# Difference, Disparity, and Race/Ethnic Bias in Federal Sentencing

Ronald S. Everett<sup>1,3</sup> and Roger A. Wojtkiewicz<sup>2</sup>

Federal sentencing guidelines were enacted to reduce unwarranted disparities in sentencing. In this paper we examine the degree to which disparity in sentencing on the basis of race and ethnicity occurred in federal sentencing after the guidelines were implemented. We consider how much of the disparity is explained by offense-related factors as specified in the guidelines. We find that African Americans, Hispanics, and Native Americans receive relatively harsher sentences than whites and that these differentials are only partly explained by offense-related characteristics. We interpret our findings in light of attribution, uncertainty avoidance, and conflict theories.

**KEY WORDS:** sentencing; disparity; race/ethnic bias; guidelines; determinate.

# 1. INTRODUCTION

Sentencing reform during the 1970s was often justified by the need to restrict discretion, reduce unwarranted disparity, and achieve neutrality on the basis of social characteristics when meting out punishments (Tonry and Hatlestad, 1997). From this perspective, sentence disparities attributable to such factors as race or gender were interpreted as products of discrimination and racism (Mann, 1993). Reformers argued that the legally relevant criteria of an individual's criminal history and offense seriousness must substantially determine punishment severity. The "justice" of determinate sentencing is achieved by ensuring that variations in sentencing are not attributable to extra-legal factors such as race/ethnicity, gender, or social class (USSC, 1987). Congress identified unwarranted disparity as a critical problem to be

<sup>&</sup>lt;sup>1</sup>National Institute of Justice, Office of Research and Evaluation, 810 Seventh St. NW, Washington, DC 20531.

<sup>&</sup>lt;sup>2</sup>Department of Sociology, Ball State University, Muncie, IN 47306. Telephone: 765-285-5977; E-mail: rwojtkie@bsu.edu

<sup>&</sup>lt;sup>3</sup>To whom correspondence should be addressed.

solved by sentencing reform:

... everyday federal judges mete out an unjustifiably wide range of sentences to offenders with similar histories, convicted of similar crimes, committed under similar circumstances. One offender may receive a sentence of probation, while another—convicted of the very same crime, and possessing a comparable criminal history—may be sentenced to a lengthy term of imprisonment (USSCJ, 1983, 38).

This determinant approach to sentencing emerged in the context of critiques of rehabilitation as implemented through indeterminate sentencing (Cavender, 1984; Tony, 1996). When interpreted within a philosophy of rehabilitation, judicial discretion and individualized indeterminate sentences produce desirable warranted differences. Judges were expected to tailor sentences according to the specific characteristics of individual offenders and liberal minimums and maximums were set for each sentence. Parole boards exercised their discretion to assess progress toward rehabilitation, within the wide boundaries of the indeterminate sentence, and to determine the date for final release from prison. Criticism of rehabilitation, particularly the failure to reduce recidivism, fueled a reform movement (Martinson, 1974). Ultimately, these criticisms justified a punishment philosophy in which consideration of offender characteristics and discretion by parole boards and judges were interpreted as producing injustice that must be eliminated from sentencing (USSCJ, 1983).

Our research investigates the impact of the federal sentencing guidelines on social differentials in sentence severity with a particular focus on race and ethnicity. Incorporating the legally relevant variables of offense type, offense seriousness, and criminal history we find differences in sentence severity among social groups based on gender, race/ethnicity, age, education, and nativity. We show that the formal operation of the federal sentencing guidelines cannot directly account for these differences. We review previous research on the operation of state guidelines and the limited number of investigations on the federal guidelines. The results are interpreted using existing theory on criminal sentencing, punishment, and race/ethnic disparity in sentencing.

# 2. PRIOR RESEARCH: SENTENCING GUIDELINES AND DISPARITY

A challenge in reforming sentencing systems is distinguishing those sentencing differences based on the legitimate rehabilitation needs of the defendant from those differences stemming from judicial bias, idiosyncrasy, and discrimination based on race/ethnicity, gender, and age (Hagan, 1974). Most reformed sentencing systems attempt to control the influence of these extra-legal factors. The federal sentencing guidelines, in particular, adopted

a conservative and highly restrictive response to this dilemma by excluding virtually all extra-legal factors from consideration during sentencing. In general, warranted sentencing disparity was defined as the total sentencing variation explained by legally mandated factors such as offense seriousness and criminal history while all remaining variation was defined as unwarranted sentencing disparity (Stolzenberg and D'Alessio, 1994).

