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Structural Theories and Race-Specific Drug Arrests: What Structural Factors Account for the Rise in Race-Specific Drug Arrests Over Time?

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Studies examining the structural correlates of urban crime have generated a large body of research; however, few studies have linked the structural conditions to race-specific drug arrests. In this study, the authors examine the impact of urban disadvantage, social disorganization, and racial threat indicators on the rise in race-specific drug arrests from 1980 to 1990. They find these theoretical perspectives contribute to an understanding of the change in race-specific drug arrests. Findings indicate that shifts in the urban economy significantly affected Black drug arrests, while having no effect on the change in White drug arrests. In addition, the shift away from manufacturing jobs significantly affected Black arrests for drug possession. Consistent with the theory, social disorganization measures proved equally significant for Whites and Blacks, whereas mixed support was found for racial threat arguments. The importance of a theoretically grounded exploration into the rise in racial disparities in drug arrests is highlighted.

Keywords: drug arrest; race and urban inequality; structural theories

In 1982, on the introduction of crack cocaine, an official "war on drugs" was declared (Sacher, 1997). A common feature of the crack cocaine epidemic was the assumption that the drug possessed properties that made it more dangerous than other drugs, and as a result, media attention and law enforcement efforts rose (Fagan & Chin, 1990; Reinerman & Levine, 1989). The war on drugs began an era of targeting the urban and disproportionately Black population of America's cities with specific drug law enforcement tactics aimed at curbing the rising use and sales of crack cocaine (Tonry, 1995).

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Symptomatic of this drug epidemic, the 1980s marked unprecedented drug arrests across the nation's largest cities. In New York City alone, drug arrests rose from 18,521 to 88,641 respectively from 1980 to 1988, highlighting the shift from heroin- to crack-related drug arrests (Belenko, Fagan, & Chin, 1991; New York City Police Department, 1989). Moreover, Blumstein (1993) noted that although White arrest rates remained relatively stable from the 1970s through much of the 1980s, non-White drug arrests steadily climbed from 1980 to 1985, growing exponentially at a rate of 15% to 20% per year until peaking in 1989.

Similar patterns were documented at the national level. For example, the total number of drug arrests in 1980 was just under 600,000 and by 1990 had risen to around 1.1 million total drug arrests (representing nearly a 92% increase during a 10-year period). More striking, however, are the racial shifts that occurred during this period. In 1980, African Americans made up about 25% of all drug arrests in the United States, and by 1990 this figure had increased to 41% of all drug arrests. Meanwhile, Whites represented 75% and 58% of drug arrests, respectively (Goode, 2005; U.S. Department of Justice, Federal Bureau of Investigation, 1996).

Although research has documented the rise in drug arrests in many urban areas across the United States, most studies focus on drug activities within a single community or area (Belenko et al., 1991; Fagan & Chin, 1991; Maher & Daly, 1996). To date, only one study has addressed drug arrests in multiple cities and attempted to examine structural indicators as potential contributors (Mosher, 2001). Using the Uniform Crime Report's (UCR's) drug arrest data and census data, Mosher (2001) applied social disorganization and conflict theories to explain drug arrest rates in 1990. Mosher found support for conflict theory in total possession and drug trafficking arrests when controlling for race-specific economic deprivation. Although Mosher's study examined the impact of structural conditions on drug arrest rates across a large sample of urban cities, it did not address racial disparities in drug arrests. We attempt to fill this gap in the existing literature.

In the current study, we contribute to the existing literature in important ways. First, we estimate the impact of race-specific indicators on types of drug arrests (sales, possessions, etc.) across multiple urban cities; that is, we offer a test of the impact of various structural predictors on different types of drug arrests involving Blacks and Whites, which allows us to make comparisons across racial groups.

Second, we explore the ability of key theoretical perspectives (such as urban disadvantage, social disorganization, and racial threat arguments) to predict the dynamic process of change in urban drug arrests from 1980 to 1990. The contributions of these theoretical perspectives have not been

examined systematically in the drug arrest literature. Third, although previous studies have been cross-sectional in nature, we attempt to move beyond this literature by estimating the impact of within-city change in structural conditions on the change in race-specific drug arrests from 1980 to 1990. Examining this time period is important because of the dramatic change in drug arrests during this time period and because of a significant shift in the political economy of urban areas occurring from 1980 to 1990. Overall, our aim is to offer a test of the impact of various theoretically linked structural predictors on White and Black types (e.g., total, possession, and sales) of drug arrests over time.

URBAN DISADVANTAGE, DISORGANIZATION, AND THREAT: THEORETICAL MODELS

Three major theoretical perspectives allow us to analyze the relationship between changes in urban conditions and the change (rise) in drug arrests for race-specific groups. The three perspectives include urban disadvantage, social disorganization, and racial threat (power-threat) arguments. Each of these approaches explores the relationship between structural conditions and race-specific drug arrests in distinct ways, yet a common underlying theme is the emphasis each perspective puts on place or spatial location when studying race, structural conditions, and crime. As highlighted by Sampson and Wilson (1995), the current study views the relationship between race and crime as resulting from racial differences in the ecological context of urban communities rather than individual characteristics. In what follows, we briefly outline each perspective and then provide linkages to drug arrests.

Urban Disadvantage

The disadvantages present in urban areas today are due to a set of economic and industrial changes that have transformed these areas since the 1970s. Wilson (1987) documented the increased joblessness in urban areas and how these areas have become poverty stricken and racially isolated. For Wilson (1987), an industrial shift in the urban economy led to the decline in manufacturing jobs that further diminished employment options for minority groups (see Kasarda, 1983; S. A. Smith & Tienda, 1987; Wilson & Wu, 1993). Defenseless against the shift in the industrial economy, Wilson (1987) wrote that urban areas experienced growing levels of Black joblessness and poverty concentration.

Other scholars have also demonstrated how poverty levels in urban neighborhoods differ significantly by race and have provided evidence of racial residential segregation (Massey, Condran, & Denton, 1987; Massey & Denton, 1988, 1993). Taken together, Wilson (1987) and Massey and colleagues (Massey & Denton, 1993; Massey, Gross, & Shibuya, 1994) depicted an urban environment where many African Americans face heightened levels of urban disadvantage, such as labor market marginalization, joblessness, and racial isolation. These conditions have been linked to a decline in marriageability, rise in incarceration rates, and family disruption (Almgren, Guest, Inmerwahr, & Spittel, 1998; Sampson, 1987), in addition to crime rates (Krivo, Peterson, Rizzo, & Reynolds, 1998; Parker & McCall, 1999). And whereas Shihadeh and Ousey's (1998) empirical work established a relationship between the shift in the urban economy and race-specific homicide from 1970 to 1990, no research to date has linked economic decline to the rise in drug arrests over time.

We argue that these economic changes are related to trends in drug arrests over time. The loss of unskilled and semiskilled jobs in large cities since the 1960s and 1970s (Kasarda, 1989) led to participation in the growing informal economy in inner cities for alternative sources of income (Johnson, Williams, Dei, & Sanabria, 1990). Fowles and Merva (1996) suggested that there was a significant rise in wage inequality during the 1973 to 1993 period and that young urban males experienced considerable job loss during this time. Given this trend, they argued that a rational response of young males "would be to substitute risky but more lucrative illegitimate activities for legitimate activities, namely, the buying and selling of illegal drugs" (Fowles & Merva, 1996, p. 175). Still other researchers documented that the involvement of young persons in drug selling increased dramatically in the 1980s, and the majority of these individuals were unemployed or unskilled workers (Fagan, 1992).

Based on these arguments, the relationship between labor markets, concentrated disadvantage, and drug arrests is likely to be higher among Blacks than Whites because Blacks were more dependent on labor market structures that experienced significant job loss over time (e.g., manufacturing employment and low-skilled jobs) and because Blacks are typically confronted with more extreme levels of urban disadvantage relative to Whites (see Krivo & Peterson, 2000; Parker & McCall, 1999). Specifically, we hypothesize that

> *Hypothesis 1:* An increase in concentrated disadvantage for Blacks (e.g., poverty, income inequality, racial residential segregation, dependency on public assistance) will positively affect drug arrests over time for Blacks.

