This research examines the differential effects of structural conditions on race-specific victim and offender homicide rates in large U.S. cities in 1990. While structural theories of race relations and criminological explanations are reviewed, particular attention is given to those structural theories that highlight racial competition, economic and labor market opportunity, and racial segregation as essential for an examination of racially disaggregated homicide offending. The effects of these and other structural conditions are estimated for four racially distinct homicide offending models—black intraracial, white intraracial, black interracial, and white interracial homicides. The results suggest that the structural conditions that lead to race-specific victim and offender homicide rates differ significantly among the four models. Economic deprivation and local opportunity structures are found to influence significantly the rates of intraracial homicide offending, while racial inequality contributes solely to black interracial homicide rates. In addition, our findings indicate that blacks and whites face different economic and social realities related to economic deprivation and social isolation. The differential impact of these structural conditions and other labor market factors are discussed.

Criminologists long have studied the question of what differences exist between blacks and whites in their involvement in homicide. Recently, researchers have provided some answers to this question when examining separate black and white homicide offending models (Harer and Steffensmeier, 1992; Messner and Golden, 1992; Messner and Sampson, 1991; Parker and McCall, 1997; Peterson and Krivo, 1993; Sampson, 1985; Shihadeh and Flynn, 1996). Key to these studies is the finding that some...
of the disparities in black and white homicide offending are due to structural conditions within localities (Krivo and Peterson, 1996; Sampson and Wilson, 1995).

The purpose of this research is to examine the differential effects of structural conditions on racially disaggregated homicide rates. Specifically, our research addresses two central issues related to racial variations in homicide rates. First, based on theories of race relations and crime, we examine the effects of structural conditions on race-specific victim and offender homicide rates. Particular attention is given to estimating the effects of opportunity structures, racial segregation, and racial competition on homicide offending rates for blacks and whites in large U.S. cities. Second, we address the extent to which structural conditions within localities produce four distinct racial patterns of homicide—black intraracial, white intraracial, black interracial, and white interracial homicide rates. Consequently, whereas recent criminological research has explored the impact of structural inequality on homicide rates within urban neighborhoods (Krivo and Peterson, 1996), our focus is on how such structural characteristics influence race-specific homicide rates across U.S. cities.

According to Wilson (1987), the increase in economic marginalization of African-Americans is due, in part, to a set of spatial and industrial changes in the political economy that resulted in the elimination of many jobs for minorities and increased the rate of poverty and isolation within these localities from accessible occupations (see also Kasarda, 1992; Ricketts and Sawhill, 1988). Extant research provides some support for the effects of poverty on homicide rates in general (Bailey, 1984; Messner, 1982, 1983) and race-specific homicide rates in particular (Patterson, 1991; Sampson, 1985; Williams and Flewelling, 1988). However, we argue that in order to fully extend the study of black and white homicide offending, the impact of racial differences in labor market and opportunity structures should be established. The local opportunity structure reflects access, or lack thereof, to labor market opportunities among racial groups within a given locality. Specifically, opportunity structure depicts blacks' and whites' ability to establish employment within urban areas marked by spatial and industrial changes. Shihadeh and Maume (1997), for example, found evidence linking African-Americans' job accessibility with black homicide offending. An examination of the differences in local opportunity structure for blacks and whites as a source of the racial variations in homicide offending has not been offered.

Another issue of importance in this research is the extent to which the structural conditions operating in urban areas can contribute to the competition and conflict between racial groups (see also, Corzine et al., 1983, 1988; Olzak, 1992; Olzak et al., 1996; Tomaskovic-Devey and Roscigno,
Although a growing body of research examines the effects of economic and social disadvantages on race-specific homicide rates, the influence of poverty, racial segregation, racial inequality, and labor market factors on crime rates within and between racial groups has yet to be examined. Structural theories of race relations explore the conflicts, competition, and antagonisms that exist within and between racial groups in local areas. These structural arguments offer explanations for the differential effect of structural conditions on intra- and interracial homicide rates.

By generating propositions and empirically analyzing the linkages between structural conditions and race-specific victim and offender homicide rates for large U.S. cities, this research advances previous research in three central ways. First, structural theories of race relations are incorporated into the study of race-specific violence. An examination of split labor market/exploitation and racial competition theories provides this research with an avenue to assess the impact of labor market factors and competition between racial groups on lethal violence. Second, this study goes beyond previous studies of race-specific violence by offering multiple measures of the disadvantages faced by blacks and whites in the local political economy. We estimate the influence of job accessibility, labor market structures, racial competition, and racial residential segregation on racially disaggregated homicide rates. Finally, this study extends the few empirical studies of race-specific violence by comparing the differential effects of structural conditions on rates of white and black interracial as well as intraracial homicide. Much of the previous empirical research focuses solely on black urban violence (e.g., Peterson and Krivo, 1993; Sampson, 1987; Shihadeh and Maume, 1997; Shihadeh and Steffensmeier, 1994) and does not address interracial violence. To begin, we develop our hypotheses by delineating the influence of structural conditions on the rates of homicide among and between blacks and whites.

**STRUCTURAL ARGUMENTS**

Criminological explanations posit that economic deprivation and racial inequality are particularly relevant to studies of criminal behavior. Strain/deprivation theory, social disorganization, and Blau’s macrostructural theories are among the major structural theories that inform homicide studies. Our research broadens the scope of theoretical arguments to include race-relations literature along with these criminological explanations. Our review focuses on the contributions of racial residential segregation, racial competition, and local opportunity structure as structural conditions that differentially influence race-specific homicide rates.
According to strain/deprivation theory, limited or blocked economic opportunities are accompanied by feelings of injustice and resentment (Merton, 1938). Strain/deprivation theorists attempt to explain the criminal response of minority groups as one possible reaction to unfulfilled expectations of justice and equity (Messner and Rosenfeld, 1993). This approach provides an established connection between blocked economic opportunities and violence. Because minorities are disproportionately represented among the lower class and are more likely to experience discrimination in economic spheres, they are presumed to be more likely to experience relative deprivation, which potentially engenders animosity, strain, and violence. Researchers have found a direct relationship between economic inequality (relative deprivation) and homicide (Blau and Blau, 1982; Chamlin, 1989; Loftin and Hill, 1974; Messner, 1983; Sampson, 1986).

In contrast, research examining the effects of economic deprivation on racially disaggregated homicide rates has produced findings contrary to strain/deprivation theorists' expectations. While relative deprivation theory predicts that inequality generates higher rates of homicide for minority groups, extant research provides evidence that inequality has no effect on black homicide offending (Peterson and Krivo, 1993; Harer and Steffensmeier, 1992; Messner and Golden, 1992) yet has a positive impact on white homicide offending (Harer and Steffensmeier, 1992; Messner and Golden, 1992; Parker and McCall, 1997). Propositions from the race-relations literature offer insights that account for the differential effects of economic deprivation on racial variations in homicide.

Since the 1970s, the polarization of the labor market and elimination of manufacturing jobs have been key to the transformation of urban areas. Extant research has offered evidence of the criminogenic effect of increasing poverty (Messner, 1982, 1983), poverty concentrations (Krivo and Peterson, 1996), and unemployment or joblessness (Sampson, 1987; Shihadeh and Maume, 1997) in urban areas, which supports Wilson's (1987) argument. Accordingly, economic and labor market dynamics in localities can result in antagonisms within and between racial groups. We argue that this influence can affect race-specific homicide through two fundamental forms: job accessibility and racial competition in the labor market.