There is an expanding body of research using data from sentencing guidelines systems (Tony, 1996). A number of these have addressed the specific issue of race/ethnic bias and more generally the issue of unwarranted disparity. Early investigations of the Minnesota sentencing guidelines found that differences attributable to extra-legal factors were initially reduced but sentencing disparities suggesting race/ethnic bias reemerged later (Miethe and Moore, 1985, 1988; Moore and Miethe, 1986). Stolzenberg and D'Allessio (1994) also using Minnesota data found disparity in sentence length had declined but disparity in the no prison/prison sentencing outcome had not been dramatically reduced. On the other hand, Dixon (1995) in an analysis of Minnesota data found that race/ethnicity did not have a significant influence on type of disposition or sentence severity.

Early studies of the Pennsylvania sentencing guidelines found weak evidence of gender and race/ethnic bias in incarceration decisions (Kramer and Steffensmeier, 1993; Steffensmeier *et al.*, 1993). However, a more recent investigation exploring the interrelationships among race, gender, age, and sentence severity provided stronger evidence for a direct effect of the three factors on both sentence severity and the likelihood of incarceration (Steffensmeier, *et al.*, 1998).

Albonetti (1997) used 1991–92 Federal Sentencing Guidelines Monitoring Data to examine variation in sentence length for drug offenses. Controlling for the effect of guideline mandated variables such as criminal history and offense seriousness, the analysis found significant effects for extra-legal factors, including gender and race/ethnicity, on sentence severity (Albonetti, 1997, 817). However, the influence of these extra-legal factors was less than the influence of type of drug offense (possession or distribution) and guideline departures for substantial assistance.<sup>4</sup>

<sup>4</sup>The Federal sentencing guidelines allow departures from the determined sentence range in very limited circumstances. All departures require a judicial statement of reasons to justify the sentence either above or below the determined range. As pointed out by Albonetti (1997), substantial assistance is the most common departure. An analysis of sentence severity including departures, particularly for substantial assistance, presents certain fundamental difficulties. Given the structure and operation of the federal sentencing guidelines, it is reasonable to expect the substantial assistance departure to have a significant influence on sentence severity for several reasons. First, by definition it represents an extraordinary sentence outside a narrow range. Second, the substantial assistance departure can only be initiated on the motion of the prosecutor, distinguishing it from other departures. Both the motion and the size of the recommended reduction are at the discretion of the prosecutor. Third, within the structure of the guidelines, there are no other mechanisms that can so dramatically alter a sentence.

At least seventeen states and the federal court system have implemented sentencing guidelines (Reitz, 1993). Many within the sentencing reform movement believe that presumptive sentencing guidelines hold the most promise for reducing unwarranted disparities (Tony and Hatlestad, 1997). Our research is intended to evaluate the effectiveness of guidelines in reducing unwarranted disparities within the context of federal sentencing. Although we are rapidly accumulating knowledge concerning the operation of sentencing guidelines, the limited number of investigations and mixed findings concerning reductions in unwarranted disparities strongly suggest the need for further research (Alschuler, 1991; Tony, 1995).<sup>5</sup>

# 3. RACE/ETHNIC DISPARITY IN SENTENCING: THEORETICAL IDEAS

While there is a good amount of empirical work on the influence of extra-legal factors on sentencing, theoretical work is less developed. There are three theoretical perspectives which stand out in their usefulness. The first perspective employs attribution theory to explain the differential assessments of juvenile probation officers (Bridges and Steen, 1998). The second perspective blends theories about uncertainty avoidance and causal attribution pertaining to the sentencing of adults (Albonetti, 1991). A third perspective is conflict theory (Quinney, 1973; Wooldredge, 1998).

Bridges and Steen (1998) argue using attribution theory that the perceptions of officials contribute to differences in legal dispositions. According to this theory, those evaluating situations perceive causal forces to be either internal (within the individual) or external (within the environment) when constructing causal explanations for events. They demonstrate how perceptions about respectfulness and remorse and how assumptions about whether the cause of the crime was due to a bad person or bad environment are converted into differences in recommended punishments within the context of the juvenile court process.

Acceptance of responsibility is the next most common sentence adjustment but it is limited to a three level reduction in offense seriousness and produces a more modest reduction in sentence length. Finally, a departure for substantial assistance is the only mechanism to reduce a mandatory minimum sentence. It is obvious that departures, in particular those for substantial assistance, must have a significant influence on sentence severity. For these reasons we have excluded all departures from our present investigation and suggest that they warrant separate analysis. See Maxfield and Kramer (1998) for a complete discussion of these and other issues concerning the substantial assistance departure under federal sentencing guidelines.

<sup>5</sup>See Spohn (2000) for the most complete and extremely useful review of the research on sentencing reform, disparity and discrimination. Providing insight into the theoretical linkages between sentencing and the attitudes of minorities, this research shows that juvenile probation officers are more likely to attribute the deviant behavior of blacks to negative attitudinal and personality traits and the deviant behavior of whites to the influences of the social environment. These negative attributions about blacks lead to expectations of higher chances of recidivism which in turn lead to recommendations for longer sentences.

