THE STRUCTURAL CONTEXT OF HOMICIDE: ACCOUNTING FOR RACIAL DIFFERENCES IN PROCESS

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Previous research demonstrates differences in the processes that generate black and white rates of criminal violence. Analyses of race-specific urban homicide offending rates for 1990 test the hypothesis that racially different effects occur because the crime-generating process itself is conditioned by the social situations of blacks and whites. Results show that when African Americans and whites have similar low levels of concentrated disadvantage, the effects of disadvantage and homeownership are relatively comparable.

Despite a recent downturn in general crime rates, criminal violence is an enduring concern in urban America. But this problem is not equally serious for all communities and groups. One of the most glaring differences is between the homicide levels of blacks and whites. For example, in 1997 the homicide offending rate for blacks was 8.1 times that for whites, and this ratio has fluctuated between 6 and 9 since 1976 (U.S. Department of Justice 1999). This large black-white difference in lethal violence has stimulated considerable research directed at understanding the disparity (Harer and Steffensmeier 1992; Messner and Golden 1992; Sampson 1987). Most studies draw from structural theories that assume that the same social conditions are at the root of violent crime for all racial groups (Sampson and Wilson 1995). Accordingly, differences in homicide rates across racial and ethnic groups are thought to stem from the considerable divergence in levels of crime-generating social conditions.

Yet recent within-race analyses challenge this assumption; they demonstrate important differences between blacks and whites in the effects of various structural predictors of crime (Harer and Steffensmeier 1992; LaFree and Drass 1996; LaFree, Drass, and O’Day 1992; Messner and Golden 1992; Parker and McCall 1999; Shihadeh and Ousey 1996). Why is this the case? What accounts for differences in the processes that generate black and white rates of criminal violence? One possibility is that racially differing effects occur because the crime-generating process itself is conditioned by the social situations of these groups. Specifically, variation in levels of structural disadvantage may cease to provide meaningful distinctions among cities once disadvantage reaches very high levels. As a result, additional increases in structural disadvantage may not lead to ever higher rates of violence. If true, the implications for blacks and whites are salient. In the majority of U.S. urban areas, African Americans have extremely high levels of poverty and other disadvantages such that there may

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be little effect on violent crime of variation in these conditions. By contrast, disadvantage among whites is usually much lower and thus may be within a range in which variation reflects important community differences strongly associated with violent outcomes. These racial differences in structural position may account for divergence in the effects of social conditions on criminal violence. By implication, when the groups do not differ, we would expect the influences of crime-generating characteristics for blacks and whites to be similar.

We test these arguments by examining models of race-specific homicide. Drawing on the above logic, we explore three hypotheses: (1) Theoretically important structural factors have weaker effects on homicide when disadvantage is particularly widespread; (2) black-white differences in the effects of structural conditions reflect the fact that these groups are generally observed in different portions of the disadvantage distribution; and by implication (3) the effects of structural factors are similar for blacks and whites only in the small number of cities in which the two groups are comparably advantaged.

PAST RESEARCH AND REMAINING CONCEPTUAL ISSUES

A substantial body of research investigates the structural determinants of general homicide rates, but only in the last decade have researchers begun to explore whether general structural models apply equally well to African American and white violence (Harer and Steffensmeier 1992; Krivo and Peterson 1996; LaFree and Drass 1996; LaFree et al. 1992; Messner and Golden 1992; Parker and McCall 1999; Peterson and Krivo 1993; Phillips 1997; Sampson 1987; Shihadeh and Flynn 1996; Shihadeh and Ousey 1996, 1998; Shihadeh and Steffensmeier 1994). Because of the gravity of violence for blacks, some investigators have explored crime rates for this population exclusively (Peterson and Krivo 1993; Phillips 1997; Shihadeh and Flynn 1996; Shihadeh and Steffensmeier 1994). Compared with research on violence in general, these studies show less systematic influence of deprivation and inequality on violence among blacks. For example, none has demonstrated that interracial socioeconomic inequality has a significant positive effect on violent crime among blacks, and only Shihadeh and Flynn (1996) report that among blacks poverty and violence are associated. These studies suggest that models of general criminal violence may not apply equally well to all racial groups. However, single-group analyses cannot tell us whether structural conditions affect racial groups in similar or dissimilar ways.