In the first of these two forms, a lack of accessibility to employment opportunities produces strain among minority populations, whereby minorities face systematic exclusion from employment or are relegated to the least desirable, unstable jobs (Kasarda, 1992; Shihadeh and Maume,
1997; Wilson, 1991). Importantly, whites too suffer from economic downturns and labor market forces. Economic instability and labor market fluctuations provide a breeding ground for strain and, hence, conflict among the white population as well. As racial groups lose out economically due to industrial changes or fluctuations in the local opportunity structure, antagonisms and conflict among them increase.1 We examine the local structure of labor market opportunities as well as the extent to which changes in opportunities over time may contribute to differential rates of within-group homicide for these racial groups.

The second form by which labor market dynamics influence homicide rates emerges from split labor market/exploitation and racial competition theories, which offer insight into the conflicts between racial groups. Arguments from this perspective are based on the fact that minorities are disproportionately represented among the lower classes and typically occupy unskilled or semiskilled jobs. In the local labor market, differences in labor market participation among various racial groups are produced as a by-product of whites' attempts to maintain their economic positions (Bonacich, 1976). Accordingly, economic inequality is due to competition between racial groups in the labor market. Inequality theorists posit that African-Americans pose an economic threat to low-skilled white workers—a threat of competition for jobs, power, and positions—that leads to conflict between them (Blalock, 1967; Blauner, 1982; Lieberson, 1980). This competition intensified the exclusion of African-Americans from participating in the labor market (Bonacich, 1972; James, 1988), as well as the social control of African-Americans in the form of violence by whites against blacks as the size of the black population increases (Corzine et al., 1983; Huff-Corzine et al., 1991; Olzak, 1990; Parker and McCall, 1997; Tolnay et al., 1992). Thus, as a function of the competition between racial groups, whites' perceptions of blacks as an economic threat, whether such threats are real or imagined, enhance whites' hostilities toward blacks. These theories provide the link between racial competition and white interracial homicide. Our discussion of the macro-structural dynamics that provide an explanation for the impact of racial competition on black interracial homicide is offered in the next section.2

1. As argued here, economic difficulties could produce strain. However, we also acknowledge other possibilities or linkages with social disorganization theory in later segments. That is, as both blacks and whites lose out economically, the ability to maintain informal social control within a given locality is decreased and, therefore, may result in white and black intraracial homicide offending.

2. Structural theories of race relations also provide an avenue to address black interracial homicide. However, the dynamics by which racial competition affects black-on-white homicide differ from those described for white interracial homicide offending. The potential for black interracial homicide is dependent upon the amount of interracial contact and social isolation in a given area. In areas where blacks lack access to
SOCIAL DISORGANIZATION, SEGREGATION, AND MACROSTRUCTURAL DYNAMICS

Another fundamental approach to the study of homicide is social disorganization theory. In essence, Shaw and McKay (1942) argue that deteriorating structural conditions lead to social disorganization in communities, which in turn, accounts for the ecological variations in crime rates. In more recent efforts, Bursik (1988) defines social disorganization as the inability of a community structure to realize the common values of its residents and maintain effective social control. Key to the social disorganization perspective is the idea that structural barriers impede development of formal and informal ties that promote the community's ability to solve common problems. Empirical analyses have provided support for social disorganization theory (Sampson, 1991; Sampson and Groves, 1989; Petee and Kowalski, 1993; Smith and Brewer, 1992; Smith and Jarjoura, 1988).

The characteristics of contemporary urban areas mirror those described by social disorganization theorists. Racial heterogeneity and residential mobility persist in urban areas, and together they contribute to growing racial segregation in today's inner city. Clear patterns of residential segregation of African-Americans from other races in urban areas have been documented. Structural theorists posit that black poverty is the outgrowth of persistent racial segregation in urban areas (Massey and Eggers, 1990; Massey et al., 1994) and that segregation plays an essential role in the growing disparities between white and black disadvantaged neighborhoods. Moreover, racial residential segregation in urban areas has been linked to whites' intolerance (Massey and Eggers, 1990; Massey et al., 1991) and the breakdown in community organization and informal social control within urban communities (Sampson and Wilson, 1995).

Not only is racial residential segregation related to social disorganization theory, it clearly plays a part in the potential for interracial contact. Blau's (1977) macrostructural theory examines the opportunity for intergroup contact, which influences race-specific criminal offending. In principle, intergroup contact is required for the emergence of any meaningful intergroup association, and the basic structural features of communities influence the probability of those contacts (Blau, 1977; Messner and South, 1986; Sampson, 1984; South and Messner, 1986, 1992). The extent as well as the nature of interracial contact are determined by the structural conditions in which that contact occurs (see also Sigelman et al., 1996).
Interracial contact in urban areas has implications for the variations in black and white interracial homicide.

We propose that in racially segregated black residential areas, which are typically coupled with the multiple disadvantages of inequality, there will be a decrease in the rates of black interracial homicide. Although racial competition theory proposes that racial barriers to achievement and access to labor markets for blacks will fuel resentment (strain) and the potential for racial violence (see Harris, 1988; Massey and Denton, 1993; Olzak et al., 1996), we argue that such potential is suffocated by the restrictions placed on blacks. That is, the restrictions placed on blacks in the labor market (least desirable jobs, lacking job security, part-time work, and so on) and the existence of high degrees of racial residential segregation decrease the likelihood of violence in the form of black-on-white homicide. In light of the multiple disadvantages faced by blacks, however, we posit that racial segregation will increase the rates of black intraracial homicide. On the other hand, whites have benefited from racial isolation by steadily diminishing their contact with African-Americans through racial segregation. Massey and Denton (1993) and Lieberson (1980), among others, have long argued that black isolation is indicative of whites' successful efforts at segregating themselves from blacks. As discussed, white segregation is not accompanied by the multiple disadvantages of poverty and isolation that confront the black population. Therefore, we postulate that segregation will not adversely influence white intraracial homicide rates.

CRIMINOGENIC LINKAGES TO STRUCTURAL CONDITIONS: THE HYPOTHESES SUMMARIZED

By examining structural theories of race relations and criminology, we attempt to identify the structural forces that account for intra- and interracial homicide offending. Whereas we argue the local opportunity structure sets the stage for various forms of conflict, it has differing implications for intra- and interracial violence. When considering black homicide offending, the inability to locate or sustain employment in the labor market results in economic deprivation and strain among minority populations. This strain may result in diffused aggression toward proximate targets in the form of black intraracial homicide offending. In addition, conditions conducive to social disorganization are exacerbated in those areas characterized by spatial and economic changes (racial segregation and economic deprivation), which also promote black intraracial homicide. Racial inequality between whites and blacks engenders frustration and hostilities among blacks as they perceive these injustices, which could result in blacks' aggression toward whites. On the other hand, the geographic constraints of racial segregation should suppress black-on-white homicide
offending. Therefore, the relative proximity of blacks in racially segregated urban areas combines with weak social organization and limited access to labor markets to contribute to black intraracial homicide offending, while isolating and protecting whites—spatially and economically—from black interracial homicide offending.

In terms of white homicide offending, we propose economic hardships increase white intra- and interracial homicide offending. Whites' declining opportunities in the local labor market generate strain and, potentially, diffused aggression, which influences white intraracial homicide offending. Moreover, due to the existence of racial discrimination and competition between working-class and lower skilled laborers, blacks are likely to be perceived as the cause of whites' economic decline, which fuels white interracial homicide offending. On the other hand, racial segregation and inequality do not contribute to white intra- and interracial homicide offending. In accord with theories of deprivation and race relations, whites benefit from and, therefore, perpetuate black isolation and racial inequality. In what follows, we introduce the data and methodology that allow us to estimate the relative contributions of the factors identified in the above causal processes.