In explaining longer sentences for minorities, other researchers have used attribution theory to argue that minorities may be seen as more evil and threatening (Peterson and Hagan, 1984; Hagan and Peterson, 1995) and also that court officials may use mental images of past interactions in their decision-making (Albonetti, 1991). Cicourel's (1968) work on the juvenile court and the more recent analysis of juvenile and adult sentencing offer support for this perspective (Bridges and Conley, 1995; Tony, 1995). Drass and Spencer (1987), Ulmer and Kramer (1996), and Everett and Neinstedt (1999) also find support for the idea that the defendant's attitude can be an important factor in sentencing decisions.

Integrating the ideas of uncertainty avoidance, decision-making rationality, and attribution theory, Albonetti (1991) makes a similar argument concerning judicial discretion. The argument is that decision-makers maintain "rationality" by creating patterned responses that, from their perspective, reduce uncertainty in their attempts to achieve specific results. Thus, the challenge facing judges is that:

uncertainty surrounding the sentencing decision arises from an inability to predict accurately future criminal behavior. Using defendant characteristics, circumstances of the crime and case processing outcomes, judges assess the defendant's disposition toward future criminal activity. Attributions of a stable and enduring disposition are expected to increase sentence severity. Attributions of a temporary or situational involvement in crime are expected to decrease sentence severity (Albonetti, 1991, 250).

This viewpoint suggests that information about the offender and offense which is relevant to chances of recidivism affects sentence severity. Key to the patterned response is the assessment of whether the causes of behavior were either personal or environmental. This research illustrates how disparity emerges if judges rely on stereotypical images, closely linked to race/ethnicity and gender, in making their predictions of recidivism and in developing their patterned responses.<sup>6</sup>

Traditional conflict theory suggests a structural interpretation arguing that the powerless and persons who are dissimilar to those in power are

<sup>&</sup>lt;sup>6</sup>Similar issues are discussed within a "focal concerns perspective on court decision making" in Steffensmeier, Kramer, and Ulmer (1995) and Steffensmeier, Ulmer, and Kramer (1998).

more likely to be treated harshly by the criminal justice system and other mechanisms of social control (Quinney, 1973). Conflict theory would suggest that race/ethnic minorities are more likely to be perceived as dangerous and therefore punished more harshly (Bridges, Crutchfield and Simpson, 1987). Race/ethnic minorities are viewed as threatening to the social order warranting greater social control efforts (Bridges and Crutchfield, 1988).

# 4. RESEARCH STRATEGY: IDENTIFYING DISPARITY

The federal sentencing guidelines offer less judicial discretion and fewer opportunities for departure compared to most state guidelines systems (Morris and Tony, 1990; Kramer, Lubitz and Kempinen, 1989). A key tool in federal sentencing decisions is a table developed by the federal sentencing commission that consists of a matrix with six categories of criminal history arrayed along the horizontal axis and 43 levels of offense seriousness down the vertical axis. Terms of imprisonment are expressed in a range of months with the maximum of the range not to exceed the minimum by more than the greater of 25 percent or six months. The appropriate sentence range for each class of convicted persons is determined by finding within the sentencing table the intersection of the criminal history category and the offense seriousness level. Formally, judicial discretion under the guidelines is limited to sentencing within the range (Tjoflat, 1991). In practice, the sentencing decision is influenced by plea bargaining negotiations between prosecution, defense, and often the probation officer. At the time of sentencing, the judge may accept or modify the sentence recommendation of the prosecutor and probation officer. In all circumstances, the guidelines clearly specify the factors which may legitimately be considered when determining the sentence.

Under federal guidelines judicial discretion is restricted and is highly structured when exercised (Steury, 1989). As discussed above, the appropriate sentence range is established by the designated offense level, as defined in the guidelines manual, and the calculated criminal history points. Although the initial calculation of these factors is completed by the probation officer, where to place the sentence within the established range is negotiable creating an opportunity for judicial discretion. It appears that judges are using their discretion since "despite the best efforts of Congress and the Sentencing Commission to limit judicial discretion, sentence disparities continue...the guidelines structure and operation have engendered new disparities and exacerbated old ones" (Heaney, 1991, 188). The key opportunity for judicial discretion is the decision of where within the determined range to sentence (Becker, 1991). At the time, Judge Heaney's critique was widely cited and had substantial symbolic value in the ongoing policy debate over the Federal sentencing guidelines. However, the analysis had serious

methodological flaws and the primary arguments concerning unwarranted sentencing disparity were not supported (Wilkins, 1992).