Hypothesis 2: A decline in labor market opportunities (e.g., manufacturing employment opportunities and low-skilled job accessibility) will positively affect Black drug arrests over time, relative to Whites.

Social Disorganization

Consistent with the Chicago school tradition, the social disorganization perspective posits that structural disadvantage can block the development of formal and informal ties that are necessary to promote and maintain social control. Researchers found that structural conditions (such as family disruption and low economic status) are persistent throughout urban areas (Anderson, 1990; Sampson & Wilson 1995; Wacquant & Wilson, 1989; Wilson, 1996) and increase rates of crime and violence (Crutchfield & Pitchford, 1997; Liska, Logan, & Bellair, 1998; Krivo & Peterson, 1996; Parker & McCall, 1997, 1999; Sampson, 1987). It is important to note, unlike the urban disadvantage arguments reviewed above, the impact of these structural conditions on crime rates is racially invariant (see Krivo & Peterson, 2000; Sampson & Wilson, 1995). For example, Krivo and Peterson (2000) found that high or extreme levels of certain structural conditions were related to rates of Black and White homicide; that is, the rates of offending for racial groups were similar in geographical areas with extreme or high levels of concentrated disadvantage.

We predict that cities became increasingly socially disorganized (i.e., family disruption, residential instability, etc.) during the 1980 to 1990 time period. As urban communities became less stable—economically and residentially—through the 1990s, the ability to maintain effective informal social control that reduces crime weakened.

Given this, we expect the rise in drug arrests (regardless of race) is related to the degree of social disorganization of urban areas. Our third hypothesis states:

Hypothesis 3: As urban areas become increasingly socially disorganized (via family disruption and residential mobility), drug arrests will increase (invariant of race).

Racial Threat

The racial threat perspective suggests that as the relative size of the minority group increases, members of the majority group perceive a growing threat to their positions and will take steps to reduce the competition (Blalock, 1967). Blalock (1967) argued that the response of the majority to the increase

in minority size assumes two forms: competition over economic resources and power threats. Recognizing these two forms of threat, researchers have investigated two conceptually distinct threat-based hypotheses—political threat and economic threat. The political threat hypothesis postulates that as the relative size of the Black population increases, the state will increasingly perceive Blacks as a threat to Whites' political power, and thus the state intensifies formal social control to maintain the dominant position of Whites. On the other hand, the economic threat hypothesis asserts that as Blacks compete for jobs and economic resources, they increasingly become a threat to the economic well-being of Whites. In line with the economic threat hypothesis, formal social control efforts to reduce the potential threat of Blacks become stronger; that is, social control efforts can be used to exclude Blacks from participating in the economic sphere and thus lessen the economic competition between racial groups (see Brown & Warner, 1992; Jackson & Carroll, 1981).

Austin and Allen (2000) argued that dominant groups will intensify formal social control efforts toward minority groups when they are perceived as threatening. Drug use and drug markets have a history of being associated with minorities by the media, as well as being viewed as threatening to society at large. As evident in leading newspapers, including *The New York Times*, cocaine-crazed Blacks committing horrific crimes while under its so-called control were commonly depicted (D. E. Smith, 1986). Lo (2003) linked the highly publicized crack cocaine phenomenon to the so-called drug scare of the middle 1980s and early 1990s, arguing that government officials responded to this so-called threat by increasing police size, which resulted in more arrests and imprisonment (see also Belenko et al., 1991; Liska & Chamlin, 1984; Liska, 1992). Other researchers have documented a disproportionate concentration of police in Black urban areas (see Jackson & Carroll, 1981; Liska, Lawrence, & Benson, 1981) and a rise in incarceration (Bureau of Justice Statistics, 1996), particularly among Black males (Lynch & Sabol, 1997) during this time period.

However, much of the racial threat literature relies on the size of the Black population as the sole indicator of threat (see Eitle, D'Alessio, & Stolzenberg, 2002; Stolzenberg, D'Alessio, & Eitle, 2004, for similar arguments), neglecting exact measures of social control. In the current study, we are interested in establishing the relationship between economic threat and drug arrests that account for the rise in formal social control as a mechanism of reducing racial threat. Thus, we offer measures of racial economic threat (via racial inequality and percentage Black), in addition to social control (via incarceration and police presence). In terms of drug arrests, we predict that a change (increase) in the Black population and racial economic inequality

will contribute to the change in types of Black drug arrests as compared to White drug arrests. Capturing the rise in incarceration and police presence in urban areas during the 1980s and 1990s, we further expect to find an increase in incarceration and police presence over time in our sample of urban cities that, in turn, contributes to a change in drug arrests, particularly in geographic areas that are predominantly Black. As Tonry (1995) wrote,

> Any experienced police official could have predicted that policies of wholesale arrests of dealers would sweep up mostly young minority user-dealers in the cities. This is not necessarily because more members of minorities use or sell drugs, but because arrests are easier to make in disorganized inner-city areas where many minority dealers operate than they are in middle- and working-class neighborhoods where the White dealers operate. (p. 42)

Our last hypothesis is

> *Hypothesis 4:* Growth in racial threat will lead to an increase in drug arrests for Blacks whereas racial threat will not significantly affect drug arrests for Whites.

DATA AND METHODS

Data Sources

The unit of analysis is U.S. cities with a population of 100,000 residents or more in 1980. This sampling strategy generated 168 cities in 1980, and these cities were the basis for selecting cities in 1990 to assess change over time. There are four major sources of data for this research. For the dependent variables, the data are UCR arrest counts obtained from Chilton and Weber (2000). In the multivariate analysis, the dependent variables are race-specific arrest counts for three types of drug arrests (sales, possession, and total drug arrests) for 1980 and 1990. These were used to generate change scores in drug arrests from 1980 to 1990 reported in Table 2.

The second major data source is the 1980 and 1990 *Census of Population: Social and Economic Characteristics* (U.S. Bureau of the Census, 1983, 1994). These data sources are essential to this research because they provide comparable indicators during the time periods of interest (1980 and 1990). Third, the U.S. Department of Justice, Bureau of Justice Statistics's *Census of State Adult Correctional Facilities* (1979) and the *Census of State and Federal Adult Correctional Facilities* (1990) are the primary sources of information for our race-specific incarceration measures. Finally, the UCR serves as

the source of information on the number of police officers in each city circa 1980 and 1990.

Dependent Variables

The current study utilized race-specific drug arrests associated with 1980 and 1990 decennial time periods. Three types of race-specific drug arrests were calculated: total, possession, and sales. We acknowledge the problem of missing data for one or more months of data per year across our dependent variables. In situations in which data were reported for at least 9 or more months, a mean substitution procedure was used to correct for missing data on the remaining months. Imputation occurred in approximately 14.6% of the 1980 sampled cities and only 5.6% in the 1990 sample. A dummy variable was computed when mean substitution was used, and this measure was entered into our preliminary regression analyses to determine whether the dependent variables with imputation differed significantly from those where no imputation occurred. Our results indicated no significant differences.[1] Arrest data for those cities reporting fewer than 9 months of arrest statistics (i.e., 8 months or fewer) were considered incomplete, which reduced the number of cases in our final sample. The dependent variables were computed as the number or count of race-specific types of drug arrests in 1980 and 1990.