DATA AND METHODS

The data for our analyses include U.S. cities with a population of 100,000 or more in 1990. In addition, only cities with a black population of 2% or more are included in the models of interracial homicide rates (see also, Messner and Golden, 1992; Parker and McCall, 1997; Peterson and Krivo, 1993; Sampson, 1987). Our interest in computing race-specific measures imposes this selection criterion to ensure reliable estimates of racially disaggregated homicide rates. To minimize the impact of random year-to-year fluctuations of homicide incidents and because interracial homicide is an especially rare form of homicide, the race-specific victim and offender homicide rates are based on a five-year average of the homicide data for the years, 1987–1991—the years circa 1990 for which data were available. This procedure generates a complete sample of the largest 196 cities. However, given the above-mentioned 2% black population criterion and the existence of missing data for some of the explanatory variables, the sample of cities for 1990 is further restricted and differs in each of the racially disaggregated homicide models.

The two primary data sources are the Federal Bureau of Investigation's (FBI's) Uniform Crime Reports (UCR) and the 1990 Bureau of the Census population statistics. The Comparative Homicide File (CHF) is based on the annual Supplementary Homicide Reports (SHR) collected by the FBI's Uniform Crime Reporting program. The CHF is vital to this study
because it contains information on the race of the victim and the offender in homicide cases and, thus, allows us to compute the race-specific victim and offender homicide rates. We begin with a discussion of the homicide measures.

DEPENDENT VARIABLES

This study limits the analysis to murders and nonnegligent manslaughters with a single offender and single victim, which is consistent with previous research based on CHF data (Messner and Golden, 1992; Parker and McCall, 1997; Williams and Flewelling, 1988). This restriction avoids ambiguous classifications of incidents with multiple victims and offenders of different racial groups. The four dependent variables included in this study are: black offender/black victim homicide rates, white offender/white victim homicide rates, black offender/white victim homicide rates, and white offender/black victim homicide rates.

Our black and white intraracial homicide rates are computed as the number of homicides involving an offender and victim of a given race divided by the number of persons for that racial group. The white interracial homicide rate is calculated by dividing the number of homicides involving a white offender with a black victim by the number of whites in the city's population. Likewise, the black interracial homicide rate is computed with the number of homicides involving a black offender with a white victim divided by the total number of blacks residing in the city. All four homicide rates are computed as the number of each type of racial homicide per 100,000 population.

3. Another advantage of using CHF data is that for those situations in which the race of the offender was unknown, an imputation algorithm developed by Williams and Flewelling (1987) was implemented to "extrapolate the characteristics of the known cases to those with missing information" (p. 426). This procedure allows for an "adjusted" count of homicide incidents by estimating the race of the unknown offender on the basis of all recorded features of the incidents and the racial patterning in the given city in homicide incidents for which the race of the offender is known. See also Messner and Golden (1992); Parker and McCall (1997); and Williams and Flewelling (1988) for further detailed descriptions of these data. We thank Kirk Williams and the Center for the Study and Prevention of Violence at the University of Colorado for providing us with these data.

4. Consistent with previous research, we assess only those homicides involving a single offender-single victim (see Williams and Flewelling, 1987). Being aware of the limitations of SHR data in general, the potential for inaccuracies (and implications for measurement error) when classifying the race of multiple offenders and/or victims is heightened when examining race-specific intraracial and interracial homicide rates. Until such information becomes available, and it is possible to enumerate all the pertinent racial characteristics of victim/offenders in multiple-offender or -victim incidents, it is difficult to assess the implications of these omissions on the research outcome.
The concepts comprising our causal models include local opportunity structure, racial residential segregation, economic deprivation, family disruption, and racial inequality. Our description of the operationalization of these concepts focuses on local opportunity structure. The majority of variables we employ are race specific; exceptions to this race specificity are noted in our discussion below.

Three indicators of the local opportunity structure are included: (1) percentage of persons not employed, (2) job accessibility, and (3) relative changes in employment opportunities between 1980 and 1990 (racial competition). The percentage of persons employed is computed as the number of employed persons divided by the total number of persons that are 16 years of age and older. The percentage of persons not employed is computed by subtracting the percentage of persons employed from 100. Because most measures of unemployment do not include those persons not actively seeking work, we construct this measure of percentage of persons not employed to account for those individuals. The second measure, job accessibility, reflects the accessibility of semiskilled and unskilled jobs to low-skilled persons and is computed as the ratio of the number of jobs in low-skill industry groups to the number of persons aged 25 and over with a high school diploma or less (see Shihadeh and Maume, 1997).5

Our third measure of local opportunity structure reflects the change in employment opportunities over time. It is computed by subtracting the percentage of persons employed in 1990 from those employed in 1980 and then dividing that value by the percentage of persons employed in 1980. This measure of strain is included only in the intraracial models because it is an indicator of the changing economic hardships encountered within a racial group as opposed to the changing racial competition in the labor market between racial groups. For the interracial models, we include a measure to reflect the racial competition that represents the change in labor market/employment opportunities of one racial group relative to those of another. Specifically, the numerator is the percentage difference between persons employed in 1990 and 1980 for one racial group, while the denominator measures the percentage difference between those persons employed in 1990 and 1980 for the other racial group. It has been suggested that competition and conflict between racial groups in the labor

5. According to Kasarda (1989), 10 of the 17 major industry groups can be classified as being dominated by low-skill jobs. They are (1) agriculture, forestry and fisheries; (2) mining; (3) construction; (4) manufacturing, nondurable; (5) manufacturing, durable; (6) transportation; (7) wholesale trade; (8) retail trade; (9) personal services; and (10) entertainment and recreational services. Our defining of an industry group as low skill is based on Kasarda's (1989) classification.
DISADVANTAGES IN URBAN AREAS

market may increase the level of homicide incidents by one racial group against the other (Corzine et al., 1983, 1988; Parker and McCall, 1997).6

Racial residential segregation is measured by the index of dissimilarity, which is a widely used indicator of unevenness in the distribution of two racial groups across census tracts within a city (Massey and Denton, 1988; Messner and Golden, 1992; Parker and McCall, 1997; Peterson and Krivo, 1993).7

Our measures of economic deprivation include the percentage of the population that lives below the poverty line as well as the Gini index of household income inequality. These variables are widely employed in criminological research investigating the influence of economic deprivation.

Two measures of family disruption are implemented that have been used in related research to tap two dimensions of social disorganization: percentage of children not living with both parents and the percentage of divorced males. The first measure reflects the lack of supervision available for youths and is computed by estimating the number of children ages 18 and under not living with both parents, divided by the total number of children 18 years old and under. The second measure attempts to capture the weakened ties to family among divorced males and is computed as the number of divorced males divided by the total number of males 15 years of age and older.

Three measures of racial inequality are employed in this research: the ratio of white to black median family income, the ratio of white to black median years of schooling attained by those persons 25 years old and over, and the ratio of black unemployment rates to white unemployment rates (see Messner and Golden, 1992). Three control variables are included in each of the intra- and interracial homicide models. The control variables include population size, percent of the population of Hispanic origin, and a measure of region (South).

---

6. The racial group represented in the numerator differs in the black and white homicide offending models, in that it reflects the race of the offending group. The ratio measure represents the relative change in employment opportunities for whites vis a vis blacks and, therefore, the greater likelihood of racial competition in the local opportunity structure and potential for racial conflict.