In the present paper, we focus on the exercise of judicial discretion. We hypothesize that if the guidelines have successfully controlled unwarranted sentencing disparity, location within the range will be unaffected by extralegal factors. On the other hand, race/ethnic bias and other extra-legal factors may remain a significant influence within the sentencing process and have a significant affect on placement within the sentencing range. If this is the case then we may conclude that federal sentencing guidelines have failed to eliminate unwarranted sentencing disparities.

Early assessments of the federal sentencing guidelines identified prosecutorial discretion as a potential source of unwarranted sentencing disparity (Nagel, 1990). Subsequent empirical investigations confirmed the influence of the federal prosecutor under the guidelines and the role of plea negotiations in producing unwarranted sentencing disparity (Maxfield and Kramer, 1998; Schulhofer and Nagel, 1989; Nagel and Schulhofer, 1992). Since judicial and prosecutorial discretion involve different decision makers operating under different circumstances, we exclude cases where there were downward departures from the sentencing guidelines attributable to prosecutorial discretion.

# 5. DATA

In this study we use data from the Monitoring Database created by the U.S. Sentencing Commission. The source of the data is case documents supplied to the commission by district courts and U.S. magistrates. We use data from the "MONFY92" and "MONFY93" data sets. The data covers cases sentenced over a two-year period from October 1, 1991 to September 30, 1993. The data represents only those cases sentenced pursuant to the Sentencing Reform Act of 1984 and which were submitted to the U.S. Sentencing Commission. Petty offenses are excluded (USSC, 1991b).

Each unit of analysis in the data involves the sentencing of a single defendant. Multiple counts and multiple indictments are treated as one if sentenced by the same judge at the same time. A person can appear in the data more than once if involved in more than one sentencing event. If there is more than one defendant in the same sentencing, each one appears as a separate unit in the data (USSC, 1991b).

<sup>&</sup>lt;sup>7</sup>According to the U.S. Sentencing Commission report: "While the court does not have to grant a 5K1.1 motion filed by the prosecution, information obtained by the Commission indicates that the vast majority of the motions are granted as a matter of course (Maxfield and Kramer, 1998, 5)." This observation supports our decision to exclude departures from our investigation and focus on sentences within the guideline range.

We exclude units missing information on total months imprisoned, minimum guideline range, or maximum guideline range. We also exclude units where the minimum guideline range equals the maximum guideline range because the sentencing range would be zero for these units. Units where the maximum guideline range is life imprisonment are excluded because such a maximum does not allow for calculation of a sentencing range. Finally, we exclude those units where there was a downward departure, including those based on the defendant's substantial assistance to authorities. Our final sample size is 59,250.

# 5.1. Variables

The dependent variable in our analysis of sentencing disparity is a four category variable for whether the defendant's sentence fell in the first, second, third, or fourth quarter of the sentencing range. Sentences in the first quarter are relatively shorter sentences while sentences in the fourth quarter are relatively longer sentences. The quarters are calculated by subtracting the minimum guideline range from the maximum guideline range and dividing the result into four parts. This variable measures the severity of sentencing holding constant length of sentence.

Our analysis focuses on disparities in sentencing due to race/ethnicity. We hold constant four other extra-legal factors: gender, age, education, and alien status. The race/ethnic categories include non-Hispanic white, non-Hispanic black, Hispanic, Native American, and Asian. We examine five age groups: less than 30, 30–39, 40–49, 50–59, and 60 and over. We group by level of education as follows: less than high school, general education degree, high school graduate only, some college but no degree, college degree only, and graduate degree.

We consider six offense-related characteristics: offense type, offense level, criminal history, plea status, acceptance of responsibility, and region for court. The variable for primary offense type has five categories: economic, drug, violent, firearms, and immigration. We use final offense level as determined by the court as our measure of offense level. We treat this variable as interval and it ranges from 1 (least severe) to 43 (most severe). Criminal history is an interval variable ranging from 1 (least extensive) to 6 (most extensive). We created two categories for plea status: guilty which includes guilty plea and nolo contendere, and trial which includes jury trial, judge/bench trial, and guilty plea/trial. We group the twelve circuits into four regions. The northeast includes circuits 1, 2, and 3; Atlantic includes

<sup>&</sup>lt;sup>8</sup>We also conducted the analysis including defendants with downward departures. Our results concerning race/ethnicity differences did not change with the inclusion of these cases.

circuits 0 and 4; south includes circuits 5 and 11; central includes circuits 6, 7, and 8; and west includes circuits 9 and 10.9

There is missing data on most of the independent variables. We show the frequency for missing on each variable in Table I. We exclude missing data on independent variables in the cross-tabulations in Table II. Variables for missing data were included in the logistic regressions in Table III but coefficients are not shown.

# 6. RESULTS

# 6.1. Bivariate Analysis

Table I shows the frequency in each category of the independent variables. In this table and in Table II we divide offense level and criminal history into categories for presentation purposes. Table I also shows the percentage in each quarter of the sentencing range for each category. Notice that defendants tended to be sentenced either at the low end of the range or the high end with few in between.

