi 1987). Here the number of cases is limited, but the range of available variables is considerably wider. The dataset contains more than 200 variables on 1748 cases of homicide recorded by police departments and medical examiners in Memphis, Philadelphia, Oakland, San Jose, Dallas, St. Louis, Chicago, Newark and "Ashton" (a large city in the western U.S.). The city selection was purposive to provide a reasonable degree of regional balance. The data are limited to a single year, and except for Chicago where a 50% sample was drawn, they represent the universe of cases reported in these cities in 1978.

Specific Research Question

We begin with the assumption that patterns of homicide occurrence will reflect the both general patterns of behavior between individuals as well as the larger social structure within communities. While we do not test routine activities theory, we believe its framework may be useful as a starting point in understanding the relationship between both individual and community characteristics and the pattern of homicide occurrence.

We have selected one of homicide's well-known patterns to focus our investigation: the tendency for homicide to occur on weekends. This is because the weekend concentration of homicides has been a persistent phenomenon over time and across data collections and because it provides an appropriate comparison group at the individual level for modeling

underlying behavior patterns. We have operationalized our dependent variable as the probability that homicide occurs on a Saturday or Sunday relative to other days of the week. Our expectation is that the routine activities of victims should be reflected in the pattern of homicide occurrence. At the same time, we expect that routine activities of many individuals collectively contribute to community structure and this too should be reflected in patterns of homicide occurrence. Thus both individual characteristics as well as community characteristics are expected to influence the day on which a homicide occurs.

Methods: Phase I

The data for phase one were drawn from the national vital statistics mortality system for 1985. They are based on information from death certificates that is forwarded to the National Center for Health Statistics (NCHS). They include only deaths classified as homicides and legal interventions (ICD9 codes E960-E978). The variables used in this analysis are age, race, gender, and the day of death. As structural components of the population, we use age, race, and gender to form subgroups that may broadly reflect differential patterns of homicide occurrence. We expect that such subgroups of can only roughly and indirectly represent different patterns of routine activities, but nevertheless, we expect that these variables are useful in exploring patterns and suggesting hypotheses.

All variables in this phase of the analysis were recoded as binary indicators. Day of death was transformed such that deaths occurring on Saturday and Sunday were considered weekend deaths (coded "1") and those occurring on other days of the week (Monday through Friday) were considered weekday deaths (coded "0"). Days were defined as beginning and ending at 12:00 midnight. Well-known patterns of highest risk determined the recoding of age, race and gender. Victims of homicide were considered young (coded "1) if age at death was between 15 and 24 years, inclusive. Ages of all others were coded "0". Similarly, the

race of black victims was coded "1" and victims of other races, "0". For gender, male victims were recoded "1" and females, "0".

"Missing data" in this analysis is largely an ignorable problem. Day of death was missing on 9 of the total 19,628 homicides in 1985. With regard information missing on individual items, the NCHS imputes race and gender for all death certificates missing this information, but it does not do so for age. Thus, there is no missing data for race or gender, but 77 cases of the remaining 19,619 were missing age information and were excluded from the analysis.

The main analytic method employed was logistic regression with the dependent variable being the probability the homicide occurred on a weekend compared to a weekday. Age, race, and gender composed the set of independent variables used in modeling day of occurrence patterns.

An exploratory approach to model specification was followed. The initial stages utilized descriptive statistics (frequencies, percentages, etc.) to determine patterns in the data. Differences between groups, and especially, evidence of interactions, informed specification of the logit models. Use of likelihood ratio tests to reject insignificant interactions led to the selection of the final model.

Results: Phase I

The well-known tendency of homicides to occur on weekends is shown in Figure 1. If homicide occurrence were evenly distributed across the week, each day would account for 14.3% of the incidents. In 1985, 18.6% of homicides occurred on Saturdays, 16.1% on Sundays, and weekdays each averaged 13%. Together, Saturday and Sunday account for 34.7% of the homicides.