Studies that have compared the determinants of violent crime rates among blacks and whites tend to show that major predictors differ for the two groups (Harer and Steffensmeier 1992; LaFree and Drass 1996; LaFree et al. 1992; Messner and Golden 1992; Shihadeh and Ousey 1996). Harer and Steffensmeier (1992) and Shihadeh and Ousey (1996) found that intraracial inequality affects rates of violence among whites but not blacks, and Messner and Golden (1992) reported that absolute deprivation influences white but not black killings. LaFree and his colleagues showed that greater economic well-being significantly reduces robbery rates for whites, but has no influence on rates for African Americans (LaFree and Drass 1996; LaFree et al. 1992). Further, educational attainment is positively associated with crime rates for blacks during times of increasing black income inequality. In contrast, increased educational attainment reduces crime among whites, but only during periods of decreasing white income inequality.

Even studies purporting to show that the causes of violence are comparable for blacks and whites have found important racial differences in the effects of some predictors. Sampson (1987) showed that for blacks and whites, family structure has a sizable effect on juvenile and adult urban robbery rates. Yet among adults, the influence of female-headed families on robbery is three times larger for whites than blacks (a significant difference). For youth, increased per capita income significantly reduces robbery rates for whites, but not for blacks, while welfare payments affect robbery rates for blacks but not for whites. Shihadeh and Ousey (1998) demonstrated that the link between low-skilled jobs and homicide transcends racial
lines. They also found, however, that the percentage of renters in a city has a strong effect on killings by African Americans alone, while the prevalence of high school dropouts significantly increases homicide rates only for whites.

No research to date has addressed the question of why some factors are more influential in producing violence for one racial group than another. We examine the issue here by exploring the possibility that such differences in effects between blacks and whites are a result of the very disparate community structures in which these two races commonly reside (Sampson and Wilson 1995). More specifically, black-white differences in the influence of theoretically important determinants of crime may reflect the fact that disadvantage conditions the effects of homicide predictors, and that the two populations predominantly fall within different parts of the disadvantage distribution.

With regard to the conditioning effects of disadvantage, we argue that deprivation and other community characteristics may contribute less to increases in violence when disadvantage is very high than when it is low. For example, going from a 10-percent poverty rate to a 20-percent poverty rate may have a greater impact on the social organization of the community, and in turn on crime, than going from a 40-percent poverty rate to a 50-percent poverty rate. In the latter case, the initial level of disadvantage is so high that further increases may matter very little. Similarly, levels of other structural characteristics such as stability or inequality may also have weak effects because they do not appreciably differentiate communities in such high poverty contexts. In a prior study (Krivo and Peterson 1996), we reported evidence consistent with this argument: We found that neighborhood poverty and relatively few professionals are associated with increases in violent crime, but these effects level off when disadvantage is extreme.

The argument posed here is similar to that made by scholars who have explored tipping points and other nonlinear relationships between social conditions and behavioral outcomes (Crane 1991; Granovetter 1978; LaFree 1999; Quercia and Galster 1999; Schelling 1971). While much of this literature focuses on how outcomes take off at a rapid rate once they reach a threshold level, our argument describes a related but opposite process—one of decelerating effects (Berry 1991; LaFree 1999). In particular, we hypothesize that disadvantage has a substantial and positive effect on homicide rates when disadvantage is low to moderate, but that this association levels off under conditions of extreme disadvantage.

If the nonlinear relationship described holds, effects of structural conditions for blacks and whites could differ because the observed ranges of economic deprivation for African Americans and whites are highly divergent and largely nonoverlapping. Deprivation levels for blacks are generally at the high end of the distribution (where crime-producing effects level off), while deprivation levels for whites are in the lower portion of the distribution (where these effects are stronger). If this logic is correct, then crime-generating characteristics should have similar influences for blacks and whites in situations where the groups' positions are similar.

**DATA AND METHODS**

Our analyses examine race-specific homicide rates for large U.S. cities with appreciable African American populations. Metropolitan Statistical Area central cities with a population of at least 100,000 and a black population of at least 5,000 in 1990 were included to ensure a sufficient number of blacks for constructing reliable race-specific measures. Although 135 central cities met our selection criteria, homicide data were not available for cities in Florida or for Chattanooga, Tennessee.\(^1\) Outlier analyses resulted in the elimination of two additional cases (Oxnard, California and Worcester, Massachusetts).\(^2\) Our final sample consists of 124 central cities.