There are clear differences between race/ethnic groups in the percentage sentenced in the first or last quarters of the range. Asians are less likely than whites to be sentenced in the fourth quarter while blacks, Hispanics, and Native Americans are more likely. Asians are more likely than whites to be sentenced in the first quarter while blacks, Hispanics, and Native Americans are less likely. Thus, Asians receive relatively milder sentences than whites while blacks, Hispanics, and Native Americans receive harsher sentences.

There are clear differences in sentencing on the offense-related factors. Those convicted of economic offenses receive milder sentences than those convicted of drug, violent, firearms, or immigration offenses. Those convicted of higher-level offenses receive harsher sentences than those convicted of lower-level offenses. Those with more extensive criminal histories receive harsher sentences than those with less extensive histories. Those who entered a guilty plea receive milder sentences than those whose case went to trial. Those who accept responsibility receive milder sentences than those who did not accept responsibility. Finally, there are regional differences in sentencing severity. Those sentenced in the south region receive the harshest sentences

<sup>&</sup>lt;sup>9</sup>In the analysis not shown we considered two other independent variables: whether career offender status was applied and whether armed career offender status was applied. These statuses involved only a few sentencing events: 1.9 percent for career offender and 0.7 percent for armed career offender. Analysis showed that neither one of these variables made an important contribution to explaining race/ethnic differences so we did not include them in the final analysis.

**Table I.** Frequencies for Race/Ethnicity and Offense-Related Variables and Percentages in Sentencing Range Quartile

		Percentage in Quarter			
Variable	Frequency	1st	2nd	3rd	4th
Race/Ethnic					
White	26,167	68.5	5.6	8.6	17.3
Black	16,712	59.2	6.8	9.7	24.3
Hispanic	13,615	60.8	7.0	9.6	22.6
Native American	975	59.9	7.3	10.5	22.3
Asian	1,018	72.9	4.5	7.6	15.0
Missing	763	81.9	2.8	6.3	9.0
Offense-Related					
Economic	18,117	75.0	4.1	9.0	11.9
Drug	23,152	60.4	7.3	7.4	24.9
Violent	3,881	47.7	9.1	9.2	34.0
Firearms	4,832	50.5	7.0	13.3	29.2
Immigration	3,520	57.4	7.4	16.1	19.1
Other or missing	5,748	72.5	4.9	8.8	13.8
Offense level 1-10	22,778	74.9	4.0	8.8	12.3
Offense level 11–20	16,442	60.2	5.9	13.4	20.5
Offense level 21–30	13,931	52.8	8.2	5.7	33.3
Offense level 30 +	6,039	60.9	10.6	6.8	21.7
Missing	60	66.7	6.7	8.3	18.3
Criminal history 1–2	42,677	70.0	5.5	7.7	16.8
Criminal history 3–4	10,110	49.9	8.3	13.2	28.6
Criminal history 5–6	6,406	48.0	7.4	12.4	32.2
Missing	57	64.9	7.0	8.8	19.3
Trial	8,481	49.1	8.1	10.0	32.8
Guilty plea	50,689	66.7	5.9	9.0	18.4
Missing	80	83.8	2.5	5.0	8.7
Not accept resp.	11,303	50.2	8.1	10.9	30.8
Accept resp.	46,202	67.2	5.8	8.8	18.2
Missing	1,745	76.1	4.5	7.5	11.9
Northeast	9,251	67.9	5.6	7.8	18.7
Atlantic	7,263	64.8	6.3	8.6	20.3
South	16,403	57.5	7.3	11.4	23.8
Central	13,035	64.4	6.3	9.1	20.2
West	13,298	69.4	5.2	7.6	17.8
Total	59,250	64.2	6.2	9.1	20.5

while those sentenced in the northeast and west regions receive the mildest.

Analysis of Table I shows that there are differences between race/ethnic groups in the severity of sentences. The analysis also shows that the offense-related variables, which are directly linked to sentencing severity by the

sentencing guidelines, are in fact related to chances of receiving longer sentences. In Table II, we consider to what degree do race/ethnic groups differ on the offense-related variables.

On each offense-related characteristic, blacks are more likely than whites to be in categories that receive harsher sentences and less likely to be in categories that receive milder sentences. Specifically, blacks are less likely to be convicted of economic offenses and more likely to be convicted of drug offenses. Additionally, they are more likely to be convicted of higher-level offenses, have more extensive criminal histories, less likely to plead guilty, are less likely to accept responsibility, and are more likely to be sentenced in the south region.