Before moving to the predictor variables, it is important to acknowledge an ongoing debate surrounding the use of drug arrest measures. There are two perspectives to consider—one being that a measure of drug arrests reflects enforcement patterns or official responses to crime (see Mosher, 2001; Quinney, 1979) and the other is that measures of drug arrests indicate actual drug behavior (Cohen, Felson, & Land, 1980; Rosenfeld & Decker, 1999), particularly at the city level (Rosenfeld, 1986). Although we are unable to empirically address this debate in the current study, our read of these arguments led us to conclude that our measures of drug arrests provide a useful indicator of the amount and/or volume of race-specific drug activity in a given area and thus can serve to gauge (at least the official accountability of) drug activity in urban cities. Furthermore, in light of alternative indicators (e.g., Drug Use Forecasting program [DUF] now renamed as Arrestee Drug Abuse Monitoring program [ADAM], Drug Abuse Warning Network [DAWN], and/or medical examiner's data) of drug activity, prior research has reported high internal reliability among data sources and that these data sources yield similar estimates of drug use when compared to drug arrests for cities (Baumer, Lauritsen, Rosenfeld, & Wright, 1998; Rosenfeld & Decker,

1993; Warner & Coomer, 2003). Given that the alternative data sources are limited in sample size, drug arrests are a good proxy of drug activities across multiple large urban cities over time.

Independent Variables

We generate a number of race-specific measures of urban disadvantage. We include race-specific measures of poverty (percentage of the population that lives below the poverty level), income inequality (via Gini Index of Income Concentration), racial residential segregation (computed as the index of dissimilarity), the percentage of race-specific female-headed households receiving public assistance payments, and the race-specific percentage of female-headed households.

In addition to dimensions of concentrated disadvantage in urban areas, we incorporated two indicators of labor market conditions. First, we calculated the percentage of persons in manufacturing jobs by dividing the number of race-specific persons employed in manufacturing occupations by the total number of those persons age 16 years and older. Examples of occupations within the manufacturing sector include precision, production, crafts, repair, operators, fabricators, and laborers. The second measure, job accessibility, reflects the accessibility of semiskilled and unskilled jobs to low-skilled Blacks and Whites (see Shihadeh & Maume, 1997), and this measure is operationalized as a ratio of the number of jobs in low-skill industry groups to the number of a race-specific population age 25 years and older with a high school diploma or less. Defining an industry group as low skill is based on Kasarda's (1989) classification.[2]

The three measures of social disorganization in cities are family disruption, residential mobility, and the male marriage pool index. The measure of family disruption is a race-specific indicator of divorce. Residential stability is operationalized according to the proportion of residents that reported they were not living in the same residence for the previous 5 years. The male marriage pool index is operationalized as the number of employed males age 16 years and older per 100 females (see Sampson, 1987).

Finally, in keeping with our claim of the importance of expanding measures of racial threat beyond percentage Black, we offer four indicators of racial threat in the current study. A measure of Black concentration is included in the current study to take into account the change in the minority group population and racial composition of cities over time. Black concentration is computed as the percentage of the Black population. Racial

inequality is captured by combining three ratio measures: the ratio of White to Black median family income, the ratio of White to Black median years of schooling attained by persons age 25 years and older, and the ratio of Black unemployment rates to White unemployment rates.

The remaining two racial threat measures take into account how formal social control is used as a response to racial threat in urban areas. They include police presence and a race-specific measure of the incarcerated population. The police presence measure is computed as a rate based on the average number of police officers in each city in 1980 (1979 to 1981) and 1990 (1989 to 1991) per 100,000 population.[3] The race-specific incarceration measure is based on state-level census data counts of correctional facilities. Specifically, this measure is computed by taking the sum of all Black (White) persons from each facility within a given state, divided by the total incarcerated population in 1980 and 1990.

Finally, we included a measure of the percentage of the population with Hispanic origins as a control measure. The offense rate is an indication of the overall degree of criminal offending in a given area, and it is an important control measure when the dependent variables (arrests) are dependent on law enforcement involvement. It is computed as a rate by dividing the number of all offenses by the total population and multiplying that value by 100,000.

Preliminary analyses revealed that the explanatory variables associated with urban disadvantage were highly correlated (see Land, McCall, & Cohen, 1990, for details), which led us to utilize confirmatory factor analysis and combine these measures into a composite index called urban disadvantage/ segregation index. The results of the factor analysis are reported in Table 1. Specifically, in the Black models, this index includes two race-specific measures of economic deprivation (i.e., poverty and income inequality), racial residential segregation, and the race-specific measure of public assistance with the indicator of female-headed households. In the White models, racial residential segregation does not load with the other indicators (e.g., factor scoring below .500 cut off), and thus this measure was excluded from the composite measure. On the other hand, racial residential segregation loads with the three indicators of racial inequality in the White models. This differential loading across racial groups is commonly reported (see, e.g., Messner & Golden, 1992; Parker & McCall, 1999). After the above indices were computed, we reexamined the predictor variables for evidence of collinearity and partialling among the regressors (see Land et al., 1990) and performed collinearity diagnostics in a series of cross-sectional regression analyses to obtain variance inflation factors (VIFs). None of the VIFs associated with the parameter estimates exceeds a value of 4, indicating that collinearity is not

TABLE 1: Principal Components Analysis Matrices After Oblique Rotation

Variables	Black Models		White Models	
	1	2	1	2
Percentage in poverty	.935		.684	
Income inequality	.840		.912	
Percentage of households with public assistance payments	.551		.526	
Percentage female-headed households	.760		.787	
Racial residential segregation	.631			.583
Racial Inc. inequality		.749		.949
Racial educational attainment inequality		.837		.643
Racial unemployment inequality		.621		.751
Eigenvalue	3.342	1.885	2.441	2.390
% variance explained	41.8	23.6	30.5	29.9

NOTE: Only factor loadings greater than 0.5000 are reported.

problematic in the current study. The appendix displays the descriptive information for each of our detailed measures and indices in 1980 and 1990.

EVIDENCE OF CHANGE OVER TIME

Although the appendix reports mean levels for our predictors in 1980 and 1990, key to our research effort was documenting the change in these constructs over time. To provide evidence of the amount of change occurring over time, we reported the percentage of change in our predictors from 1980 to 1990 in Table 2 and descriptive statistics for our entire sample. We computed change score measures by subtracting a given indicator in 1980 from 1990, divided by the value of that variable for 1980, and then multiplied by 100. We highlight some of the key findings reported in Table 2 here.

In terms of dependent variables, race-specific total and types of drug arrests rose significantly from 1980 to 1990, with the growth in drug arrests being more visible for Blacks than Whites. For example, the increase in Black total drug arrests was twice as high as the increase in White total drug arrests (211% and 106%, respectively) from 1980 to 1990. Although a similar disparity exists for drug possessions, the difference between White and Black drug sales arrests was considerably smaller (236.54% and 193.65%, respectively). As argued by other scholars, we found consistent and strong evidence of a rise in drug arrests through much of the 1980s and that this change was more pronounced among Blacks than Whites (e.g., Blumstein, 1993).

TABLE 2: Change Scores and Descriptive Statistics (Means, Overall, and Within-Sample Standard Deviations) for Indicators Included in the Race-Specific Drug Arrest Multivariate Change Models