7. We acknowledge that the index of dissimilarity is one of many measures of segregation being proposed for use in criminological research (see Shihadeh and Flynn, 1996). Recently, Shihadeh and Maume (1997) have offered an alternative measure of racial segregation, referred to as black centralization in their analysis of black homicide offending, which may have interesting implications for studies of race-specific homicide rates. However, we employ the index of dissimilarity as our measure of segregation because of our interest in both intraracial and interracial homicide offending among whites and blacks. We thank Ruth Peterson and Lauren Krivo for their assistance when constructing this measure.
Overall, population size is measured by the total resident population residing in each of the cities for 1990. The percentage of the population of Hispanic origin has been offered as a control variable because of the notable shortcomings in the SHR. Finally, a measure of southern region is employed in this study to control for any regional differences in homicide offending. South is measured using a dummy-coded variable so that cities located in the southern region are coded as one and all other cities are coded as zero.

Preliminary data analyses revealed nonlinear relationships between each dependent variable and population size as well as percent Hispanic; therefore, natural logarithmic transformations were applied to these independent variables. In addition, a natural logarithmic transformation of the dependent variables was performed to reduce the skewness typically associated with rare events such as homicide.

STATISTICAL ANALYSES

The potential for committing the partialling fallacy is evident from examining the bivariate correlations. Therefore, principal components analyses were conducted to reduce the likelihood of related methodological problems. The results of the principal components analysis for each of the four racially disaggregated homicide models are presented in Table 1. Overall, the findings in Table 1 identify the differential loading of factors for the white and black populations, which reflects the diverse social and economic conditions for these racial groups. A discussion of the emerging indices follows.

8. Consistent with Nelsen et al. (1994), we too are concerned with the potential inclusion of homicide victims with Hispanic origins in estimations of white homicide rates without also accounting for the proportion of Hispanics in the population. For this reason, we include the percent Hispanic population measure as a control in our equations. This measure is computed as the number of residents of all Hispanic origins divided by the total residential population of the city.

9. Due to the existence of a large number of zeros or relatively small homicide rates, a constant (1) was added to all values of the dependent variables to enable the log transformation (see Tufte, 1974; Neter, et al., 1983). We found that there are no substantive differences between equations estimated using the log transformed homicide rates and the original metric measures of the homicide rates.

10. Land et al. (1990) argue that a high degree of collinearity between a set of independent variables relative to their correlation with the dependent variable—a problem referred to as the partialling fallacy (Gordon, 1967)—is often confronted in aggregate-level research. See discussions provided in Land et al. (1990); Messner and Golden (1992); and Parker and McCall (1997) regarding the methodological technique employed to correct this problem. The means, standard deviations, and correlation matrices for dependent and independent variables before employing principal components data reduction techniques are available upon request from the first author.
Table 1. Maximum Likelihood Factor Pattern Matrices After Oblique Rotation Racially Disaggregated Homicide Models, 1990

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Percent in Poverty</td>
<td>.87134</td>
<td>.90162</td>
<td>.87095</td>
<td>.90385</td>
<td>.80790</td>
<td>.77487</td>
<td>.80176</td>
</tr>
<tr>
<td>Income Inequality</td>
<td>.83234</td>
<td>.77422</td>
<td>.82748</td>
<td>.76156</td>
<td>.77592</td>
<td>.72191</td>
<td>.73683</td>
</tr>
<tr>
<td>Percent Children Not Living with Both Parents</td>
<td>.80790</td>
<td>.77487</td>
<td>.80176</td>
<td>.77882</td>
<td>.83727</td>
<td>-.68659</td>
<td>.83636</td>
</tr>
<tr>
<td>Racial Residential Segregation</td>
<td>.77592</td>
<td>.72191</td>
<td>.73683</td>
<td>.72992</td>
<td>.80932</td>
<td>.80932</td>
<td></td>
</tr>
<tr>
<td>Percent Not Employed</td>
<td>.83727</td>
<td>-.68659</td>
<td>.83636</td>
<td>-.72204</td>
<td>.80932</td>
<td>.80932</td>
<td></td>
</tr>
<tr>
<td>Job Access</td>
<td></td>
<td>.75401</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Income Inequality</td>
<td>.78829</td>
<td>.91459</td>
<td>.81157</td>
<td>.90220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Education Inequality</td>
<td>.88063</td>
<td>.70235</td>
<td>.89993</td>
<td>.69728</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Unemployment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality</td>
<td>.70556</td>
<td>.83843</td>
<td>.73075</td>
<td>.83355</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>5.009</td>
<td>1.421</td>
<td>2.787</td>
<td>3.158</td>
<td>1.188</td>
<td>5.057</td>
<td>1.422</td>
</tr>
</tbody>
</table>

NOTE: Only factor loadings greater than 0.5000 are reported; percent divorced males, percent change in employment, and ratio of change in employment were included in principal components analysis; population size, percent Hispanic, and South were excluded.

*Cities with black residential population of 2.0% or more included.
RESOURCE DEPRIVATION/SEGREGATION INDEX

The first dimensional composite displayed in Table 1 is for the black model, which includes two measures of economic deprivation (poverty and income inequality), one of the measures for local opportunity structure (percent not employed), and one measure of family disruption (percent children not living with both parents). In addition, the measure of racial residential segregation loads along with this dimension. This index indicates that cities with relatively high percentages of black persons living in poverty, income inequality among blacks, percentages of black persons not employed, and percentages of black children not living with both parents are also cities where the black population is residentially isolated from whites. Therefore, the first dimensional composite is referred to as the resource deprivation/segmentation index (see Massey et al., 1991, 1994).

RESOURCE DEPRIVATION/AFFLUENCE INDEX

Table 1 also displays the results of the first dimensional composite for the white population models. Consistent with that for the black population, this index includes the two measures of economic deprivation (poverty and income inequality) and one indicator of family disruption (percent children not living with both parents). That is, cities that have higher percentages of white persons living below the poverty line and white income inequality are also characterized by greater percentages of white children not living with both parents. However, one major difference between this composite and that generated for the black population is that racial segregation does not load with this composite. We refer to this composite as the resource deprivation/affluence index, which is comparable to related research (Land et al., 1990; Massey and Eggers, 1990; Messner and Golden, 1992).

RACIAL INEQUALITY INDEX

The second dimensional composite, the racial inequality index, includes the three racial inequality measures: the ratio of white to black median family income, ratio of white to black median years of schooling attained for persons aged 25 and over, and ratio of black unemployment to white unemployment rates. This index is consistent across the four models, with the exception that in the white homicide models it also comprises the racial residential segregation measure (see Messner and Golden, 1992:435).

JOB OPPORTUNITY INDEX

The third composite produced by the principal components analysis for
DISADVANTAGES IN URBAN AREAS

the white population is the *job opportunity index*, which includes the measures of the percentage of whites not employed and job accessibility. Thus, cities with higher percentages of whites not employed also have proportionately fewer jobs available to whites in low-wage, entry-level industries. On the other hand, the job accessibility measure does not load with other economic indicators for the black population, and therefore, our reference to this measure, *job accessibility*, denotes this difference.

Overall, the principal components analysis generates similar yet unique racial and economic dimensions for each of the racially disaggregated homicide models.\(^\text{11}\) The results suggest the importance of examining homicide models separately along racial lines and constructing dimensional indices to reflect these racial distinctions.