Hispanics also are more likely than whites to have offense-related characteristics which lead to harsher sentences. Hispanics are more likely

Table II. Distributions of Offense-Related Variables within Race/Ethnicity

	XX71.14	D1 1	TT'	Native	A . •
	White	Black	Hispanic	American	Asian
Economic	46.9	33.3	9.8	20.3	52.3
Drug	33.6	45.8	62.0	15.2	22.3
Violent	7.9	7.9	2.1	57.4	5.0
Firearms	10.5	11.3	4.2	6.1	7.2
Immigration	1.1	1.7	21.9	1.0	13.2
	100.0	100.0	100.0	100.0	100.0
Offense level 1-10	42.8	35.7	30.4	34.3	56.3
Offense level 11-20	31.8	23.3	26.2	35.5	22.2
Offense level 21–30	18.8	26.8	30.6	18.7	14.0
Offense level 30+	6.6	14.2	12.8	11.5	7.5
	100.0	100.0	100.0	100.0	100.0
Criminal history 1–2	75.0	63.4	75.1	75.4	89.9
Criminal history 3-4	15.1	22.1	15.7	16.7	7.6
Criminal history 5–6	9.9	14.5	9.2	7.9	2.5
	100.0	100.0	100.0	100.0	100.0
Trial	12.4	17.9	14.2	13.2	15.0
Guilty plea	87.6	82.1	85.8	86.8	85.0
	100.0	100.0	100.0	100.0	100.0
Not accept resp.	17.0	24.2	19.4	17.1	19.0
Accept resp.	83.0	75.8	80.6	82.9	81.0
	100.0	100.0	100.0	100.0	100.0
Northeast	14.6	15.1	18.5	3.2	19.8
Atlantic	11.5	22.1	2.0	5.0	7.7
South	24.2	28.3	37.0	2.1	13.7
Central	27.3	25.9	7.6	32.0	10.0
West	22.4	8.6	34.9	57.7	48.8
	100.0	100.0	100.0	100.0	100.0

than whites to be convicted of drug and immigration offenses and less likely to be convicted of economic offenses. Hispanics are more likely than whites to be convicted of higher-level offenses. Hispanics are less likely than whites to plead guilty or accept responsibility. Finally, Hispanics are more likely than whites to be sentenced in the south region where sentences are harsher than in other regions.

Native Americans have some characteristics that may lead to harsher sentences and other characteristics that may lead to milder sentences. The percentage of Native Americans who are convicted of violent offenses is much higher than whites due to federal authorities handling law enforcement on reservations. Native Americans are also more likely than whites to be convicted of higher-level offenses. On the other hand, Native Americans are less likely to have extensive criminal histories and are more likely to be sentenced in the west region where sentences are less harsh.

Asians also have some characteristics that may lead to harsher sentences and others which may lead to milder sentences. On the one hand, Asians are less likely than whites to plead guilty or accept responsibility. On the other hand, Asians are more likely to be sentenced for economic offenses, are more likely to be sentenced for lower-level offenses, have less extensive criminal histories, and are more likely to be sentenced in the west region.

The analysis of Table II shows that blacks, Hispanics, and Native Americans have offense-related characteristics which may explain why they are more likely than whites to receive harsh sentences. Likewise, Asians have offense-related characteristics which may explain why they are less likely to receive harsh sentences. The next part of the analysis uses multivariate regression analysis to examine the degree to which offense-related characteristics explain differences between race/ethnic groups in sentencing severity.

# 6.2. Ordered Logistic Regressions

Table III shows the results from three regression models. We use ordered logistic regression since the dependent variable is ordinal. 10 Ordered

<sup>10</sup>Ordered logistic regression constrains the coefficients for an independent variable to be the same across all possible contrasts of the dependent variable. In this paper the contrasts are second quartile vs first quartile, third vs second, and fourth vs third. The degree to which this constraint preserves model fit can be measured by the chi-square statistic. A significantly small chi-square statistic means that the constraint did not result in loss of model fit. A significantly large chi-square statistic indicates that the constraint did lead to loss of model fit. Model 1 in Table III fits the data at the 0.01 level. Models 2 and 3 do not fit. Given this lack of model fit, there is a question about whether the race/ethnic coefficients (which are the focus of the paper) in the ordered logistic models accurately represent the race/ethnic coefficients in the separate models. In an appendix available by request, we examine whether the coefficients in

logistic regression produces coefficients that measure the difference in the log-odds of being in a higher category rather than a lower. Model 1 includes only the variables for race/ethnicity while Model 2 adds variables for gender, age, education, and alien status. Model 3 includes the offense-related variables.

Model 1 shows that blacks, Hispanics, and Native Americans are more likely than whites to receive harsh sentences while Asians are less likely. Model 2 holds constant gender, age, education, and alien status. The coefficient for blacks changes little. The coefficients for Hispanics and Native Americans decrease but do not lose statistical significance. Asians no longer have lower log-odds of receiving harsh sentences than whites once other extra-legal factors are held constant.