	Black Change Score %	White Change Score %	Black Overall M	Black Overall SD	Black Within SD	White Overall M	White Overall SD	White Within SD
Drug arrest counts								
Total	211	106.2	954.86	2,966.9	1,424.9	946.8	2,705.2	1,384.6
Possession	192.24	80.8	596.2	1,618.0	688.5	668.9	1,283.1	628.7
Sales	236.54	193.65	368.8	1,520.4	797.3	283.8	1,379.3	812.7
Urban disadvantage								
Urban disadvantage index	.38	5.18	102.5	21.9	5.78	25.9	7.6	2.5
Poverty	5	6.33	26.9	8.3	3.8	10.3	3.8	3.8
Public assistance	−14.9	30.3	7.1	7.9	7.8	7.1	5.2	5.1
Racial segregation	−26.0	—	63.3	17.2	14.4	63.3	17.2	14.4
Income inequality	9.6	17.14	.43	.04	.04	.38	.04	.03
Female-headed households	.15.6	10.3	40.1	9.9	9.5	15.1	3.3	3.2
Manufacturing sector	−20.1	−18.4	29.5	9.05	5.32	23.9	7.8	3.1
Job accessibility	132.9	79.73	13.2	44.5	32.6	1.0	.56	.41
Social disorganization								
Male marriage pool	1.65	1.01	39.1	12.7	7.9	8.6	4.7	3.2
Divorced males	85.7	44.83	11.7	13.4	9.8	11.7	13.4	9.8
Residential mobility	36.4	36.4	48.0	20.2	14.3	51.9	20.2	14.3
Racial threat								
Percentage Black	10.4	10.4	19.9	17.2	1.6	19.9	17.2	1.6
Racial inequality index	13.8	−17.5	3.49	.63	.32	39.6	9.4	4.2
Police presence	4.1	4.1	211.1	84.9	15.6	211.1	84.9	15.6
Incarcerated population	2.3	−12.2	.433	.15	.02	.460	.15	.04
Percentage Hispanic	30.4	30.4	1.6	1.3	.19	1.6	1.3	.19
Index offense rate	9.4	9.4	9.2	.35	.16	9.2	.35	.16

Poverty levels, income inequality, and the percentage of households headed by females also increased for Blacks and Whites over time. On the other hand, we found a significant decrease in the levels of racial residential segregation in urban cities (see also Farley & Frey, 1994). In fact, the degree of racial residential segregation between Blacks and Whites decreased considerably (–26%). Differences across racial groups were found in the percentage of female-headed families on public assistance; that is, the percentage of Black families receiving public assistance decreased significantly from 1980 to 1990 (–15%) whereas payments to White families increased (30%). When combining these measures into our composite indices, the differential patterns across these indicators translate into differences in levels of urban disadvantage/segregation for Whites and Blacks via our composite measure scores.

Significant changes in labor-market indicators are also found across racial groups, which supports Wilson's (1987) claim of industrial restructuring. In terms of manufacturing employment, our results reveal a decline in this industrial sector for Blacks (–20%) and Whites (–18%). On the other hand, the availability of low-skilled jobs to racial groups with limited skills and education rose considerably. This increase in the race-specific job accessibility measures may seem surprising initially; however, given that this indicator includes various types of service and retail occupations that saw the greatest growth in the urban economy during this time period (see Goldin, 1990; McCall, 2000), an increase is consistent with existing literature (Kasarda, 1992). In addition, we found that urban areas became increasingly socially disorganized via indicators of family disruption and residential instability. For example, the percentage of divorced males doubled for Blacks (86%) relative to Whites (45%), and residential mobility among city populations increased 36% on average.

Finally, we also found a shift in the racial composition of urban cities over time. The percentage of the Black population increased by 10%, and the Hispanic population increased by 30% from 1980 to 1990. Although police presence rose in urban cities (4%), Blacks and Whites differed in terms of racial inequality and incarceration rates; that is, we found that incarceration rates increased for Blacks but decreased for Whites over time. As argued above, salient to the current study was capturing the rise in incarceration rates and police presence in urban areas during the 1980s and 1990s, particularly the use of incarceration involving Blacks. Table 2 provides evidence of the increase in minority (Black and Latino) populations in urban areas and an increase in police presence and Black incarceration rates (2%) relative to White incarceration rates, which actually decreased over time (–12%). Over-

all, our indicators capture the extent of change in urban conditions and drug arrest measures over time.

DYNAMIC MULTIVARIATE MODELS OF CHANGE

We provide multivariate models to capture the impact of the structural conditions on race-specific types of drug arrests from 1980 to 1990. Because of the distributional nature of our disaggregated drug arrest measures and because we utilized counts instead of rates as the dependent variables, we used a Poisson-based regression procedure in the current study (see Osgood, 2000); that is, our initial statistical tests revealed that ordinary least squares (OLS) regression estimation is not appropriate for our analysis because of the skewed nature of the arrest data. Although the traditional method when computing the dependent variable in these situations would be to compute an aggregate rate and then apply a log transformation to the variable, Osgood (2000) and Osgood and Chambers (2000) outlined the inappropriateness of this technique and offered Poisson-based regression as an alternative, potentially more reliable, method. Given evidence of overdispersion in our race-specific dependent variables, the negative binomial form of Poisson modeling was utilized (see Osgood, 2000). Although this procedure requires the use of counts, we included the log of the city's race-specific population as an exposure variable and constrain its coefficient to equal 1 (STATA, 2003). This method converts the drug arrest counts into the equivalent of a rate (Maddala, 1983; Osgood, 2000).

To address the issue of change, a pooled cross-sectional time-series equation was estimated in which all the cities in the sample were treated as separate observations (STATA Version 7). Although there is no agreement in the social science literature on how to best model change (Firebaugh & Beck, 1994; Hausman, Hall, & Griliches, 1984; Kessler & Greenberg, 1981), we used the fixed-effects specification of the negative binomial modeling procedure. By using a fixed-effects modeling design, we were able to assess the influence of time-varying covariates on the within-city change in types of race-specific drug arrests (Hausman et al., 1984). Generally researchers prefer to use the random-effects model because it allows for the estimation of variables that are constant within unit (STATA, 2003). However, a random-effects modeling procedure requires that the u_i terms be treated as random variables and that they follow the normal distribution. This assumption is not likely to be valid in most cases, and it was not found to be true with these data. We established the appropriateness of a fixed-effect over a random-effect procedure utilizing the Hausman's specification test (Hausman et al., 1984;

Maddala, 1983) and report these results at the bottom of Table 3. Finally, a control variable for time was added to the models to fix the effects across the decennial points (referred to as period 1990).

Table 3 presents the results of our conditional fixed effects, negative binomial analysis. In this table, the first three change models display the coefficients for the total, possession, and sales drug arrests among Blacks, followed by the three types of drug arrest models for Whites. An interpretation of the results will include multiplying the coefficient by a value of exp (bx_k) (see Osgood, 2000), or comparably, a standard deviation change in X will result in a percentage change in Y.

Urban Disadvantage

The findings for the urban disadvantage indicators do not support our hypotheses concerning the impact of the concentrated disadvantage on the rise in drug arrests from 1980 to 1990. First, we find that the urban disadvantage/ segregation index has a statistically significant negative effect on Black total and possession drug arrests. Specifically, a standard deviation increase in the disadvantage/segregation index is associated with a 13.5% decrease in all Black drug arrests and 10.4% decrease in Black possession drug arrests over time (exp $[-.025 \times 5.78)] = .8654$; exp $[-.019 \times 5.78] = .8959$, respectively). We offer two possible explanations for this inverse relationship. First, Krivo and Peterson (2000) argued that the crime-producing effects of disadvantage level off in areas where disadvantage is extreme; that is, they suggest that increasing levels of already extreme disadvantage matter little to rates of urban violence in comparison to when initial levels of disadvantage are low. As a result, they expected (and found) a weak relationship between concentrated disadvantage and violence in communities with high poverty concentration levels (Krivo & Peterson, 1996, 2000). We suggest that our research sheds light on what happens when high levels of Black disadvantage persist over extended periods of time; that is, change in already high levels of Black concentrated disadvantage from 1980 to 1990 has a negative impact on the change in Black drug arrests over time.