In breakdowns by age and gender, the pattern is most evident among males and

young people. Saturday and Sunday occurrences account for 35.9% of male victims and 31.5% of female victim. Similarly, 37.4% of young homicide victims (i.e., those aged 15-24 years) and 33.9% of those of other ages died on weekend days.

In contrast, there appears no difference between Blacks and those of other races. Figure 2 illustrates the pattern. Homicides occurred on Saturdays and Sundays among a total of 34.8% of Black victims and 34.7% of White and other race victims (combined).

These results are summarized in the logistic regression analysis shown in Table 1. It estimates the effect of age, gender, and race on the log odds of weekend (as opposed to weekday) homicide occurrence. The main effects of being male and young are large, significant and positive in predicting weekend occurrence, but being black has no apparent effect.

Table 2 presents the logit model with an interaction term for Black and Young. The model implies that (holding gender constant) the effect of age group depends on race. Among blacks, being young decreases the odds of homicide on a weekend only slightly (about 3%), but among nonblacks, being young increases the weekend odds substantially (by about 33%). This is due to a large interaction between race and age that, relative to other groups, reduces the weekend odds for young blacks by about 37%.

This interaction is clear in the contrast between patterns in Figures 3 and 4. Among blacks, regardless of age group about 35% of homicides occur on the weekend (34.5% for victims age 15-24, Figure 3 and 35% for other age groups, Figure 4). In contrast, among races other than blacks, age alters the weekend effect substantially. Among persons age 15-24 (Figure 3), 40% of the homicides occur on weekends, but among those in other age groups (Figure 4) only 33.1% occur on weekends.

Methods: Phase II

To explore some of the implications of these findings, Phase II employs the detailed Zahn and Riedel (1988) data on homicides from police and medical examiners in nine U.S. cities. The data are available only for a single year (1978), but contain considerably more information about homicide victims than are available in the national vital statistics mortality data. As in phase one, we use logistic regression to analyze these data. A description of the variables selected for analysis and our expectations of their effects follows.

We expect the following variables to have an effect on whether homicide occurs on a weekend or a weekday because, as we described above, we assume the pattern of the victim's normal daily activities are important determinants. Thus variables that reflect patterns of activity that differ according to day of the week should also be important in predicting the probability of weekend homicide. We focus on three such indicators: homicide motive (or circumstance), alcohol consumption at time of death, and employment status. We consider each in turn.

First, we expect that the general motive of the homicide is related to when it occurs. One might expect the chance of being a victim of a felony-motivated homicide to be more evenly distributed through the week than being a victim of a "non-felony" homicide. This would follow from the expectation that victims spend more time on weekends than weekdays in contact with persons (such as family members, friends, lovers, etc.) who would most likely be involved in arguments, disputes, lover's quarrels and other circumstances considered non-felony motivated. Thus, compared to non-felony circumstances, a felony motive should decrease the chance of a weekend homicide occurrence.

Second, the victim's own behavior, such as the consumption of alcohol, could reasonably be expected to affect the timing of homicide. Heavy drinking is known to reduce inhibitions and impulse control and is thought to be a risk factor for violence. If alcohol

consumption is more likely to occur on weekends than weekdays and if it is related to the escalation of interpersonal conflicts, then we would expect to observe an increase in the weekend homicide probability.

Third, an obvious implication of routine activities theory suggests that work (or the lack of it) would be an important element in defining one's daily activity patterns. If one is unemployed (and not actively engaged in finding work), one might expect that there would be little difference between weekdays and weekends in one's pattern of activities. Conversely, full-time workers, students, those caring for small children, etc. are most likely to have very structured daily patterns and they might be expected to have weekend schedules that are different from weekday ones. Thus, employment status of the victim could be expected to have an effect on patterns of homicide occurrence.