\(^1\) Homicide data were obtained from the Center for the Study and Prevention of Violence (1995) at the University of Colorado. These data did not include Florida cities because Florida did not report data to the Federal Bureau of Investigation (FBI) from 1989 through 1991. The data set we obtained also excluded Chattanooga, Tennessee.

\(^2\) We concluded that Oxnard and Worcester are


**DEPENDENT VARIABLE**

Homicide data (murder and nonnegligent manslaughter) were drawn from the FBI’s Supplementary Homicide Reports (SHR). The SHR provides data on individual homicide incidents, including offenders’ race, which permits construction of race-specific homicide offending rates. To address the problem of missing information on race, we acquired adjusted race-specific homicide offender data from the Center for the Study and Prevention of Violence (1995). These adjusted counts combine the known distribution of offenders’ race with an estimated racial distribution of offenders when race is unknown (Williams and Flewelling 1987, 1988; also see Riedel 1990).

*Race-specific homicides rates* are three-year averages (1989–1991) per 100,000 black (or white) population. Average rates are calculated to minimize the impact of random fluctuations in homicides from year to year. Because of skewness, the homicide rates are transformed logarithmically.³

**INDEPENDENT VARIABLES**

Indicators of factors identified in several major perspectives on crime are considered as independent variables: *concentrated disadvantage*, *community stability*, *racial residential segregation*, and *intraracial socioeconomic inequality*. Wilson (1987, 1996) and Sampson and Wilson (1995) have argued

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³ Analyses with unlogged homicide rates yield similar patterns as analyses using logged rates. A few differences are evident in the initial models, but none emerges in tests of our main thesis. In additive models, residential segregation and percent black have significant effects on unlogged homicide rates for whites but not on logged rates. In regressions including a quadratic concentrated disadvantage term and an interaction of percent homeowners ¥ concentrated disadvantage, the same patterns hold for both races whether the dependent variable is logged or unlogged. Neither term is significant for whites, and both are significant and in the same direction for blacks.

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influential outliers based on examination of Cook’s D and DFBETA statistics for each predictor. These two cities have by far the largest Cook’s D values and show that the DFBETAs are problematic for a number of variables.

Data for the independent variables come from the 1990 U.S. Census of Population and Housing Summary Tape Files 4A (STF4A) (U.S. Bureau of the Census 1991), which provide race-specific census tract and city data. We measure *concentrated disadvantage* with an index combining the concentration of several aspects of disadvantage: poverty, female-headed families, and male joblessness. We include three separate $P^*$ isolation indices, which represent the probability that: (1) a poor person has contact in his or her census tract with another poor person; (2) a female-headed family has contact in its census tract with another female-headed family; and (3) a civilian noninstitutionalized male age 16 and over, who is either unemployed or not in the labor force, has contact in his census tract with another such jobless male. To incorporate *intergroup* contact between disadvantaged and higher status individuals in our index, we also include a fourth $P^*$ measure indicating the probability that a jobless male has contact in his census tract with a person employed in a professional or managerial occupation.

Each $P^*$ index is calculated separately for blacks and whites as:

$$ x P^*_{P^*} = \sum_{j=1}^{N} \frac{x_j}{X} \left( \frac{X}{t_j} \right) $$

When this $P^*$ index represents poverty isolation, $x_j$ is the number of black (or white) poor persons in tract $j$, $X$ is the total number of poor persons in tract $j$, $X$ is the total number of black (or white) poor persons in the central city, and $t_j$ is the total population in tract $j$. The $P^*$ indices for female-headed families, jobless males, and intergroup con-
tact are calculated in an analogous fashion. When computing the $P^*$ index for female-headed families, $t_j$ is the total number of households rather than persons. We construct an index (as average z-scores) because of substantial collinearity among the $P^*$ measures (Land, McCall, and Cohen 1990). Each race-specific z-score is calculated using the mean and standard deviation of the average of the black and white $P^*$ values to allow for comparisons of absolute levels of the index between the races. If z-scores were calculated relative to the means and standard deviations of the separate black and white $P^*$ values, the indices would have means of 0 for both groups even though there are large differences between the races in this variable (Krivo et al. 1998).