Another possible explanation for this negative impact lies in the benign-neglect hypothesis of the conflict perspective. Liska and Chamlin (1984) argued "the segregation of non-Whites decreases pressure on police to control crime, thereby decreasing the arrest rate, especially for non-Whites" (p. 386). So although the overall segregation index decreased from 1980-1990, the urban disadvantage/segregation index still increased overall. The fact that urban disadvantage was increasing in these areas, despite a reduction in segregation, suggests that perhaps it is the lack of attention of the authori-

TABLE 3: Conditional Fixed-Effects Negative Binomial Based Regression Coefficients (and z scores) for Race-Specific Drug Arrests by Type From 1980 to 1990

	BLACK			WHITE		
	Total Drug Arrest	Possession Drug Arrests	Sale Drug Arrests	Total Drug Arrest	Possession Drug Arrest	Sale Drug Arrest
Urban disadvantage						
Disadvantage and/or segregation index	−.025**(−4.19)	−.019** (−2.96)	−.009 (−1.14)	.004 (.32)	−.010 (−.69)	.008 (.46)
Manufacturing employment	.013 (1.22)	.024* (1.86)	−.001 (−.08)	−.007 (−.56)	−.003 (−.26)	−.003 (−.24)
Job accessibility	−.007 (−1.48)	−.005 (−.84)	−.008 (−1.00)	.149 (1.20)	.076 (.51)	.003 (.01)
Social disorganization						
Male marriage pool	.015** (4.15)	.014** (3.02)	.009* (1.91)	.027** (3.90)	.021** (2.64)	.019* (1.86)
Divorced males	.002 (.85)	.002 (.73)	.003 (1.00)	.030** (5.10)	.022** (3.52)	.027** (2.98)
Residential mobility	.004 (1.02)	.004 (1.07)	.006 (1.15)	−.002 (−.50)	−.002 (−.56)	.003 (.70)
Racial threat and/or formal social control						
Percentage Black	−.057**(−5.35)	−.060** (−5.66)	−.066**(−4.75)	.014 (1.25)	.006 (.54)	−.020 (−1.35)
Racial inequality index	.316* (1.87)	.414* (2.18)	.003 (.01)	.032** (2.78)	.021* (1.89)	.023 (1.32)
Police presence	.003 (1.82)	.001 (.54)	.004* (1.94)	−.003 (−1.61)	−.002 (−.89)	.003 (1.49)
Incarcerated population	−3.27** (−3.05)	−2.27* (−1.99)	−2.22 (−1.76)	−5.13** (−5.07)	−3.30** (−2.85)	−4.01** (−2.83)
Control measures						
Percentage Hispanic (log)	−.186 (−1.24)	−.259 (−1.64)	.027 (.17)	.169 (1.40)	.111 (.92)	−.008 (−.05)
Index offense rate (log)	.250 (1.26)	.384 (1.82)	.700**(2.36)	.072 (.41)	.019 (.10)	−.052 (−.22)
1990 period	1.10** (6.24)	.984** (4.91)	1.181**(5.58)	.228 (1.13)	.259 (1.23)	.666**(2.71)
Constant	−9.18	−11.68	−14.95	−11.955	−11.19	−12.20
Log–Likelihood	606.68**	−579.59*	427.38**	677.19**	−644.82**	−494.67**
Hausman Test	61.13**	37.30**	36.54**	73.93**	62.56**	26.58**
n	212	210	200	210	208	198

*p < .05. **p < .01.

ties in these areas that results in the decrease in Black drug arrests over time (Liska & Chamlin, 1984). In this context, there may be less pressure on police to control crime because victims who are non-White are less likely to report crime in these areas. In comparison to the White models, this composite measure is not statistically significant. Thus, although the impact of the Black urban disadvantage/segregation index on the change in Black drug arrests was not in the predicted direction, concentrated disadvantage among Whites did not contribute to the change in any types of White drug arrests, which is consistent with the literature and our theoretical expectations.

We found some support for our hypothesis concerning the impact of changes in labor-market opportunities (via manufacturing employment and job accessibility) on the rise in Black types of drug arrests relative to Whites (see Hypothesis 2). We found that the change (reduction) in manufacturing employment among Blacks increases Black drug arrests for possession over time. This finding indicates that a standard deviation change in manufacturing employment between 1980 and 1990 is associated with a 13.6% increase in Black possession drug arrests (exp $[.024 \times 5.32] = 1.136$). On the other hand, this measure had no effect on either sales or total drug arrests; that is, Wilson's (1987, 1991) claims concerning a shift from goods-producing to service-producing industries in urban cities was found to be a significant predictor of the rise in Black possession drug arrests over time, whereas this shift in the urban economy did not influence drug arrests among Whites. We found also that the change in job accessibility had no impact on either White or Black types of drug arrests over time.

Our investigation into the potential linkage between the changes in the urban economy and the rise in drug arrests reveals some theoretically relevant findings. For instance, indicators of urban disadvantage are significant predictors of Black drug arrests but not for Whites, which is consistent with our theoretical predictions. On the other hand, there is variation in the impact of change in Black urban disadvantage by type of indicator and by type of drug arrest. For example, the change (decline) in manufacturing employment contributed to the rise in Black drug possession arrests over time; however, this indicator did not exhibit a significant impact on the change in total and sales arrests for Blacks.

Social Disorganization

Social disorganization theory posits that family disruption (via divorce and male marriage pool) will decrease social control in a given area because of the instability and disintegration it causes in the family unit and in the community at large (Blau & Blau, 1982; Bursik & Grasmick, 1993; Sampson,

1987; Wilson, 1987). For example, the lack of employed males as potential marriage partners (i.e., male marriage pool indicator) decreases stability within the family, contributing to the impoverished conditions of the family unit and the overall disorganization of the community (Almgren et al., 1998; Sampson, 1987; Wilson, 1987). Consistent with this perspective, we predicted that as geographic areas become increasingly socially disorganized (via family disruption and residential mobility), these areas experience more drug arrests because of the breakdown in informal social control (see Hypothesis 3). We further speculated that this dynamic relationship should be racially invariant, as argued in the existing social disorganization literature (Krivo & Peterson, 2000; Sampson & Wilson, 1995).

In Table 3, we found that only one of the three indicators of social disorganization influenced the change in drugs arrests for Blacks and Whites, which is partially consistent with our prediction. For example, the change in the male marriage pool, which marks the lack of employed males per 100 females, had a positive, statistically significant effect on drug arrests in all six race-specific change models. For example, a standard deviation increase in the Black male marriage pool is associated with a 7% increase in Black drug sales arrests (exp $[.009 \times 7.9] = 1.074$) whereas the White male marriage pool is associated with a 6% increase in White drug sales arrests (exp $[.019 \times 3.2] = 1.063$). This finding leads us to conclude that the male marriage pool affects drug arrests among Whites and Blacks in similar ways. In addition, we also find that the rise in percentage of White divorced males in urban areas significantly contributed to the increase in all types of White drug arrests over time. For example, we found that a standard deviation increase in the percentage of White divorced males is associated with a 30% increase in all White drug arrests (exp $[.027 \times 9.8] = 1.303$). Although this theoretical perspective predicts racial invariance in the effects of these predictors on crime, our findings provide only partial support for this claim, in regards to the impact of the male marriage pool index. Change in levels of residential mobility, on the other hand, did not contribute to the change in drug arrests for Blacks or Whites.

Racial Threat

Turning to racial threat arguments and findings for our racial threat indicators in Table 3, recall that we postulated that the change (rise) in racial threat would fuel the drug arrests of Blacks but not Whites because of their dominant position in our society. First, although it is argued that an increase in the Black population leads the dominant group (Whites) to perceive growing threat and take action to reduce the economic competition and/or threat of

Blacks, we found the rise in the Black population has a negative effect on all types of Black drug arrests over time. This finding does not support our hypothesis and, more important, racial threat arguments. Rather, as argued above, these findings are consistent with the benign-neglect hypothesis as proposed by Liska and Chamlin (1984). They argued that in areas with a large Black population, crime is more likely to be intraracial. As a result, there is less pressure on police to control crime because victims who are non-White are less likely to report crime or even when they do report crime, police may allocate fewer resources to resolve the offense. Turning to the White arrest models, we found that the change in percentage Black does not contribute to the change in White arrests, which is consistent with theoretical expectations and racial threat arguments.