Zahn and Riedel included all of these variables in their data collection which spanned nine, geographically dispersed cities in 1978. We recoded a variable originally named FELCIRC (felony circumstance) such that codes 1 and 3 ("Yes" and "Suspected Felony") were considered felony-related (coded "1") and code 2 ("No") was considered non-felony related (coded "0"). Evidence of alcohol consumption at death was taken from medical examiners' autopsy measurements of the victim's blood alcohol content (BACPOS). We have recoded it "1" for a positive BAC and "0" for a negative BAC.

One difficulty encountered with the Zahn and Riedel data was an unexpectedly large amount of missing data on the Employment Status variable. In fact we discovered that approximately 37% of the cases are coded "0" which is not defined in the codebook. Together with 8% of cases that were defined as "missing" (coded "9"), use of this variable in any analysis would lead to removing nearly half of the cases. Cursory examination led us to

conclude that we could not consider the undefined cases as missing completely at random.[3] Therefore, we cannot include an individual-level indicator of employment status in our model. Instead, we include a measure of the city unemployment rate (percent of the 1980 labor force unemployed) as reported in the County and City Data Book (U.S. Bureau of the Census, 1983). This has an advantage of introducing a city-level structural indicator to the model, but since an individual-level effect cannot be directly measured, we do not strictly interpret the city unemployment rate as a community-level effect.

Results: Phase II

Despite a difference of seven years and 17,000 cases, the eight-city data are remarkably similar to the national data. The magnitudes and signs of the coefficients for race, age group, and gender in Table 3 are similar to those in Tables 1 and 2, although they are not statistically significant.

The interaction between race and age that was detected in the national data is also detectable in the city data (although it, too, is not statistically significant). The pattern of homicides by day of the week and age group for blacks and nonblacks is illustrated in Figure 5. As in the national data, blacks exhibit little difference across age groups in the percent of homicides that occurred on weekends (34.1% young, 35.2% others). On the other hand, nonblacks who were aged 15-24 years had a higher weekend concentration of homicide (39.3%) than nonblacks of other ages (35.9%).

The lack of statistical significance in the city data for the effects of race, age, and gender is of little consequence since these factors are themselves simply indirect indicators of

[3] Victims with undefined employment status (relative to cases with defined values) were more likely to be males, blacks, positive for alcohol consumption, weekend occurrences, and/or located in Memphis, Dallas, or Philadelphia. All were differences were statistically significant at less than the .01 level.

a underlying process that generates the weekend effect. With more direct indicators, one expects more discernable effects.

Such a model is presented in Table 4 that includes indicators for whether the homicide was felony-motivated, whether the victim had a positive blood alcohol content at autopsy, and the unemployment rate in the city in which the homicide occurred. By far the strongest indicator is evidence of the victim's consumption of alcohol. Having a positive blood alcohol content at death increases the odds that the homicide occurred on the weekend by 48%. Homicides judged to have been motivated by a desire to commit a felony such as robbery, burglary, rape, etc. were only 77% as likely to have occurred on a weekend as "non-felony" homicides (e.g., those following arguments, disputes, and the like). Finally, a one unit increase in the rate of unemployment in the victim's city decreased the odds by about 4% that the homicide occurred on Saturday or Sunday.

Conclusions

A persistent pattern in homicide data is that homicides are concentrated on weekends. The degree of concentration is not the same for all groups in the U.S. population, however. Our analysis of national vital statistics data for 1985 shows a large and significant interaction between race and age: age makes little difference among blacks, but it has a large impact on those who are not black. For blacks, there is less than half of a percentage point difference between those who are young and those who are older, but for non-blacks there is nearly a 7 percentage point difference (persons between ages 15 and 24 are more likely to die on weekends vs. weekdays than persons of other ages).

This suggests there are different mechanisms generating the distribution of homicide across the week for blacks and others. For those who are not black, being young has an added impact. We hypothesized that differences in the routine activities of victims produced

these differences.