RESULTS AND DISCUSSION

The results of the ordinary least squares (OLS) multiple regression estimation of the four intra- and interracial homicide equations are displayed in Table 2.\(^\text{12}\) Our discussion of the regression results is organized around the measures most salient to our structural arguments across the four models. We first discuss our findings for the effects of economic deprivation on the racially disaggregated homicide rates, then the influence of

---

\(^{11}\) The correlation matrices, standard deviations, and means for the newly simplified models are presented in Appendixes 1 through 4. The matrices reveal no evidence of collinearity or problems associated with the partialling fallacy. As a further test, regression coefficients for a series of nested models are estimated for the racially disaggregated homicide rates. We do this by examining the shift in the relative magnitude of the parameter estimates as each regressor is successively entered into the model (tables are not shown but are available upon request from the first author). The results indicate that the implementation of principal components analysis in each of the racially disaggregated homicide models provides for efficient parameter estimates in the multiple regression analyses. Further, an examination of the variance inflation factors (VIF) yield further evidence that collinearity is not problematic. None of the VIF associated with the parameter estimates exceeds a value of 4. Rather, the values range from 1.016 to 2.114 in the four models.

\(^{12}\) Initial regression analysis and robust statistical diagnostics reveal that a few cities included in the sample are influential and extreme cases. Because their inclusion in the regression analyses can affect the stability of the parameter estimates, standard errors, and test statistics (see Belsley et al., 1980, for detailed discussion), those cities have been omitted from the multiple regression analyses presented in this study. For each model, the cities include, Black Intra-racial: Torrance, CA; Hialeah, FL; Cedar Rapids, IA; Lowell, MA; Salem, MA; Allentown, PA; Black Interracial: Fremont, CA; Lowell, MA; Springfield, MA; Yonkers, NY; and White Intra-racial: Inglewood, CA; Hialeah, FL; Hollywood, FL; Miami, FL; Lowell, MA; and Las Vegas, NV. The deletion of these cases, along with the 2% or more black population criterion in the interracial models, contributes to the difference in sample sizes for the homicide equation models.
local opportunity structure, racial inequality, social disorganization, and our control variables.

Table 2. Unstandardized (and Standardized) Regression Coefficients for Racially Disaggregated Homicide Rate Equations, 1990

<table>
<thead>
<tr>
<th></th>
<th>Black Intraracial Homicide Model</th>
<th>White Intraracial Homicide Model</th>
<th>Black Interracial Homicide Model</th>
<th>White Interracial Homicide Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Deprivation/Segregation Index</td>
<td>0.0138*** (0.303)</td>
<td>—</td>
<td>—</td>
<td>0.012** (0.198)</td>
</tr>
<tr>
<td>Resource Deprivation/Affluence Index</td>
<td></td>
<td>0.026*** (0.304)</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Job Opportunity Index</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.016*** (0.223)</td>
</tr>
<tr>
<td>Job Access</td>
<td>-0.0136*** (-0.496)</td>
<td>0.015*** (0.307)</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Change in Employment</td>
<td>-0.942*** (-0.169)</td>
<td>-0.483 (-0.081)</td>
<td>-0.081 (-0.006)</td>
<td>0.001 (-0.039)</td>
</tr>
<tr>
<td>Racial Inequality Index</td>
<td>0.034 (0.028)</td>
<td>0.125* (0.129)</td>
<td>0.042 (0.076)</td>
<td></td>
</tr>
<tr>
<td>Percent Divorced Males</td>
<td>0.0064 (0.065)</td>
<td>0.004 (-0.003)</td>
<td>-0.001 (-0.024)</td>
<td>-0.007 (-0.082)</td>
</tr>
<tr>
<td>Population Size (log)</td>
<td>0.224*** (0.163)</td>
<td>0.267*** (0.313)</td>
<td>0.133* (0.134)</td>
<td>0.205*** (0.303)</td>
</tr>
<tr>
<td>Percent Hispanic (log)</td>
<td>0.024 (0.031)</td>
<td>0.199*** (0.414)</td>
<td>0.189*** (0.340)</td>
<td>0.029 (0.079)</td>
</tr>
<tr>
<td>South</td>
<td>-0.016 (-0.007)</td>
<td>0.214*** (0.160)</td>
<td>-0.523*** (-0.339)</td>
<td>0.002 (-0.026)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-1.147 (-0.210)</td>
<td>-3.119 (-0.210)</td>
<td>-0.469 (-0.210)</td>
<td>-2.912 (-0.210)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.633 .553</td>
<td>.439 .439</td>
<td>.246 .246</td>
<td></td>
</tr>
<tr>
<td>$N$</td>
<td>190 190</td>
<td>162 162</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Only cities with black residential population of 2.0% or more included.

$^*$ $p < .10.$

$** p < .05.$

$*** p < .01.$

ECONOMIC DEPRIVATION AND SEGREGATION ON BLACK OFFENDING

We find that the resource deprivation/segregation index has the predicted positive, statistically significant effect on the black intraracial homicide rate. The limited opportunities to obtain employment and high levels
of economic deprivation can explain black-on-black homicide in terms of the strain generated by these inequalities. A similar argument was made by Fowles and Merva (1996), who suggest the widening in the distribution of wage income in the United States has significantly decreased the employment opportunities for young black males. Hence, we find a structurally based influence of declining employment and poverty on black-on-black homicide. On the other hand, we find that the resource deprivation/segregation index does not contribute to the rates of black interracial homicide.

Based on these findings, we argue that the vast resource deprivation and social isolation experienced by the black population increase the incidence of black homicide offending with black victims. In this way, our findings suggest that the multiple disadvantages that make up the resource deprivation/segregation index have a violent, fatal outcome for the black population. The economic deprivation and social isolation imposed on blacks, according to the race-relations literature, persist due to the efforts of whites to exclude blacks from employment opportunities and economic advancement, as well as whites' continual resistance to racially integrated residential areas (Massey et al., 1991).

ECONOMIC DEPRIVATION ON WHITE OFFENDING

The resource deprivation/affluence index is indicative of a structural condition that reflects the overall impact of economic deprivation on the white population. This measure is found to have a positive effect on the white intra- and white interracial homicide rates. Thus, as the white population loses out economically, the rates of white homicide offending increase, regardless of the racial characteristics of the victim. This finding is supportive of a vast body of research that suggests that economic conditions (i.e., white poverty and income inequality) are primary causes for the involvement of the white population in violent acts, specifically homicide offending (Harer and Steffensmeier, 1992; Messner and Golden, 1992; Parker and McCall, 1997; Sampson, 1985). Moreover, in the white interracial homicide model, the positive effect of the resource deprivation/affluence index on white interracial homicide rates enhances understanding of the power that economic forces have on the white population. That is, as whites face economic declines and hardships, they may take out their resentment and frustration on blacks in the form of white interracial homicide.
LOCAL OPPORTUNITY STRUCTURE

Regarding the effect of local opportunity structure on homicide offending, we find that job accessibility for the black population has the statistically significant impact of decreasing the rates of black intraracial homicide. In fact, this finding is appreciably strong relative to the magnitude of the other predictor variables included in the model. This finding, which is consistent with the work of Shihadeh and Maume (1997), suggests that availability of jobs in low-skill industries is incremental in reducing black-on-black homicide. Although job accessibility in the local economy significantly decreases black intraracial homicide, it has a statistically significant positive effect on the black interracial homicide rate. This latter finding underscores the contributions of Blau’s macrostructural theory and racial competition theory to the study of homicide. That is, as job accessibility improves for blacks and more blacks enter the labor market, the interactions between blacks and whites increase, thereby increasing the opportunity for interracial exchange and conflicts.