Second, we found that the change (increase) in inequality between racial groups significantly increases Black total and Black possession drug arrests over time, which is more consistent with deprivation than threat arguments. Recall that in the White models the racial inequality index includes three indicators of racial inequality and the measure of racial residential segregation. Because racial segregation decreased significantly from 1980 to 1990 in urban cities (–26%), the inclusion of this indicator leads to differences in this indicator across racial groups, which is reflected in the change scores reported in Table 2 and our interpretation of this coefficient in the multivariate change models. Specifically, we found that the change (decrease) in racial inequality has a positive impact on the rise in White total and possession drug arrests over time. Given the greater opportunity for interracial contact, a standard deviation increase in racial inequality is associated with a 14% increase in total White drug arrests and 9% increase in arrests for White drug possession (exp [.032 × 4.2] = 1.144; exp [.021 × 4.2] = 1.092, respectively). These findings might also support the benign-neglect hypothesis, in that given the greater potential for contact between racial groups in urban cities and the political and media attention toward drug offenses, the police are more likely to respond to race-specific drug arrests.

In terms of social control indicators of threat, the increase in police presence had a positive impact on the rise in drug sales among Blacks, which supports our theoretical expectations. Specifically, a standard deviation increase in police force size is associated with a 6% increase in arrests for Black drug sales (exp [.004 × 15.6] = 1.0642). This finding of a significant impact on police presence on Black drug sale arrests supports that literature which claims a concentration of police in predominantly Black urban areas over time (see Jackson & Carroll, 1981; Liska et al., 1981). Last, we also found that the change in incarceration rates over time influenced the change in drug arrests in five of six models. Specifically, the change (rise) in Black incarcer-

ation rates decreases Black total and possession drug arrests but does not influence drug sale arrests among Blacks. On the other hand, the change (decline) in White incarceration rates decreases all types of White drug arrests over time. Overall, given our effort to measure different dimensions of racial threat, which led us to include multiple measures of racial inequality and formal social control, the finding of mixed results concerning the relationship between indicators of racial threat and Black drug arrests is not surprising.

CONCLUSION

In the current study, we attempted to assess whether three theoretical perspectives concerning race, urban inequality, and crime contributed to our understanding of the racial disparities, and the rise, in drug arrests over time. We conclude that the three theoretical perspectives do offer some insights into the changing nature of drug arrests, with differences revealed across racial groups. For example, urban disadvantage arguments contribute to our understanding of the change in Black drug arrests. Consistent with this approach, it does not explain White drug arrests. Furthermore, social disorganization measures prove to be partially influential in explaining different types of drug arrests regardless of race, although the change in percentage of divorced males only affected the change in White drug arrests. On the other hand, the racial threat perspective offers indicators that result in significant differences in types of drug arrests across racial groups, but not always in the predicted direction. For example, changes in the racial (Black) composition of urban areas have a negative and significant impact on the change in all types of Black drug arrests. However, the rise in social control (via the increase in police presence) led to more Black drug sale arrests over time, while exhibiting no effect on the change in Black total and possession drug arrests. These findings produce mixed support for racial threat arguments concerning the use of social control to reduce the potential economic threat of Blacks. In fact, our findings are more consistent with Liska and Chamlin's (1984) benign-neglect arguments.

These mixed findings led us to conclude that measures for Blalock's (1967) racial threat hypothesis should be expanded beyond that of the size of the Black population. Only by incorporating different measures of political and/or economic threat will researchers be able to disentangle the effects of the racial threat on arrest and thus explain the racial disparities in urban crime. Furthermore, past research has found that areas that fall below the median percentage Black population were often the areas where race mea-

sures, such as percentage Black, had their strongest impact. Although this claim may seem contradictory to the racial threat thesis at first glance, it may be that indicators such as percentage Black will only prove important in areas perceived as so-called safe by the community (e.g., predominantly White areas may perceive an increase in the Black population much differently than other areas) (Crawford, Chiricos, & Kleck, 1998). Future research incorporating racial threat arguments should attempt to separate these areas to determine if this is the case.

Along these lines, future research should also attempt to disentangle the relationship between racial threat and benign neglect. If the benign-neglect hypothesis continues to demonstrate support, researchers and policy makers must ask themselves what this means. Does it mean that as long as minorities maintain a high ratio of intra- to interracial crime, then agents of formal social control are not concerned with these areas? Moreover, does it indicate that minorities in such areas are more reluctant to notify authorities for fear of not being taken seriously, or a lack of concern by those in law enforcement as Liska and Chamlin (1984) suggested? Similar observations have been made such as Zimmer's (1987) work on Operation Pressure Point in the Lower East Side of New York City, where it appears the police were most concerned when nonlocals (and many Whites) began frequenting the area to purchase cocaine and heroin (Goode, 2005; Zimmer, 1987). These are important questions that deserve more attention.

Overall, the current study highlights the importance of race specificity in measures to capture the disparities across racial groups, examining changes over time, and the importance of expanding the types of theoretical approaches and methodological strategies utilized in the study of drug arrests. Although the current study fills a gap in the existing research by offering greater specificity (in race and types of drug arrests) in macro-level research, additional specification is warranted. For example, specific drug types should be explored as structural correlates may operate differently for different types of drugs (marijuana vs. cocaine, cocaine vs. heroin) and at different time intervals (e.g., 1980 vs. 2000, etc.).

Future research should also incorporate 2000 census and arrest data. Recent evidence suggests a significant decline in crime rates, particularly homicide (Blumstein & Wallman, 2000) at the same time 2000 census data releases reveal that urban areas are becoming more racially and ethnically diverse and economically stable. How the shift in the racial composition (via racial threat arguments) and economic climate of urban areas is related to the observed crime drop has yet to be studied. Another interesting possibility is that although the crack cocaine epidemic was very visible in urban areas between 1980 and 1990, it is possible that crack cocaine did not affect all

APPENDIX

Descriptive Statistics (Means and Standard Deviations) for Predictors and Race-Specific Drug Arrests in 1980 and 1990

	Black Model 1980	Black Model 1990	White Model 1980	White Model 1990
Drug arrests (counts)				
Total	476.6 (1,408.29)	1,482.6 (3,982.23)	629.1 (1,136.93)	1,297.27 (3,713.04)
Possession	310.60 (893.59)	907.69 (2,105.71)	482.44 (864.53)	872.32 (1,897.26)
Sales	171.77 (788.84)	578.07 (2,009.17)	146.35 (462.30)	429.75 (1,915.32)
Urban disadvantage index	102.27 (18.53)	102.66 (24.81)	25.31 (6.79)	26.62 (8.35)
Poverty	26.26 (7.62)	27.58 (8.91)	9.95 (3.41)	27.58 (8.91)
Public assistance	19.38 (7.45)	16.50 (8.21)	6.17 (2.92)	8.04 (6.61)
Racial residential segregation	72.55 (11.17)	53.70 (17.13)	—	—
Income inequality	.41 (.029)	.45 (0.44)	.35 (.025)	.41 (032)
Female-headed households	37.18 (8.87)	42.99 (10.08)	14.27 (2.95)	15.84 (3.41)
Manufacturing sector	32.80 (8.53)	26.20 (8.35)	26.39 (7.98)	21.53 (6.77)
Job accessibility	.64 (.34)	25.81 (60.43)	.74 (.21)	1.33 (.64)
Social disorganization				
Male marriage pool	38.85 (11.88)	39.49 (13.58)	51.46 (6.47)	51.98 (5.6)
Divorced males	8.42 (2.40)	15.64 (19.08)	7.16 (1.7)	10.37 (6.2)
Residential mobility	40.82 (25.29)	55.68 (6.76)	40.82 (25.29)	55.68 (6.76)
Racial threat and/or formal social control				
Percentage Black	18.91 (16.58)	20.88 (17.75)	18.91 (16.58)	20.88 (17.75)
Racial inequality index	3.27 (.45)	3.72 (.71)	43.38 (6.41)	35.79 (10.30)
Police presence	206.89 (81.75)	215.38 (88.12)	206.89 (81.75)	215.38 (88.12)
Incarcerated population	.43 (.15)	.44 (.15)	.49 (.15)	.43 (.14)
Percentage Hispanic	9.0 (12.36)	11.74 (14.72)	9.0 (12.36)	11.74 (14.72)
Index offense rate	9,865.25 (3,041.19)	10,790.42 (3,739.03)	9,865.25 (3,041.19)	10,790.42 (3,739.03)
n	132	117	132	117

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urban areas at the same time. Therefore, by incorporating the changes through 2000, those cities whose epidemic may not have peaked during the 1990s may be better understood.