To explore this possibility we turned to data collected by Zahn and Riedel in 1978. They collected considerably more detail on each homicide than is available from either the U.S. Vital Statistics or the FBI's Supplementary Homicide Report. Our analysis of the Zahn and Riedel data focused on indicators of behavior that should be related to when homicides occur. The large and statistically significant effects for alcohol consumption and homicide motive confirmed our expectations. Moreover, because they are more direct indicators than age, race, and gender, they suggest that the distribution of homicides by day of the week is related to and reflected by regular daily activity patterns. Those whose exposure to situations in which homicide is a more of a risk on weekends were more likely to killed on weekends. Living in places with high unemployment (and/or presumably being unemployed oneself) tends to reduce the chances that one will be a weekend homicide victim.

This has implications for communities who wish to address the problem of homicide. Communities may be able to alter the pattern, and perhaps even the risk of homicide if they can change features of the environment that limit or change exposure patterns. It also has implications for those building multivariate models of homicide, suggesting that race is a very important variable that should not be ignored when exploring routine activities and exposure to risk.

Finally, these results are merely suggestive, pointing to the need to collect better, more comprehensive multicommunity data and to conduct additional research. While far more detailed than any official, national data source (not to mention expensive and painstaking), the Zahn and Riedel data were collected in only nine U.S. cities for a single year. Data on at least one key variable were incomplete. If new data collection efforts were to be funded, it would be desirable to expand both the number of communities as well as the

number of indicators of daily, routine activities of the victim. With criminology of place becoming more developed, one would ideally collect sub-city geographical information (neighborhood, or at least census block) as well, so that the context of place could be better related to individual characteristics.

In any case, the present study not only demonstrates that the ability to explore new hypotheses with existing homicide data is a cost-effective way for specifying the kinds of data collection efforts that would be most useful in future efforts. It also shows that secondary analysis of existing data can yield new insights into the process of building better models that may one day lead to effective ways for reducing homicide.

References

Bureau of the Census
1983 County and City Data Book, 1983. Washington, DC: U.S. Government Printing Office.

Federal Bureau of Investigation
1993 Crime in the United States, 1992. Washington, DC: U.S. Department of Justice.

Greenberg, Michael and Dona Schneider.
1992 Blue Thursday? Homicide and Suicide among Urban 15-24-Year-Old Black Male Americans. Public Health Reports 107:3 (May-June): 264-268.

Keith, Verna M. and David P. Smith.
1988 The Current Differential in Black and White Life Expectancy. Demography 25:625-632.

Land, Kenneth C., Patricia L. McCall and Lawrence E. Cohen.
1990 Structural Covariates of Homicide Rates. American Journal of Sociology 95:4 (January): 922-963.

National Center for Health Statistics
1992 Health United States 1991 and Prevention Profile. DHHS Pub No. (PHS) 92-1232. Hyattsville, MD: Public Health Service.

National Center for Health Statistics
1993 Advance Report of Final Mortality Statistics, 1991. Monthly Vital Statistics Report 42:2 (Supp.). DHHS Pub No. (PHS) 93-1120. Hyattsville, MD: Public Health Service.

National Center for Health Statistics
1994 Mortality Detail Files, 1968-1990. [Computer files]. Hyattsville, MD: National Center for Health Statistics [producer]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], ICPSR Study 7632.

Riedel, Marc and Margaret A. Zahn.
1982 Nature and Patterns of American Homicide. Unpublished final report, grant 79-NI-AX-0092, submitted to the National Institute of Justice. Carbondale, IL.: Southern Illinois University.

Riedel, Marc, Margaret A. Zahn, and Lois Felson Mock.
1985 Nature and Patterns of American Homicide. Washington, DC: National Institute of Justice.

Rokaw, William M., James A. Mercy, and Jack C. Smith.
1990 Comparing Death Certificate Data With FBI Crime Reporting Statistics on U.S. Homicides. Public Health Reports 105:5 (September-October): 447-455.