Also consistent with our propositions, the job opportunity index (which combines the percent not employed and job accessibility measures for the white population) has a statistically significant negative effect on the rates of white intra- and interracial homicide. We argue that a weakened local opportunity structure heightens the economic-induced strain among the white population, which also produces a breeding ground for conflict and aggression among the white population. As a result, white intraracial homicide offending increases. Whites’ displacement from the labor market also incites racial antagonisms as a result of the perceived threat the black population has for whites’ occupational positions and financial security. A local opportunity structure of this nature increases the competition between racial groups, which results in increasing white interracial homicide rates. This finding bolsters race-relations theorists’ claim of the racial majority’s (whites’) interest in maintaining its economic advantage, even to the point of eliminating competitors (blacks) in the labor market (see also, Olzak et al., 1996: Tolnay and Beck, 1995). Overall, these findings are supportive of our hypotheses concerning the primary role local opportunity structures and racial competition play in understanding the racial disparities in homicide rates.

The dynamic aspect of the local opportunity structure, measured by the changing employment opportunities for the black population over time, significantly reduces the black intraracial homicide rate and, thus, provides further support for our hypotheses. That is, as the employment opportunities for blacks increased between 1980 and 1990, black intraracial homicide rates decreased. Employment opportunities in the local labor market as well as the resources to maintain formal and informal social control
significantly reduced the rates of black intraracial homicide. On the other hand, the percent change in employment opportunities for the white population between 1980 and 1990 has a negative, albeit not statistically significant, effect on the white intraracial homicide rate. This measure of local opportunity structure, which estimates the change in employment opportunities for one racial group relative to the other, was also not statistically significant in the black and white interracial homicide models. It appears that changing employment opportunities between racial groups over time does not contribute significantly to the variation in black and white interracial homicide rates.

RACIAL INEQUALITY

The racial inequality index was found to have a significant direct effect on the black interracial homicide rate. With the examination of racially disaggregated homicide rates, definite conclusions about the role of racial inequality as a structural condition of homicide rates emerge. While prior research has produced a number of inconsistent findings concerning the effects of racial inequality on total and race-specific homicide rates, our findings provide evidence of the differential influence of racial inequality across racially disaggregated homicide rates, which is consistent with propositions based on theories of race relations. The influence of the racial inequality index, which reflects the existence of structural discrimination, suggests the inequitable economic opportunities in which whites' gains at the expense of blacks' losses have a violent outcome in the form of black interracial homicide rates. On the other hand, we find that racial inequality yields no appreciable effect in the black and white intraracial homicide models or the white interracial homicide model. This finding also provides support for the structural arguments that state that it is the clustering of multiple disadvantages within areas—that is, economic deprivation and social isolation—rather than racial inequality that has a profound effect on black intraracial homicide offending.

SOCIAL DISORGANIZATION

In terms of the influence of social disorganization, we find the percent divorced males is not statistically related to the rates of black and white intraracial or interracial homicide. These findings, however, are neither consistent with previous research nor our theoretical propositions. One explanation for the inconsistencies between our findings and previous homicide research in which divorce contributed significant explanatory variation to the homicide rate may be the difference in model specification. That is, the lack of significance for the divorce measures may be due to the relationship between divorce and the indicators of labor market
competition included in our models. This finding also could be due to the fact that divorce has an indirect rather than direct impact on black and white intraracial homicide rates (see Harer and Steffensmeier, 1992; Sampson, 1987; Shihadeh and Steffensmeier, 1994).

CONTROLS FOR POPULATION SIZE, PERCENT HISPANIC, AND SOUTHERN REGION

Our findings show population size has a significant positive effect across all the racially disaggregated models. Consistent with most empirical studies of homicide, we find that cities with larger residential populations have higher rates of homicide in each of the race-specific models.

Further, recent research indicates the size of the Hispanic population may have important implications in racially disaggregated homicide rates due to the recording practices of police officers, which often do not specify Hispanic origins when classifying homicide victims and offenders (see Nelsen et al., 1994). Our research supports the claim that one must control for the size of the Hispanic population when estimating race-specific homicide rates. Specifically, we find that the percent of the population of Hispanic origin has a significant effect on white intraracial and black interracial homicide offending patterns. In fact, percent Hispanic explains the greatest amount of variance in the white intraracial homicide models. Consistent with Nelsen et al. (1994), our findings indicate that the size of the Hispanic population is an important control measure when explaining the variation in race-specific homicide rates. Future research on racially disaggregated homicide rates should attempt to differentiate between whites of Hispanic origin and whites of non-Hispanic origin.

Finally, we find that the southern region variable has a positive and statistically significant influence on white intraracial homicide rates and a negative, statistically significant effect on black interracial homicide rates. On the other hand, no significant regional impact was found in the black intraracial homicide models or the white interracial homicide offending models. These findings are particularly salient to the body of research that proposes that homicide rates are higher in the southern region than in nonsouthern regions. Our findings of a nonsignificant effect of southern region on black intraracial homicide offending and white interracial homicide suggest that southern region has differential effects on black and white intra- and interracial homicide rates.

In accord with the thesis of a southern culture of violence, a positive, statistically significant effect of southern region on homicide rates is expected. Support is found only in the white intraracial homicide offending model, which is consistent with Nisbett and Cohen's position (1996) that rates of homicide for non-Hispanic whites are higher in the South due
to a “culture of honor”. According to Nisbett and Cohen, “culture of honor” is rooted historically from the settlement of white herding societies in the South and reflects the importance whites’ place on responding to insults and threats to property or reputations with violence. In the black interracial homicide model, the statistically significant negative effect of southern region may reflect the southern region’s unique history characterized by black oppression (Blauner, 1982; Corzine et al., 1983, 1988; Tolnay et al., 1992; Tomaskovic-Devey and Roscigno, 1996). Further, a higher proportion of blacks reside in nonmetropolitan areas of the southern region compared to other regions of the United States (Nelsen et al., 1994). These results highlight the complex nature of the influence of race, region, and urban-rural settings on homicide offending rates and the further need for research to understand better the cultural and economic forces related to homicide in the South.

CONCLUSION

This study examines the effects of structural conditions on racially disaggregated homicide rates in U.S. cities in 1990. Recent research has found the effects of structural factors to differ when examining separate black and white homicide offending models. Our study provides valuable insight into the differential effects of structural conditions on race-specific homicide rates and the complementary nature of race-relations literature and criminological approaches.

First, this study demonstrates how structural theories of race relations complement criminological explanations when determining the effects of structural conditions on race-specific victim and offender homicide rates. Overall, structural theories of race relations emphasize the importance of the impact of residential segregation, labor market factors, and the

---

13. Nisbett and Cohen (1996) also found that there were few regional differences in the homicide rates among blacks and that this finding provided further evidence of the influence of the white southern culture on the homicide rates among whites in the South. Our findings of South having a statistically significant, positive effect on white intraracial homicide rate, and no significant effect on the black intraracial homicide rate, concur with their interpretation.