To capture community stability, we include homeowner occupancy, operationalized as the race-specific percentage of housing units that are owner-occupied. We measure racial residential segregation with an indicator of residential evenness—the index of dissimilarity ($D$) for blacks and whites across census tracts. The index of dissimilarity ranges from a low of 0, when blacks and whites are evenly distributed across census tracts (i.e., every tract has the same percent black as the entire city), to a maximum of 100, when blacks and whites are completely segregated (i.e., each tract is either 100 percent black or 100 percent white). Using $D$ allows us to differentiate the independent effect of the uneven distribution of groups across neighborhoods within a city (segregation) from the effect of the concentration of group disadvantage across areas within the city (Peterson and Krivo 1999). The index of dissimilarity value for a city is calculated as:

$$D_{bw} = \left[0.5 \left( \sum_{j=1}^{N} \left( \frac{b_j}{B} - \frac{w_j}{W} \right) \right) \right]100,$$

where $b_j$ and $w_j$ are the numbers of blacks and whites, respectively, in tract $j$, $N$ is the number of tracts in the city, and $B$ and $W$ are the respective total numbers of blacks and whites in the central city.

An index of interracial socioeconomic inequality combines (as average z-scores) ratios of white to black: median household income, percentage of adults who are high school graduates, and percentage of adult males who are jobless (unemployed or out of the labor force). We control for: (1) percentage of the black (or white) population that is male and between the ages of 15 and 34; (2) percentage of the total population that is black; (3) region (South or West); and (4) city population (logged). Population size is log-transformed because crime rates rise at a decreasing rate as population increases (Logan and Messner 1987).

**Statistical Analysis**

To evaluate the sources of racial differences in the effects of the theoretical predictors of homicide, we first perform race-specific regressions to confirm that the influences of the predictors differ between the two groups. We then test whether concentrated disadvantage has a curvilinear effect on homicide for each racial group, and whether other theoretical factors interact with concentrated disadvantage such that their influences decrease at higher levels of concentrated disadvantage.

In analyses of cities, heteroskedasticity is a potential problem because the error variance likely decreases as city population increases. We tested for heteroskedasticity by population size within the race-specific models using the Breusch-Pagan test (Greene 1993:394–95). Analyses indicated significant heteroskedasticity for the regressions for blacks but not those for whites. To correct for this, we perform weighted-least-squares (WLS) regressions (with the error variance specified as inversely proportional to city population size) for blacks; ordinary-least-squares (OLS) techniques are used for the models for whites. The impact of multicollinearity was assessed using collinearity diagnostics for the OLS models for whites (Belsley, Kuh, and Welsch 1980) and Variance Inflation Factors for the WLS regres-
sions for blacks. Although the diagnostics show that the city population parameter for whites is degraded by collinearity, the conclusions drawn are unaffected—the variable remains significant. For blacks, residential segregation is strongly associated with the other independent variables. However, in models excluding other correlated variables, the standard error for residential segregation is not notably smaller, and hence its significance is unaffected.

RESULTS

Table 1 presents the means and standard deviations for all of the variables. These descriptive statistics show the common pattern of substantially higher homicide rates for African Americans than for whites. The average logged homicide offending rate per 100,000 is 3.7 for blacks and 1.9 for whites; the mean unlogged rate is more than five times higher for African Americans than for whites, 47.4 versus 9.0. Also, African Americans have much greater concentrations of general and specific types of disadvantage. The largest differences are for poverty and female-headed families. Homeownership rates are dramatically lower for blacks. The two groups have similar percentages of young males, although this small difference is significant.

Table 2 presents the regression results predicting homicide rates for African Americans and whites. The first two columns refer to additive models. The results reveal important race differences in the magnitude and significance of the predictors of lethal violence. Only concentrated disadvantage, city population, and region are significant for both groups. Two of the four theoretical variables have significantly different effects for whites and blacks: concentrated disadvantage and percent homeowners. Concentrated disadvantage has a significant positive influence for both whites and blacks, but the effect for whites is nearly twice as large as that for blacks. The effect of homeownership is 0 for blacks, but negative and large for whites—a 10-percent increase in the percent of homeowners among whites is associated with a 24-percent decrease in the white homicide rate \(100 \times [e^{-.027\times 10} - 1]\). Neither of the other two theoretical variables, residential segregation and interracial socioeconomic inequality, has a significant effect on homicide rates. Our results also show racial differences in the influence of some of the control variables—city population and South have significantly stronger effects on lethal violence among whites than blacks.