Wolfgang, Marvin E.
1958 Patterns in Criminal Homicide. Philadelphia: University of Pennsylvania.

Zahn, Margaret A., and Marc Riedel.
1983 National versus Local Data Sources in the Study of Homicide: Do They Agree? Pp. 103-120 in Gordon P. Waldo (ed.), Measurement Issues in Criminal Justice. Beverly Hills, CA: Sage Publications.

_____.
1988 Nature and Patterns of Homicide in Eight American Cities, 1978 [Computer file]. Carbondale, IL: Southern Illinois University, Center for the Study of Crime, Delinquency, and Corrections [producer], 1988. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], ICPSR Study 8936.

Zahn, Margaret A. and Philip C. Sagi.
1987 Stranger Homicides in Nine American Cities. Journal of Criminal Law and Criminology 78:2 (Summer): 377-397.

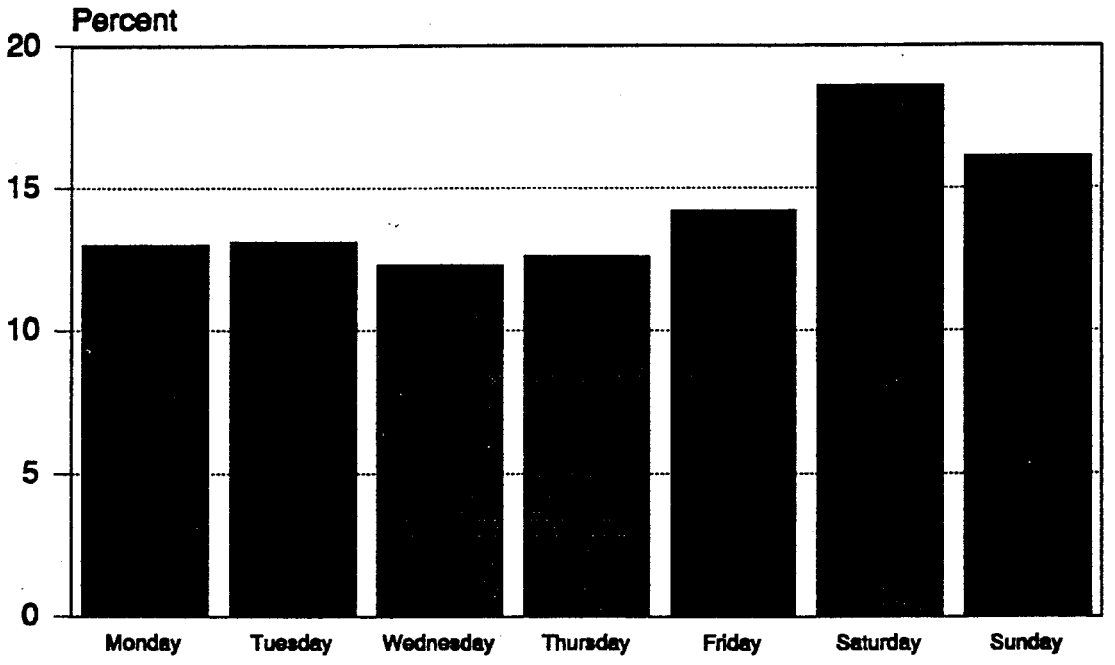

Figure 1 Percentage Distribution of Homicide Occurrence by Day of Week, 1985

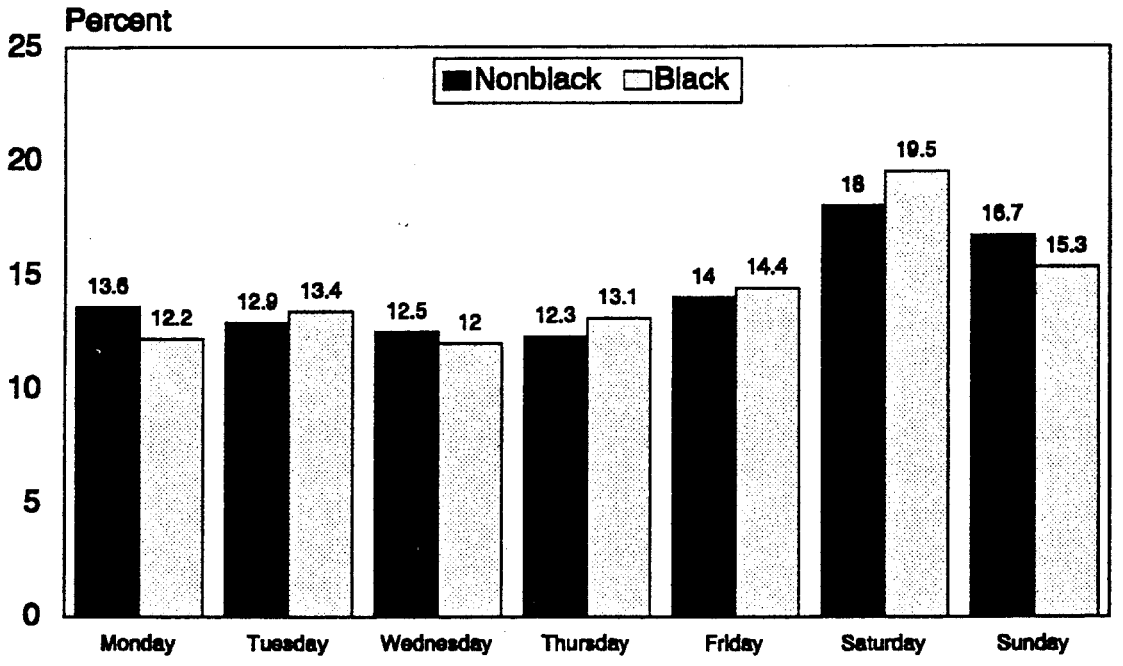

Figure 2 Percent of Homicides by Day of Week and Race of Victim, 1985

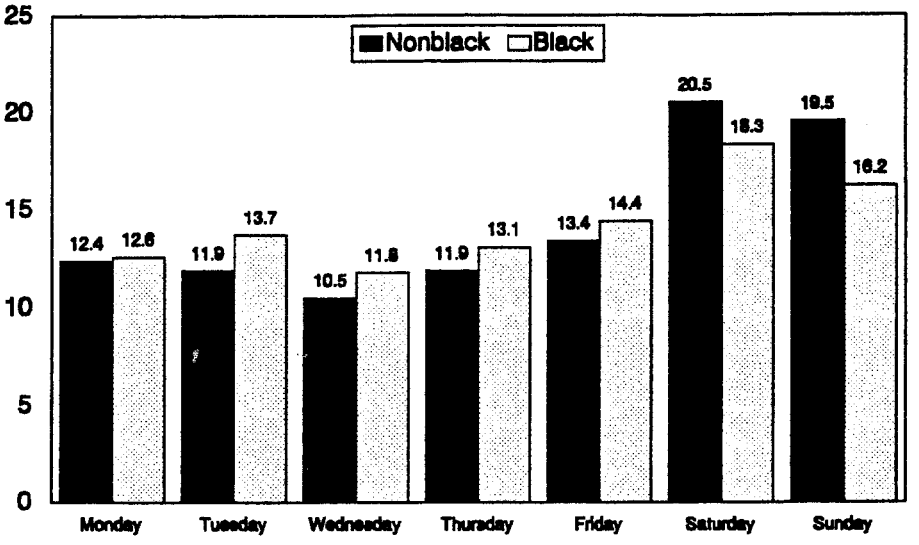

Figure 3 Percent of Homicides by Day of Week and Race of Victim: Ages 15-24 Only

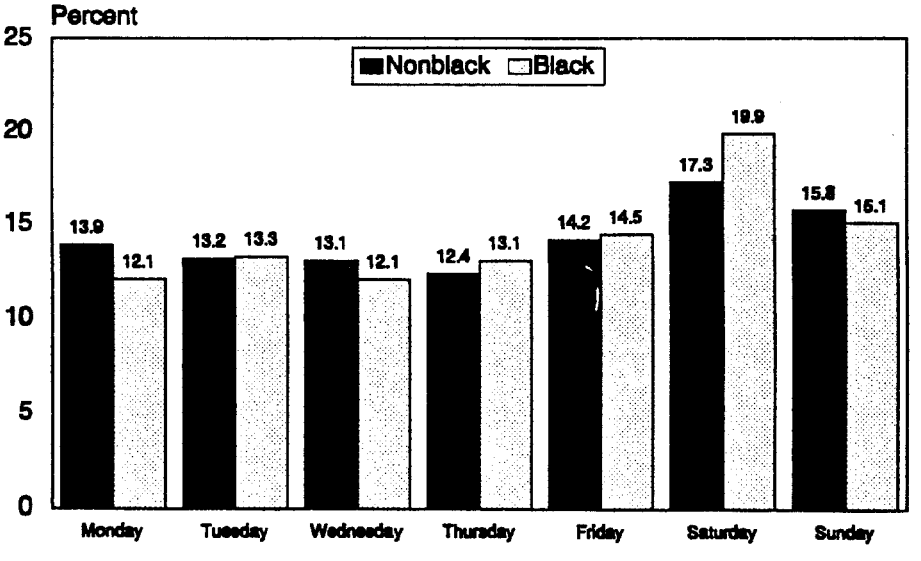

Figure 4 Percent of Homicides by Day of the Week and Race of Victim: All Ages Other Than 15-24 Years