NOTES

1. In addition to entering the dummy variable into the models, we also performed a second test to determine whether performing mean substitution on some of the drug arrest data substantially changed our research. In this test, we estimated all the models restricting the data to include only cities reporting 12 months on the dependent variables. The findings (in terms of significance level and direction) did not differ from those findings where mean substitution was used.

2. According to Kasarda (1989), 10 of the 17 major industry groups can be classified as being dominated by low-skill jobs. They include agriculture, forestry, and fisheries; mining; construction; manufacturing, nondurable; manufacturing, durable; transportation; wholesale trade; retail trade; personal services; and entertainment and recreational services.

3. Mean substitution was used for some police officer data in 1990 in situations where data were missing for 1 of the 3 years. Mean substitution was not used in cases where data for 2 of the 3 years were missing. No mean substitution was used in the police officer data circa 1980.

REFERENCES

Almgren, G., Guest, A., Inmerwahr, G., & Spittel, M. (1998). Joblessness, family disruption, and violent death in Chicago, 1970-1990. *Social Forces*, *76*, 1465-1493.

Anderson, E. (1990). *Streetwise: Race, class and change in an urban community*. Chicago: University of Chicago Press.

Austin, R. L., & Allen, M. D. (2000). Racial disparity in arrest rates as an explanation of racial disparity in commitment to Pennsylvania prisons. *Journal of Research in Crime and Delinquency*, *37*(2), 200-220.

Baumer, E., Lauritsen, J. L., Rosenfeld, R., & Wright, R. (1998). The influence of crack cocaine on robbery, burglary, and homicide rates: A cross-city, longitudinal analysis. *Journal of Research in Crime and Delinquency*, *35*(3), 316-340.

Belenko, S., Fagan, J., & Chin, K.-L. (1991). Criminal justice responses to crack. *Journal of Research in Crime and Delinquency*, *28*(1), 55-74.

Blalock, H. M. (1967). *Toward a theory of minority-group relations*. New York: John Wiley.

Blau, J., & Blau, P. M. (1982). The cost of inequality: Metropolitan structure and violent crime. *American Sociological Review*, *47*, 114-129.

Blumstein, A. (1993). Making rationality relevant: The American Society of Criminology presidential address. *Criminology*, *31*, 1-16.

Blumstein, A., & Wallman, J. (2000). *The crime drop in America*. New York: Cambridge University Press.

Brown, C. M., & Warner, B. D. (1992). Immigrants, urban politics, and policing in 1900. *American Sociological Review*, *57*(3), 293-305.

Bureau of Justice Statistics. (1996). *Correctional populations in the U.S., 1994* (Executive summary). Washington, DC: U.S. Department of Justice, Office of Justice Programs.

Bursik, R. J., Jr., & Grasmick, H. (1993). *Neighborhoods and crime: The dimensions of effective community control*. New York: Lexington Books.

Chilton, R., & Weber, D. (2000). *Uniform Crime Reporting Program [United States]: Arrests by age, sex, and race for police agencies in metropolitan statistical areas, 1960-1997* [Computer file] (2nd ICPSR version). Amherst, MA: University of Massachusetts [producer]. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor].

Cohen, L. E., Felson, M., & Land, K. C. (1980). Property crime rates in the United States: A macrodynamic analysis, 1947-1977; with ex ante forecasts for the mid-1980s. *American Journal of Sociology*, *86*(1), 90-118.

Crawford, C., Chiricos, T., & Kleck, G. (1998). Race, racial threat, and sentencing of habitual offenders. *Criminology*, *36*, 481-511.

Crutchfield, R. D., & Pitchford, S. (1997). Work and crime: The effects of labor stratification. *Social Forces*, *76*, 93-118.

Eitle, D., D'Alessio, S. J., & Stolzenberg, L. (2002). Racial threat and social control: A test of the political, economic, and threat of Black crime hypotheses. *Social Forces*, *81*(2), 557-576.

Fagan, J. (1992). Drug selling and licit income in distressed neighborhoods: The economic lives of street-level drug users and sellers. In V. Harrell & G. E. Peterson (Eds.), *Drugs, crime and social isolation: Barriers to urban opportunity* (pp. 99-146). Washington, DC: Urban Institute.

Fagan, J., & Chin, K.-L. (1991). Social processes of initiation into crack. *Journal of Drug Issues*, *21*(2), 313-343.

Farley, R., & Frey, W. H. (1994). Changes in the segregation of Whites from Blacks during the 1980s: Small steps toward a more integrated society. *American Sociological Review*, *59*, 23-45.

Firebaugh, G., & Beck, F. D. (1994). Does economic growth benefit the masses? *American Sociological Review*, *59*(5), 631-653.

Fowles, R., & Merva, M. (1996). Wage inequality and criminal activity: An extreme bounds analysis for the United States, 1975-1990. *Criminology*, *34*(2), 163-182.

Goldin, C. (1990). *Understanding the gender gap*. New York: Oxford University Press.

Goode, E. (2005). *Drugs in American society* (6th ed.). New York: McGraw-Hill.

Hausman, J., Hall, B. H., & Griliches, Z. (1984). Econometric models for count data with an application to the patents-R & D relationship. *Econometrica*, *52*(4), 909-938.

Jackson, P. I., & Carroll, L. (1981). Race and the war on crime: The sociopolitical determinants of municipal police expenditures in 90 non-southern U.S. cities. *American Sociological Review*, *46*, 290-305.

Johnson, B. D., Williams, T., Dei, K., & Sanabria, H. (1990). Drug abuse in the inner city: Impact of hard drugs users and the community. In M. Tonry & J. Q. Wilson (Eds.), *Drugs and crime* (pp. 313-371). Chicago: University of Chicago Press.

Kasarda, J. D. (1983). Entry-level jobs, mobility, and urban minority unemployment. *Urban Affairs Quarterly*, *19*, 21-40.

Kasarda, J. D. (1989). Urban industrial transition and the underclass. *Annals of the American Academy of Political and Social Sciences*, *501*, 26-47.

Kasarda, J. D. (1992). The severely distressed in economically transforming cities. In A. V. Harrell & G. E. Peterson (Eds.), *Drugs, crime, and social isolation: Barriers to urban opportunity* (pp. 45-97). Washington, DC: Urban Institute.

Kessler, R. C., & Greenberg, D. F. (1981). *Linear panel analysis: Models of quantitative change*. New York: Academic Press.

Krivo, L., & Peterson, R. D. (1996). Extremely disadvantaged neighborhoods and urban crime. *Social Forces*, *75*, 619-648.

Krivo, L., & Peterson, R. D. (2000). The structural context of homicide: Accounting for racial differences in process. *American Sociological Review*, *65*(4), 547-559.

Krivo, L. J., Peterson, R. D., Rizzo, H., & Reynolds, J. R. (1998). Race, segregation, and the concentration of disadvantage: 1980-1990. *Social Problems*, *45*(1), 61-79.

Land, K. C., McCall, P. L., & Cohen, L. E. (1990). Structural covariates of homicide rates: Are there any invariances across time and social space? *American Journal of Sociology*, *95*, 922-963.

Liska, A., Lawrence, J., & Benson, M. (1981). Perspectives on social order: The capacity of social control. *American Journal of Sociology*, *87*, 413-426.

Liska, A., Logan, J., & Bellair, P. (1998). Race and violent crime in the suburbs. *American Sociological Review*, *63*, 27-38.

Liska, A. E. (1992). *Social threat and social control*. Albany: State University of New York Press.