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Table 1. Means and Standard Deviations of Variables: Central Cities, 1990

<table>
<thead>
<tr>
<th>Variable</th>
<th>Whites</th>
<th>Blacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide rate (ln)^a</td>
<td>1.94</td>
<td>3.74</td>
</tr>
<tr>
<td></td>
<td>(.72)</td>
<td>(.50)</td>
</tr>
<tr>
<td>Concentrated disadvantage</td>
<td>-.84^b</td>
<td>.83^b</td>
</tr>
<tr>
<td></td>
<td>(.76)</td>
<td>(1.05)</td>
</tr>
<tr>
<td>P* for poverty</td>
<td>.22</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>(.06)</td>
<td>(.08)</td>
</tr>
<tr>
<td>P* for female-headed family</td>
<td>.15</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>(.03)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>P* for male joblessness</td>
<td>.11</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>P* for male joblessness—professional contact</td>
<td>.14</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>(.05)</td>
<td>(.03)</td>
</tr>
<tr>
<td>Percent owner-occupied housing</td>
<td>55.86</td>
<td>36.94</td>
</tr>
<tr>
<td></td>
<td>(8.70)</td>
<td>(8.96)</td>
</tr>
<tr>
<td>Racial residential segregation</td>
<td>58.13</td>
<td>58.13</td>
</tr>
<tr>
<td></td>
<td>(14.14)</td>
<td>(14.14)</td>
</tr>
<tr>
<td>Interracial socioeconomic inequality</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>(.88)</td>
<td>(.88)</td>
</tr>
<tr>
<td>Percent males age 15 to 34</td>
<td>17.63</td>
<td>17.03</td>
</tr>
<tr>
<td></td>
<td>(2.47)</td>
<td>(2.52)</td>
</tr>
<tr>
<td>Percent black</td>
<td>25.49</td>
<td>25.49</td>
</tr>
<tr>
<td></td>
<td>(17.65)</td>
<td>(17.65)</td>
</tr>
<tr>
<td>City population (ln)</td>
<td>12.51</td>
<td>12.51</td>
</tr>
<tr>
<td></td>
<td>(.79)</td>
<td>(.79)</td>
</tr>
<tr>
<td>Region:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>.38</td>
<td>.38</td>
</tr>
<tr>
<td></td>
<td>(.49)</td>
<td>(.49)</td>
</tr>
<tr>
<td>West</td>
<td>.23</td>
<td>.23</td>
</tr>
<tr>
<td></td>
<td>(.42)</td>
<td>(.42)</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses are standard deviations; \(N = 124\).

^a The mean of the unlogged white homicide offending rates is 9.0; the mean for blacks is 47.4.

^b Average z-scores for the following four \(P^*\) indicators of concentrated disadvantage.

^† Difference between the means for whites versus blacks is significant at \(p < .01\) (one-tailed \(t\)-tests).

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6 Intraracial inequality was also examined and was not significant for either racial group.
Table 2. Unstandardized Coefficients from Regressions of Logged Homicide Offending Rates on Independent Variables: Central Cities, 1990

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Additive Models</th>
<th>Additional Models for Blacks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whites</td>
<td>Blacks</td>
</tr>
<tr>
<td>Concentrated disadvantage index</td>
<td>.323** (.078)</td>
<td>.171** (.063)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent owner-occupied housing</td>
<td>-.027** (.007)</td>
<td>-.000 (.004)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial residential segregation</td>
<td>-.007 (.006)</td>
<td>.007 (.005)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interracial socioeconomic inequality</td>
<td>-.030 (.079)</td>
<td>.043 (.060)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent males age 15 to 34</td>
<td>-.052* (.024)</td>
<td>-.008 (.022)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent black</td>
<td>.006 (.004)</td>
<td>.004* (.003)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City population (In)</td>
<td>.334** (.074)</td>
<td>.120** (.037)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>.551** (.136)</td>
<td>.225* (.103)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>.749** (.160)</td>
<td>.534** (.100)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentrated disadvantage index × percent homeowners</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.343</td>
<td>1.936</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.447</td>
<td>.384</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses are standard errors; N = 124. We use weighted-least-squares regressions in the models for Blacks to correct for significant heteroskedasticity by city population size. Buse’s R² values are reported for these equations. Models for whites use ordinary-least-squares regressions.