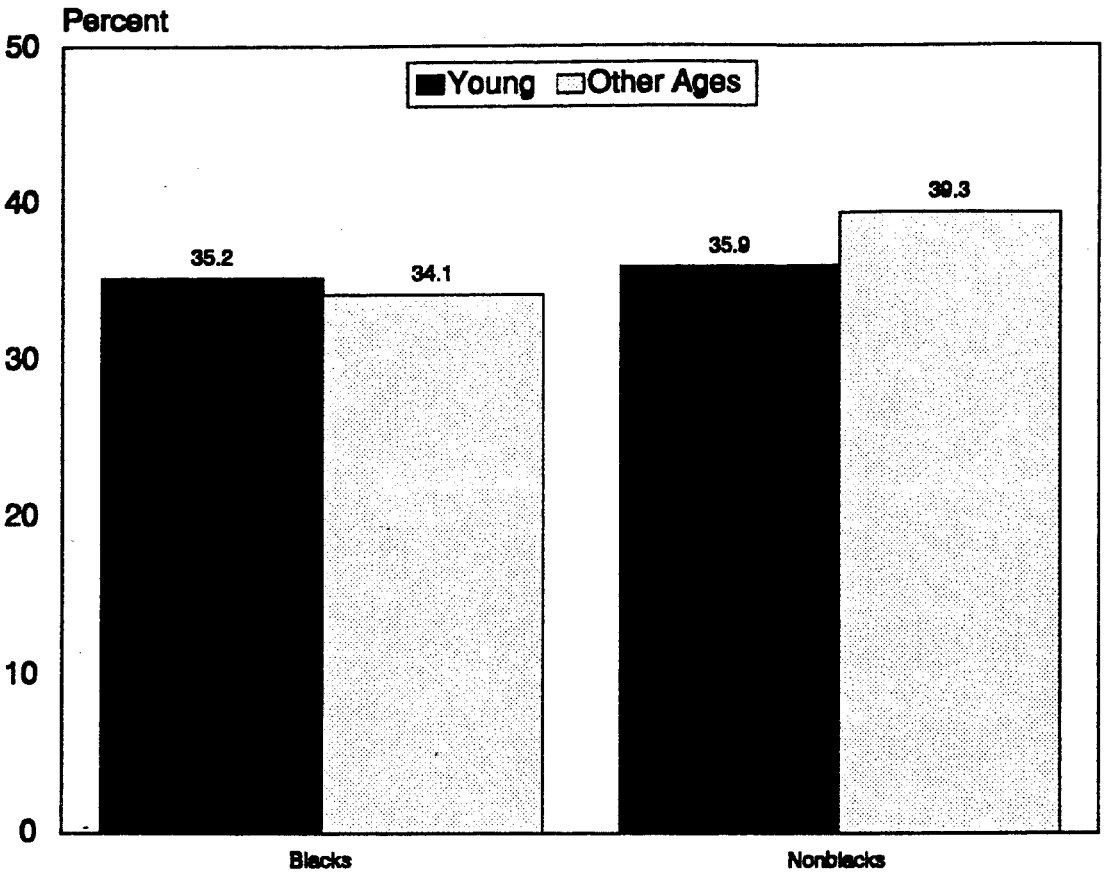

Figure 5 Percentage of Weekend Homicides by Race and Age Group, 1978

TABLE 1 Logit Model of Weekend Tendency in Homicide Occurrence, 1985: Main Effects Only

Variable	Coefficient (B)	Standard Error (SE)	B/SE	P-value	Conditional Odds Ratio
MALE	.1916	.0357	5.37	<.0001	1.2111
BLACK	−.0116	.0306	−.38	.7038	.9884
YOUNG	.1453	.0349	4.16	<.0001	1.1564
Constant	−.8064	.0336	−24.02	<.0001	

-2 (Log Likelihood) = 25213.535

TABLE 2 Logit Model of Weekend Tendency in Homicide Occurrence, 1985: Race-Age Interaction Included

Variable	Coefficient (B)	Standard Error (SE)	B/SE	P-value	Conditional Odds Ratio
MALE	.1904	.0357	5.33	<.0001	1.2097
BLACK	.0680	.0354	1.92	.0547	1.0703
YOUNG	.2857	.0467	6.12	<.0001	1.3308
BLACK by YOUNG	−.3138	.0703	−4.46	<.0001	.7306
Constant	−.8379	.0344	−24.36	<.0001	

-2 (Log Likelihood) = 25193.54