Examination of Model 3 shows that those sentenced for economic offenses are the less likely to receive harsh sentences compared to those convicted of other offenses. Convictions for higher-level offenses are more likely to receive harsh sentences than those for lower-level offenses. Defendants with more extensive criminal histories are more likely to receive harsh sentences than those with less extensive criminal histories. Those pleading guilty and those accepting responsibility are less likely to receive harsh sentences than those not. Those convicted in the south or central regions are more likely to receive harsh sentences than those in the northeast while those in the west are less likely.

Comparing Models 2 and 3 shows that the coefficients for blacks, Hispanics, and Native Americans decrease when the offense-related variables are controlled. However, blacks, Hispanics, and American Indians are still significantly more likely to receive harsh sentences even when offense-related characteristics are controlled. Thus, a significant part of the disparity in sentencing between race/ethnic groups is not explained by differences in offense-related characteristics.

Differences on the other extra-legal factors are also not fully explained by offense-related characteristics. While all of the differences decreased, all but one remained significant after controlling for offense-related characteristics. Females were less likely to receive harsh sentences than males. Middleaged persons received harsher sentences than those younger or older. Those less educated received harsher sentences than those more educated. Only the difference between aliens and non-aliens was explained by offense-related characteristics.

the ordered logistic model are accurate representations. Our conclusion is that the ordered logistic coefficients accurately capture the signs of the coefficients in the separate models. For the purpose of our analysis, the ordered logistic regression provides a simpler but realistic summary of the results from many logistic regression models.

**Table III.** Ordered Logistic Regression Coefficients for Effects of Race/Ethnicity and Offense-Related variables Variables on Sentencing Range Quartile

	Model 1 Model 2		Model 3			
Variable	Coeff.	SE	Coeff.	SE	Coeff.	SE
White Black Hispanic Native American	contrast 0.4072* 0.3310* 0.3555*	0.0200 0.0215 0.0647	contrast 0.4041* 0.2334* 0.2786*	0.0211 0.0291 0.0658	contrast 0.1958* 0.1424* 0.2047*	0.0223 0.0306 0.0698
Asian Male	-0.2039* 	0.0706	-0.0812 contrast	0.0728	0.0727 contrast	0.0743
Female < 30 30–39	_		-1.0275* -0.1126* -0.0224	0.0281 0.0247 0.0246	-0.7334* -0.0896* -0.0658	0.0293 0.0254 0.0252
40–49 50–59 60 +	_ _ _ _		-0.0224 contrast -0.1973* -0.5971*	0.0240 0.0379 0.0618	-0.0038 contrast -0.0993 -0.4394*	0.0232 0.0387 0.0629
< High school GED High school Some college College graduate	_ _ _ _		0.2666* 0.4209* contrast -0.0655 -0.3191*	0.0230 0.0323 0.0279 0.0441	0.1022* 0.1429* contrast -0.0366 -0.1551*	0.0237 0.0339 0.0285 0.0450
Graduate degree Not alien Alien	_ _ _		-0.1184 contrast -0.0852*	0.0711	-0.0314 contrast 0.0169	0.0722
Economic Drug Violent Firearms Immigration	_ _ _ _				contrast 0.3280* 0.7305* 0.4758* 0.4161*	0.0286 0.0410 0.0354 0.0445
Offense level	_		_		0.0050*	0.0013
Criminal history Trial Guilty plea			_ _ _		0.1743* contrast -0.3080*	0.0060 0.0320
Not accept resp. Accept resp.			_		contrast -0.3771*	0.0287
Northeast Atlantic South Central West	_ _ _ _		_ _ _ _		contrast 0.0062 0.2982* 0.1068* -0.2180*	0.0343 0.0276 0.0297 0.0302

<sup>\*</sup>Coefficient significantly different from zero at 0.01 level.

Note: Models also include dummy variables for missing data.

# 6.3. Contributions of Offense Related Variables

The analysis in Table III showed that offense-related variables explained part of the race/ethnic differences. However, when all the offense-related variables are added at once, it is not possible to determine which variables were most important in explaining the race/ethnic differences. The next part of the analysis considers the unique contribution of each offense-related variable.