* p < .05 (two-tailed t-tests)
* * p < .01 (one-tailed t-tests)
† Difference between the coefficients for whites versus blacks significant at p < .01 (one-tailed t-tests)

To explore why the effects of concentrated disadvantage and percent homeowners are much larger for whites than blacks, we examine whether the effects of these characteristics weaken as levels of concentrated disadvantage increase. We test two models for each racial group that add, respectively: (1) a quadratic term for concentrated disadvantage, and (2) an interaction of percent homeowners and concentrated disadvantage.\(^7\) For whites, neither term is significant (results not presented). The models for blacks are presented in the last three columns of Table 2. The quadratic model shows that concentrated disadvantage among blacks has a significant curvilinear association with homicide rates; disadvantage has a positive effect at low levels, but its influence weakens at higher levels.\(^8\) The interaction of

\(^7\) We also tested for interactions of concentrated disadvantage with the two other theoretical variables—residential segregation and interracial socioeconomic inequality. These interactions were not significant for whites or blacks.

\(^8\) In additional analyses, we assessed whether there are particular tipping points at which the influence of concentrated disadvantage among blacks changes from notably positive to near zero using a spline function like that used by Crane (1991). These analyses showed a pattern similar to that identified with the quadratic specification...
percent homeowners with concentrated disadvantage is also significant. The effect of percent homeowners is negative and larger at low levels of concentrated disadvantage. The effect levels off in the intermediate range of concentrated disadvantage, and becomes unexpectedly positive when concentrated disadvantage is high.

Because both terms are significant, we estimated a final model that includes both the quadratic and interaction variables. To more clearly illustrate these results, Figure 1 plots predicted homicide rates for blacks at varying levels of concentrated disadvantage (from the 10th [−.69] to the 90th percentiles [2.08] of observed black values) and percent homeowners (at the mean for blacks [37 percent], and one standard deviation below the mean [28 percent] and above the mean [46 percent]). For comparison, predicted homicide rates for whites are presented from the 10th (−1.83) to the 90th (.11) percentiles of white concentrated disadvantage (based on the linear model in Table 2). All other independent variables are held constant at black mean levels for both groups.

Panel A in Figure 1 presents the predicted homicide rates for the full sample of 124 cities. Examining the homicide rates for blacks, in cities with average or above average levels of homeownership, concentrated disadvantage has a sizable positive effect on lethal violence when disadvantage is low. However, the influence of concentrated disadvantage on homicide weakens as disadvantage levels increase, and is generally small in much of the range observed for African Americans. For cities in which homeownership among blacks is low, this curvilinearity is less pronounced because concentrated disadvantage has a more modest effect at all levels. In general, the results for blacks are consistent with our predictions—at low levels, concentrated disadvantage has an important effect on homicide, but once levels of concentrated disadvantage are seriously high, community structures are no longer distinguishable enough to produce strong effects on homicide. This curvilinear effect of concentrated disadvantage on homicide does not hold for whites because concentrated disadvantage among whites rarely reaches the seriously high levels where its effect declines. Only 12 cities (10 percent) have levels of concentrated disadvantage for whites above .11. In sharp contrast, 81 percent of cities have levels of concentrated disadvantage for blacks above this point.

Are the effects of concentrated disadvantage comparable for the two groups when levels for blacks are as low as those observed for whites? Indeed, the influence of concentrated disadvantage on black and white homicide is similar within the overlapping portions of the two distributions of concentrated disadvantage (between the vertical lines of Figure 1, Panel A). This is indicated clearly in Table 3, which presents the values of the black slopes for concentrated disadvantage for this portion of the distribution. These results show that the influence of concentrated disadvantage among blacks is at least as strong as the linear effect for whites (b = .323 from Table 2) in cities with black homeownership rates at or above their mean level—five of the six coefficients exceed the slope for whites. The most notable comparison is when the two racial groups have similar levels of both concentrated disadvantage and homeownership. Specifically, homeownership rates for whites are 46 percent or higher in the vast majority of cities (88 percent). For the cities in which rates for blacks reach these levels (and disadvantage is low), the influence of concentrated disadvantage among blacks on homicide is consistently even stronger than that for whites. Clearly, disadvantage is as important for increasing lethal violence among blacks as it is among whites when these racial groups are similarly situated.