14. Whereas the focus of much aggregate-level homicide research is on urban centers and metropolitan areas, this does not detract from the importance of understanding homicide offending in rural areas. Future research is needed to explore homicide offending rates across various localities. We cautiously speculate that rural areas that share characteristics of urban centers, especially rural areas with high percentages of blacks and similar social and economic forces, may produce comparable race-specific homicide offending patterns. Yet, differing racial dynamics in rural versus urban areas are bound to differentially impact rural intra- and interracial homicide rates. We thank an anonymous reviewer for bringing this important point to our attention and caution the reader from any attempt to apply the findings to rural areas.
political economy within local areas. These theories also suggest that racial inequality coincides with competition and conflict between and within racial groups, whereby a weakened economy creates differential opportunity structures for competing racial groups in the labor market. By examining these theoretical arguments, concrete explanations and empirical support for the racial variations in homicide behavior are found. For example, we find that improvements in the local opportunity structure significantly reduce the rates of black intraracial homicide offending (see also Shihadeh and Maume, 1997). We conclude that structural arguments contribute to an understanding of the racial variations in homicide rates and offer those interested in examining crimes rates, especially rates of violence, insights into new theoretical linkages and conceptual developments.

Second, this study offers an examination of the effects of structural conditions on homicide rates within and between racial groups. While researchers have argued for the importance of examining separate black and white homicide models, research on race-specific victim and offender homicide rates is limited (for exceptions, see Parker and McCall, 1997). For example, Messner and Golden (1992) explore the effects of racial inequality on intra- and interracial homicide rates for 1980. Yet their interracial homicide measure included all incidents of homicide involving victims and offenders of differing racial groups. We contend, however, that the effects of racial inequality are likely to be substantially different for homicide incidents involving black offenders with white victims and white offenders with black victims. Our findings provide support for the importance of exploring distinct racial homicide models. From our systematic examination of the effects of structural factors on intra- and interracial homicide rates, we offer a number of noteworthy findings. For example, we find racial inequality significantly increases the rates of black interracial homicide, but not the rates of black and white intraracial or white interracial homicide. In addition, we find that cities characterized by higher resource deprivation and social isolation among the black population have higher black intraracial homicide rates. Further, we find the southern region has no effect on black killings, but a significant effect on white homicide offending when controlling for the size of the Hispanic population (also see Nelson et al., 1994). Overall, our research provides evidence that the effects of structural conditions on racially disaggregated homicide rates differ.

Third, the empirical differences observed in the principal components analysis indicate that blacks and whites face different social and economic realities. Our study provides evidence that the social isolation confronting blacks is highly collinear with rates of black poverty, blacks not employed, and black children not residing with both parents, and therefore, it is not
possible to determine the unique contributions of racial segregation when estimating the effects of these structural conditions on black homicide offending. The empirical construction of the composite referred to as resource deprivation/segregation index is theoretically consistent with the position of those who contend that the economic reality for blacks differs from that for whites and is marked by economic marginalization, family instability, and social isolation (see Massey and Eggers, 1990; Wilson, 1987, 1991). Finally, the principal components analysis allows us to avoid the problems associated with the partialling fallacy and collinearity between independent variables. Thus, principal components analysis has offered a number of methodological and theoretically relevant innovations in this study. Future structural analyses of race-specific homicide offending should benefit from these methodological contributions, as well as our effort at integrating race-relations literature with criminological perspectives.

REFERENCES

Bailey, William C.

Belsley, David A., Edwin Kuh, and Roy E. Welsch

Blalock, Hubert M.

Blau, Judith and Peter M. Blau

Blau, Peter M.

Blauner, Robert

Bonacich, Edna

Bursik, Robert J., Jr.
Chamlin, Mitchell B.

Corzine, Jay James Creech, and Lin Huff-Corzine

Corzine, Jay, Lin Huff-Corzine, and James C. Creech

Fowles, Richard, and Mary Merva

Gordon, Gordon A.

Harer, Miles D. and Darrell Steffensmeier

Harris, Fred R.

Huff-Corzine, Lin, Jay Corzine, and David C. Moore

James, David

Kasarda, John D.

Krivo, Lauren and Ruth D. Peterson

Land, Kenneth C., Patricia L. McCall, and Larry E. Cohen

Lieberson, Stanley

Loftin, Colin and Robert H. Hill
Massey, Douglas and Nancy Denton

Massey, Douglas and Mitchell L. Eggers

Massey, Douglas, Andrew B. Gross, and Mitchell L. Eggers
1991 Segregation, the concentration of poverty, and the life chances of individuals. Social Science Research 20:397-420.

Massey, Douglas, Andrew B. Gross, and Kumiko Shibuya

Merton, Robert K.

Messner, Steven F.

Messner, Steven F. and Reid M. Golden

Messner, Steven F. and Richard Rosenfeld

Messner, Steven F. and Robert J. Sampson

Messner, Steven F. and Scott South

Nelsen, Candice, Jay Corzine, and Lin Huff-Corzine

Neter, John, William Wasserman, and Michael H. Kutner

Nisbett, Richard E. and Dov Cohen

Olzak, Susan

Olzak, Susan, Suzanne Shanahan, and Elizabeth H. McEneaney
Parker, Karen F. and Patricia L. McCall

Patterson, E. Britt

Petee, Thomas A. and Gregory S. Kowalski

Peterson, Ruth D. and Lauren J. Krivo

Ricketts, Erol R. and Isabel V. Sawhill

Sampson, Robert J.

Sampson, Robert J. and W. Byron Groves

Sampson, Robert J. and William Julius Wilson

Shaw, Clifford Robe and Henry McKay

Shihadeh, Edward S. and Nicole Flynn

Shihadeh, Edward S. and Michael O. Maume

Shihadeh, Edward S. and Darrell Steffensmeier
DISADVANTAGES IN URBAN AREAS

Sigelman, Lee, Timothy Bledsoe, Susan Welch, and Michael W. Combs

Smith, Douglas A. and G. Roger Jarjoura

Smith, Dwayne M. and Victoria E. Brewer

South, Scott J. and Steven F. Messner

Tolnay, Stewart E. and E. M. Beck

Tomaskovic-Devey, Donald and Vincent J. Roscigno

Tufte, Edward R.

Williams, Kirk and Robert L. Flewelling

Wilson, William Julius
1987 The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy. Chicago: University of Chicago Press.

Karen F. Parker is Assistant Professor of Sociology in the Center for Studies in Criminology and Law at the University of Florida. Her current research interests include examining the effects of labor market factors and racial competition on racially disaggregated homicide rates, exploring drug-related violence in Miami communities, and the evaluation of recidivism among Florida inmates. Her most recent publications appear in Homicide Studies and Crime and Delinquency.

Patricia L. McCall is Associate Professor of Sociology in the Department of Sociology and Anthropology at North Carolina State University. Her research interests include aggregate studies of homicide and suicide, modeling criminal careers, and juvenile recidivism. Her most recent publications appear in Social Forces, Theoretical Criminology, and the American Journal of Sociology.
Appendix 1. Mean, Standard Deviation, and Correlation Matrix of Independent and Dependent Variables for Black Intraracial Homicide Rate Model After Principal Components Analysis, \( N = 190 \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>( Y_1 )</th>
<th>( X_1 )</th>
<th>( X_2 )</th>
<th>( X_3 )</th>
<th>( X_4 )</th>
<th>( X_5 )</th>
<th>( X_6 )</th>
<th>( X_7 )</th>
<th>( X_8 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Intraracial Homicide Rate (log)</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res. Deprivation/Segregation Index*</td>
<td></td>
<td>.557</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Access*</td>
<td></td>
<td>-.553</td>
<td>-.371</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Change in Employment*</td>
<td></td>
<td>-.120</td>
<td>.239</td>
<td>-.048</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Divorced Males*</td>
<td></td>
<td>.197</td>
<td>.082</td>
<td>-.089</td>
<td>.026</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Inequality Index</td>
<td></td>
<td>.479</td>
<td>.545</td>
<td>-.449</td>
<td>.089</td>
<td>.088</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Size (log)</td>
<td></td>
<td>.413</td>
<td>.239</td>
<td>-.257</td>
<td>.015</td>
<td>.319</td>
<td>.167</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Percent Hispanic (log)</td>
<td></td>
<td>-.181</td>
<td>-.264</td>
<td>.090</td>
<td>.114</td>
<td>-.102</td>
<td>-.513</td>
<td>.066</td>
<td>1.000</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td>.153</td>
<td>.052</td>
<td>-.156</td>
<td>.038</td>
<td>.021</td>
<td>.326</td>
<td>.060</td>
<td>-.251</td>
</tr>
<tr>
<td>Mean</td>
<td>2.89</td>
<td>104.9</td>
<td>34.7</td>
<td>-.02</td>
<td>13.9</td>
<td>4.04</td>
<td>12.3</td>
<td>1.80</td>
<td>.34</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.21</td>
<td>22.9</td>
<td>78.4</td>
<td>.20</td>
<td>16.7</td>
<td>.88</td>
<td>.74</td>
<td>1.36</td>
<td>.47</td>
</tr>
</tbody>
</table>