Liska, A. E., & Chamlin, M. B. (1984). Social structures and crime control among macrosocial units. *American Journal of Sociology*, *101*, 388-395.

Lo, C. (2003). An application of social conflict theory to arrestee's use of cocaine and opiates. *Journal of Drug Issues*, *33*(1), 237-266.

Lynch, J., & Sabol, W. (1997). *Did getting tougher on crime pay?* (Crime policy report). Washington, DC: Urban Institute State Policy Center.

Maddala, G. S. (1983). *Limited-dependent and qualitative variables in econometrics*. New York: Cambridge University Press.

Maher, L., & Daly, K. (1996). Women in the street-level drug economy: Continuity or change? *Criminology*, *34*, 465-491.

Massey, D. S., Condran, G. A., & Denton, N. A. (1987). The effect of residential segregation on Black social and economic well-being. *Social Forces*, *66*, 29-56.

Massey, D. S., & Denton, N. A. (1988). The dimensions of residential segregation. *Social Forces*, *67*, 281-315.

Massey, D. S., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.

Massey, D. S., Gross, A. B., & Shibuya, K. (1994). Migration, segregation, and the geographic concentration of poverty. *American Sociological Review*, *59*, 425-445.

McCall, L. (2000). Gender, the labor market, and the educational wage gap. *American Sociological Review*, *65*(2), 234-255.

Messner, S. F., & Golden, R. M. (1992). Racial inequality and racially disaggregated homicide rates: An assessment of alternative theoretical explanations. *Criminology*, *30*(3), 421-447.

Mosher, C. (2001). Predicting drug arrest rates: Conflict and social disorganization perspectives. *Crime & Delinquency*, *47*(1), 84-104.

New York City Police Department. (1989). *Statistical report: Complaints and arrests 1988*. New York: Office of Management Analysis and Planning.

Osgood, D. W. (2000). Poisson-based regression analysis of aggregated crime rates. *Journal of Quantitative Criminology*, *16*, 21-44.

Osgood, D. W., & Chambers, J. M. (2000). Social disorganization outside the metropolis: An analysis of rural youth violence. *Criminology*, *38*, 81-116.

Parker, K. F., & McCall, P. L. (1997). Adding another piece to the inequality-homicide puzzle: The impact of structural inequality on racially disaggregated homicide rates. *Homicide Studies*, *1*, 35-60.

Parker, K. F., & McCall, P. L. (1999). Structural conditions and racial homicide patterns: A look at the multiple disadvantages in urban areas. *Criminology*, *37*(3), 447-478.

Quinney, R. (1979). *Criminology*. New York: Little, Brown.

Reinerman, C., & Levine, H. G. (1989). Crack in context: Politics and media in America's latest drug scare. *Contemporary Drug Problems*, *16*, 537-577.

Rosenfeld, R. (1986). Urban crime rates: Effects of inequality, welfare dependency, region, and race. In J. M. Byrne & R. J. Sampson (Eds.), *The social ecology of crime* (pp. 116-130). New York: Springer-Verlag.

Rosenfeld, R., & Decker, S. H. (1993). Discrepant values, correlated measures: Cross-city comparisons of self-report and urine tests of cocaine use among arrestees. *Journal of Criminal Justice*, *21*, 223-230.

Rosenfeld, R., & Decker, S. H. (1999). Are arrest statistics a valid measure of illicit drug use? The relationship between criminal justice and public health indicators of cocaine, heroin, and marijuana use. *Justice Quarterly*, *16*(1), 685-699.

Sacher, A. N. (1997). Inequities of the drug war: Legislative discrimination on the cocaine battle-field. *Cardozo Law Review*, *19*(3), 1149-1200.

Sampson, R. J. (1987). Urban Black violence: The effect of male Black joblessness and family disruption. *American Journal of Sociology*, *93*(2), 348-382.

Sampson, R. J., & Wilson, W. J. (1995). Toward a theory of race, crime, and urban inequality. In J. Hagan & R. D. Peterson (Eds.), *Crime and inequality* (pp. 37-54). Stanford, CA: Stanford University Press.

Shihadeh, E., & Maume, M. O. (1997). Segregation and crime: The relationship between Black centralization and urban Black homicide. *Homicide Studies*, *1*, 254-280.

Shihadeh, E., & Ousey, G. (1998). Industrial restructuring and violence: The link between entry-level jobs, economic deprivation and Black and White homicide. *Social Forces*, *77*, 185-206.

Smith, D. E. (1986). Cocaine-alcohol abuse: Epidemiological, diagnostic, and treatment considerations. *Journal of Psychoactive Drugs*, *18*(2), 117-129.

Smith, S. A., & Tienda, M. (1987). The doubly disadvantaged: Women of color in the U.S. labor force. In A. Stromberg & S. Harkess (Eds.), *Working women* (2nd ed., pp. 61-80). Palo Alto, CA: Mayfield.

STATA. (2003). *Cross-sectional time-series reference manual*. College Station, TX: Author.

Stolzenberg, L., D'Alessio, S. J., & Eitle, D. (2004). A multilevel test of racial threat theory. *Criminology*, *42*(3), 673-698.

Tienda, M., & Lii, D. T. (1987). Minority concentration and earnings inequality: Blacks, Hispanics, and Asians compared. *American Journal of Sociology*, *93*, 141-165.

Tonry, M. H. (1995). *Malign neglect: Race, crime, and punishment in America*. New York: Oxford University Press.

Trebach, A. (1982). *The heroin solution*. New Haven, CT: Yale University Press.

U.S. Bureau of the Census. (1983). *Census of population and housing, 1980 [United States]: Summary tape file 1A* [Computer file] (ICPSR 7941). Washington, DC: U.S. Department of Commerce, Bureau of the Census.

U.S. Bureau of the Census. (1994). *Census of population and housing, 1990 [United States]: Summary tape file 1A* [Computer file] (ICPSR 9575). Washington, DC: U.S. Department of Commerce, Bureau of the Census.

U.S. Department of Justice, Bureau of Justice Statistics. (1979). *Census of state adult correctional facilities, 1979* [Computer file] (ICPSR 7852). Conducted by U.S. Department of Commerce, Bureau of the Census, 2nd ICPSR ed. Ann Arbor, MI: Inter-University Consortium for Political and Social Research.

U.S. Department of Justice, Bureau of Justice Statistics. (1990). *Census of state and federal adult correctional facilities, 1990* [Computer file] (ICPSR 9908). Conducted by U.S. Department of Commerce, Bureau of the Census, 2nd ICPSR ed. Ann Arbor, MI: Inter-University Consortium for Political and Social Research.

U. S. Department of Justice, Federal Bureau of Investigation. (1996). *Crime in the United States*. Washington, DC: Government Printing Office.

Wacquant, L. J. D., & Wilson, W. J. (1989). The costs of racial and class exclusion in the inner city. *Annals of the American Academy of Political and Social Science 501*, 8-25.

Warner, B. D., & Coomer, B. W. (2003). Neighborhood drug arrest rates: Are they a meaningful indicator of drug activity? A research note. *Journal of Research in Crime and Delinquency*, *40*(2), 123-138.

Wilson, W. J. (1987). *The truly disadvantaged: The inner city, the underclass and public policy*. Chicago: University of Chicago Press.

Wilson, W. J. (1991). Another look at the truly disadvantaged. *Political Science Quarterly*, *106*(4), 639-656.

Wilson, W. J. (1996). *When work disappears: The world of the new urban poor*. New York: Knopf.

Wilson, F., & Wu, L. (1993). *A comparative analysis of the labor force activities of ethnic populations, proceedings of the Annual Research Conference of the U.S. Bureau of the Census*. Washington, DC: Government Printing Office.

Zimmer, L. (1987). *Operation Pressure Point: The disruption of street-level drug trade in New York's Lower East Side* (Occasional paper of the Center for Crime and Justice, New York University School of Law). New York: New York University.