Panel A in Figure 1 also shows that the influence of homeownership on homicide rates for blacks is more similar to its effect for whites when concentrated disadvantage is low. In the leftmost part of the predicted homicide curves for blacks, cities with a 37-percent homeownership rate have lower levels of offending than places with a 28-percent homeownership rate. Offending decreases further as percent homeowners for blacks increases to 46 percent. This negative effect of homeownership exists at low levels
Figure 1. Predicted Homicide Offending Rate by Concentrated Disadvantage: Blacks and Whites in Central Cities, 1990

Note: All other independent variables for blacks are held constant at their mean levels. Panel A includes the full sample of central cities. Panel B omits Hartford, Newark, and New York City.

\* Area of overlap between whites and blacks in concentrated disadvantage.
Table 3. Slopes of Concentrated Disadvantage for Blacks at Varying Levels of Low Concentrated Disadvantage and Percent Homeownership: Central Cities, 1990

<table>
<thead>
<tr>
<th>Concentrated Disadvantage</th>
<th>Percent Homeowners among Blacks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28.0 Percent</td>
</tr>
<tr>
<td>−.686^a</td>
<td>.327</td>
</tr>
<tr>
<td>−.290</td>
<td>.265</td>
</tr>
<tr>
<td>.107^b</td>
<td>.204</td>
</tr>
</tbody>
</table>

>Note: The slope of concentrated disadvantage for whites is .323.
^a This represents the 10th percentile for the concentrated disadvantage index for blacks.
^b This represents the 90th percentile for the concentrated disadvantage index for blacks.

of concentrated disadvantage but becomes smaller as concentrated disadvantage increases. To illustrate, the slope for percent homeowners is −.014 at the 10th percentile of concentrated disadvantage for blacks (from the final model of Table 2). This effect is just over half that for whites (\(b_w = −.027\), Table 2). Still, it is negative and more similar to the slope for whites than in the additive model (\(b_h = −.000\), Table 2). Homeownership’s influence reduces to near zero for a notable portion of the concentrated disadvantage distribution, but turns positive at very high levels of concentrated disadvantage. This result is unexpected. Further exploration reveals that it is due to three cities that have exceptionally low homeownership combined with extremely high concentrated disadvantage for blacks: Hartford, Connecticut, Newark, New Jersey, and New York City. These places also have somewhat less lethal violence among blacks than other highly disadvantaged cities. When these three cities are removed from the analysis (Panel B of Figure 1), the positive effect of homeownership is essentially eliminated and generally equals zero in all places with very high concentrated disadvantage among blacks.\(^9\)

**CONCLUSIONS**

Major theories of crime and violence lead one to expect similar etiological processes for different racial groups. Yet a common

\(^9\) Excluding Hartford, Newark, and New York City does not alter the significance or pattern of any of the other relationships in the models presented in Table 2.

finding is that some crime-generating conditions have stronger effects for whites than for blacks. We have sought to account for these racial differences. We argued that varying effects of predictors may result from the dramatically different social positions of blacks and whites in U.S. cities. In particular, the high level and high concentration of disadvantage in the African American population may create a situation that actually reduces the importance of these very conditions for generating higher homicide rates for blacks. Variation in structural disadvantage at very high levels is unlikely to produce communities that are qualitatively different from one another. Hence, criminal violence should not be systematically associated with variation in structural conditions for African Americans. By contrast, whites generally live in communities with a lower prevalence of violence-producing factors. Thus for whites, variation in levels of key theoretical variables should reflect more meaningful differentiation across communities, and hence have stronger effects. Taken together, these arguments imply that: (1) Important structural causes of homicide will have relatively weak effects in highly disadvantaged social contexts; and (2) the differing black and white effects found in previous studies reflect the fact that these racial groups fall predominantly in separate portions of the distribution of disadvantage. Accordingly, in places where the circumstances of blacks and whites are similar, crime-generating social conditions should have comparable effects on homicide.