TABLE 3 Logit Model of Weekend Tendency in Homicide Occurrence, 1978

Variable	Coefficient (B)	Standard Error (SE)	B/SE	P-value	Conditional Odds Ratio
BLACK	-.0687	.1507	.2075	.6487	.9336
YOUNG	.0287	.2252	.0162	.8986	1.0291
MALE	-.0822	.1579	.2712	.6025	.9211
BLACK by YOUNG	-.0107	.2766	.0015	.9691	.9893
ALCOHOL CONSUMED	.4321	.1236	12.2146	.0005	1.5404
CITY UNEMPLOYMENT	-.0408	.0207	3.8862	.0487	.9600
FELONY CIRCUMSTANCE	-.3808	.1435	7.0398	.0080	.6833
Constant	-.2635	.2539	1.0772	.2993	

-2(Log Likelihood) = 1643.050

TABLE 4 Reduced Logit Model of Weekend Tendency in Homicide Occurrence, 1978

Variable	Coefficient (B)	Standard Error (SE)	B/SE	P-value	Conditional Odds Ratio
FELONY CIRCUMSTANCE	−.2603	.1283	−2.03	.0425	.7708
CITY UNEMPLOYMENT	−.0374	.0194	−1.93	.0537	.9633
ALCOHOL CONSUMED	.3941	.1141	3.45	.0006	1.4830
Constant	−.3814	.2023	−1.88	.0595	

-2(Log Likelihood) = 1817.057