* Denotes race-specific measures.
Appendix 2. Mean, Standard Deviation, and Correlation Matrix of Independent and Dependent Variables for White Intraracial Homicide Rate Model After Principal Components Analysis, \( N = 190 \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y1</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Intraracial Homicide Rate (log)</td>
<td>Y1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res. Deprivation/Affluence Index*</td>
<td>X1</td>
<td>.553</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Opportunity Index*</td>
<td>X2</td>
<td>-.394</td>
<td>-.484</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Change in Employment*</td>
<td>X3</td>
<td>.142</td>
<td></td>
<td>.054</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Divorced Males*</td>
<td>X4</td>
<td>.133</td>
<td></td>
<td>.095</td>
<td>.069</td>
<td>.034</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Inequality Index*</td>
<td>X5</td>
<td>-.135</td>
<td>-.165</td>
<td>-.083</td>
<td>-.027</td>
<td>.053</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Size (log)</td>
<td>X6</td>
<td>.414</td>
<td></td>
<td>.162</td>
<td>.099</td>
<td>-.055</td>
<td>.371</td>
<td>.149</td>
<td>1.00</td>
</tr>
<tr>
<td>Percent Hispanic (log)</td>
<td>X7</td>
<td>.474</td>
<td></td>
<td>.276</td>
<td>-.004</td>
<td>.093</td>
<td>-.021</td>
<td>-.493</td>
<td>.072</td>
</tr>
<tr>
<td>South</td>
<td>X8</td>
<td>-.004</td>
<td>-.241</td>
<td>.015</td>
<td>.054</td>
<td>-.111</td>
<td>.330</td>
<td>.074</td>
<td>-.268</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>1.82</td>
<td>29.8</td>
<td>20.12</td>
<td>-.07</td>
<td>9.9</td>
<td>4.7</td>
<td>12.3</td>
<td>1.8</td>
</tr>
<tr>
<td>S.D.</td>
<td></td>
<td>.65</td>
<td>7.9</td>
<td>6.63</td>
<td>.11</td>
<td>5.6</td>
<td>1.0</td>
<td>.74</td>
<td>1.3</td>
</tr>
</tbody>
</table>

* Denotes race-specific measures.
Appendix 3. Mean, Standard Deviation, and Correlation Matrix of Independent and Dependent Variables for Black Interracial Homicide Rate Model After Principal Components Analysis, $N = 162^a$

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y1</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Interracial Homicide Rate (log)</td>
<td>Y1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res. Deprivation/Segregation Index*</td>
<td>X1</td>
<td>-1.177</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Access*</td>
<td>X2</td>
<td>0.309</td>
<td>-0.573</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Change in Employment*</td>
<td>X3</td>
<td>-0.042</td>
<td>0.020</td>
<td>-0.009</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Inequality Index*</td>
<td>X4</td>
<td>-0.163</td>
<td>0.467</td>
<td>-0.351</td>
<td>0.084</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Divorced Males*</td>
<td>X5</td>
<td>-0.030</td>
<td>0.060</td>
<td>-0.102</td>
<td>0.033</td>
<td>0.077</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Size (log)</td>
<td>X6</td>
<td>0.168</td>
<td>0.194</td>
<td>-0.182</td>
<td>0.026</td>
<td>0.084</td>
<td>0.320</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Percent Hispanic (log)</td>
<td>X7</td>
<td>0.394</td>
<td>-0.299</td>
<td>0.296</td>
<td>-0.039</td>
<td>-0.547</td>
<td>-0.118</td>
<td>0.098</td>
<td>1.000</td>
</tr>
<tr>
<td>South</td>
<td>X8</td>
<td>-0.404</td>
<td>-0.054</td>
<td>-0.250</td>
<td>0.093</td>
<td>0.295</td>
<td>0.004</td>
<td>0.004</td>
<td>-0.298</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>1.82</td>
<td>108.8</td>
<td>10.1</td>
<td>-2.0</td>
<td>4.06</td>
<td>14.4</td>
<td>12.4</td>
<td>1.73</td>
</tr>
<tr>
<td>S.D.</td>
<td></td>
<td>.77</td>
<td>19.88</td>
<td>14.8</td>
<td>33.4</td>
<td>.79</td>
<td>17.7</td>
<td>.76</td>
<td>1.36</td>
</tr>
</tbody>
</table>

* Only cities with black residential population of 2.0% or more included.

* Denotes race-specific measures.
Appendix 4. Mean, Standard Deviation, and Correlation Matrix of Independent and Dependent Variables for White Interracial Homicide Rate Model After Principal Components Analysis, $N = 166^a$

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y1</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Interracial Homicide Rate (log)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res. Deprivation/Affluence Index*</td>
<td>.338</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Opportunity Index*</td>
<td>-.329</td>
<td>-.436</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Change in Employment*</td>
<td>.075</td>
<td>-.059</td>
<td>.165</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial Inequality Index*</td>
<td>-.050</td>
<td>-.345</td>
<td>-.193</td>
<td>.002</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Divorced Males*</td>
<td>.065</td>
<td>.073</td>
<td>.064</td>
<td>-.051</td>
<td>.028</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Size (log)</td>
<td>.390</td>
<td>.130</td>
<td>.053</td>
<td>-.009</td>
<td>.077</td>
<td>.375</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Hispanic (log)</td>
<td>-.051</td>
<td>.073</td>
<td>.064</td>
<td>-.051</td>
<td>.028</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>-.035</td>
<td>-.310</td>
<td>-.023</td>
<td>.062</td>
<td>.233</td>
<td>-.120</td>
<td>.003</td>
<td>-.279</td>
<td>1.000</td>
</tr>
<tr>
<td>Mean</td>
<td>.56</td>
<td>30.5</td>
<td>19.5</td>
<td>4.1</td>
<td>4.7</td>
<td>10.06</td>
<td>12.4</td>
<td>1.77</td>
<td>.38</td>
</tr>
<tr>
<td>S.D.</td>
<td>.48</td>
<td>7.6</td>
<td>6.4</td>
<td>44.0</td>
<td>.93</td>
<td>5.96</td>
<td>.75</td>
<td>1.37</td>
<td>.49</td>
</tr>
</tbody>
</table>

$^a$ Only cities with black residential population of 2.0% or more included.

* Denotes race-specific measures.