Our analyses of the race-specific determinants of homicide offending rates for U.S.
cities in 1990 provide some support for these ideas. First, we find that racial differences in the homicide-generating processes are sizable for two key theoretical determinants: concentrated disadvantage and residential stability (percent homeowners). These factors have significantly larger effects on white homicide rates than on black rates. Second, the differences in effects appear to be rooted in the varying social positions of the two races. This is seen in the leveling off of the influence of concentrated disadvantage for blacks at the high levels that predominate among African Americans.

In addition, there is a strikingly strong positive impact of black concentrated disadvantage on homicide when levels of concentrated disadvantage are comparable for whites and blacks. Support for our proposed explanation is further demonstrated in the significant interaction between homeownership rates and concentrated disadvantage for blacks, whereby homeownership has a negative effect on homicide only when concentrated disadvantage is relatively low. In contrast, neither the curvilinear nor interactive effects of concentrated disadvantage are significant for whites. This is because the white population in most cities has a low enough level of concentrated disadvantage that this factor has pronounced effects. Overall, these findings imply that if blacks and whites held similar positions in relation to structural disadvantage, differences in criminogenic factors would operate similarly for the two groups.

Still, our evidence is not completely definitive because of the strong connection between race and disadvantage in the United States. As our data indicate, blacks and whites seldom have comparable levels of disadvantage. Indeed, racial differences in disadvantage are so great that it is impossible to assess what the effects for whites would be if they were as disadvantaged as the average African American in most urban areas. Obviously, the leveling-off effect of disadvantage that we observe for blacks might, or might not, be evidenced for whites; which possibility is correct is likely to remain a matter of speculation given the dramatic racial inequality embedded in U.S. society. As such, the empirical implications for current research are clear. For the time being, it is imperative that models of crime, including homicide, be explored separately for blacks and whites because the similarity of conditions required for combining groups (observing uniform effects) do not exist in the vast majority of places.

Despite some illuminating findings, this research reveals a large unexplained racial difference in homicide rates (see Figure 1). Clearly, new thinking and empirical analyses are required to gain a fuller understanding of the sources of this sizable race differential. Future investigations should consider additional aspects of disadvantage that could affect homicide. We have been guided by recent social disorganization literature that focuses on the consequences of poverty, joblessness, female-headed households, and the absence of professional workers. Studies should also explore factors such as labor market conditions (low wages and secondary-sector jobs) and high school dropout rates to determine whether their effects are similar to those found here for the index of concentrated disadvantage.

In addition to considering different aspects of deprivation, studies should consider how the broader meaning of race affects the specific position of blacks and whites vis-à-vis crime and violence in contemporary American society. For example, the social disorganization perspective emphasizes the role of informal networks in facilitating social control in communities. Here, we included factors that are purported to produce these networks (economic deprivation and instability), but we did not measure networks directly or explore the possibility that such networks may have different manifestations in black and white communities. For example, Pattillo (1998) points out that in contrast to white neighborhoods, black middle-class areas have higher levels of poverty and are in closer geographic proximity to poor and high-crime neighborhoods. As such, the informal networks that provide the underlying social organization of these communities include long-term residents who are part of groups that actually contribute to or draw crime and violence to their neighborhoods (e.g., gang members and leaders, persons involved in drug markets, etc.). Also, because of the greater spatial clustering of disadvantage
among blacks than among whites, the institutional and economic resources that diminish the likelihood of violent crime are fewer and farther away for black communities than is the case for disadvantaged white neighborhoods. These differential manifestations of social organization and disadvantage in black and white communities may in part account for the racial gap in homicide, and thus, should be examined in future research.

In the meantime, our findings support the widely held view that some of the major structural causes of violent crime are invariant across groups. The crime-generating processes considered here do not differ much between African Americans and whites when the two racial groups are similarly situated. However, such a finding must be interpreted within the context of contemporary U.S. society in which racial similarity of conditions is rare. Blacks and whites do not live in comparable community settings in most American cities. In only 19 percent of the places in our sample (24 cities) do blacks experience as low a level of concentrated disadvantage as is experienced by the vast majority of whites (112 cities), and these are the very places in which few blacks reside. Only 4.2 percent of African Americans in the 124 cities examined here live in this subset of cities. This means that only a small number of African Americans actually experience the same conditions and processes that operate for whites. In the remaining cities where black disadvantage is more highly concentrated, and where over 95 percent of blacks in our sample reside, homicide is more weakly impacted by important causal mechanisms and hence appears more intrinsigent.

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