The top panel in Table IV shows the coefficients for race/ethnicity from Model 2 in Table III. This model will serve as the baseline model against which other models will be compared. Table IV also shows coefficients from six other models in which each offense-related variable was added one at a time. In addition, Table IV shows the coefficients from Model 3 in Table III which included all the offense-related variables at once. Notice that in most instances the coefficients either increased or decreased when an offense-related variable was added to the model. The bottom panel shows

**Table IV.** Contributions of Offense-Related Variables to Race/Ethnicity Effects on Sentencing Range Quartile

Coefficients for Race/Ethnicity When Offense-Related Variable is
Added to Model

	Black	Hispanic	Native American	Asian
Baseline	0.4041	0.2334	0.2786	-0.0812
Offense type	0.3582	0.1592	-0.0247	-0.0447
Offense level	0.3309	0.1577	0.2474	-0.0632
Criminal history	0.3327	0.2399	0.3381	-0.0208
Guilty plea	0.3582	0.2202	0.2612	-0.1128
Acceptance of resp.	0.3503	0.2179	0.2741	-0.1079
Region	0.3731	0.2107	0.3914	0.0005
All	0.1958	0.1424	0.2047	0.0727

Change in Coefficients for Race/Ethnicity When Offense-Related Variable is Added to Model

	Black	Hispanic	Native American	Asian
Offense type	0.0459*	0.0742*	0.3033*	-0.0365*
Offense level	0.0732*	0.0757*	0.0312*	-0.0180*
Criminal history	0.0714*	-0.0065*	-0.0595*	-0.0604*
Guilty plea	0.0459*	0.0132*	0.0174*	0.0316*
Acceptance of resp.	0.0538*	0.0155*	0.0045*	0.0267*
Region	0.0310*	0.0227*	-0.1128*	-0.0817*
All	0.2083*	0.0910*	0.0739*	-0.1539*

<sup>\*</sup>Coefficient significantly different from zero at 0.01 level.

how the addition of an offense-related variable affected the coefficients measuring the difference between race/ethnic groups. In particular, the bottom panel shows the differences between coefficients from a model in which an offense-related variable was included and coefficients from the baseline model in which the offense-related variable was not included.

A positive difference means that an offense-related variable acted to increase the log-odds of receiving a harsh sentence for a particular race/ethnic group relative to the whites. A negative difference means that an offense-related variable acted to decrease the log-odds of receiving a harsh sentence. Thus, a positive difference means the variable contributes to harsher sentences while a minus sign means the variable contributes to milder sentences.

For example, the coefficient for the difference between blacks and whites in the log-odds of receiving a harsh sentence decreases from 0.4041 to 0.3327 when criminal history is added to the baseline model. Subtracting 0.4041 from 0.3327 results in a difference of 0.0714. This positive difference means that the more extensive criminal histories of blacks compared to whites leads to blacks being more likely to receive harsh sentences than whites. In other words, if blacks had the same distribution on criminal history as whites, the difference between the two groups in the log-odds of receiving harsh sentences would be less.

We test the significance of the difference between coefficients using a technique developed by Clogg, Petkova, and Haritow (1995). Because of the large sample size in our analysis, all of the changes in coefficients are statistically different than zero. We focus on the larger changes.

When all offense-related variables are controlled, the log-odds coefficient for blacks decreased from 0.4041 to 0.1958. Blacks have higher log-odds of receiving harsh sentences because they are more likely than whites to commit drug offenses, to be convicted of higher-level offenses, and to have more extensive criminal histories. Blacks also are less likely to plead guilty, less likely to accept responsibility, and more likely to be sentenced in the south region where sentences are harsher.

The log-odds coefficient for Hispanics decreased from 0.2334 to 0.1424 when the offense-related variables are added. Hispanics are more likely to be sentenced for drug offenses, are more likely than whites to commit more higher-level offenses, are less likely to plead guilty, are less likely to accept responsibility, and are more likely to be sentenced in the south region where sentences are harsher. These differences are counteracted somewhat by the fact that criminal history acts to lower the sentences of Hispanics relative to whites.

The log-odds coefficient for Native Americans decreased from 0.2786 to 0.2047 when the offense-related variables were controlled. There were

counteracting positive and negative factors underlying differences between Native Americans and whites in sentencing. Native Americans were more likely to be convicted of violent offenses then whites, which raised their log-odds of receiving harsh sentences. Native Americans were also more likely to be convicted of higher-level offenses, less likely to plead guilty, and less likely to accept responsibility. The influences of these variables were counteracted by the fact that Native Americans have less extensive criminal histories and are more likely to be sentenced in the west region where harsh sentences are less likely.

The Asian log-odds coefficient changes from -0.0812 to 0.0727. Although neither of these coefficients is statistically different from zero, the change is statistically significant. The fact that the Asian coefficient increases when offense-related variables are controlled means that the log-odds of Asians receiving harsh sentences relative to whites would be higher if Asians had the same offense-related characteristics as whites. This increase occurs because Asians are more likely than whites to be sentenced for economic offenses, commit lower-level offenses, have less extensive criminal histories, and be sentenced in the west region, all of which decrease their log-odds relative to whites. However, counteracting these influences is the fact that Asians are less likely than whites to plead guilty or to accept responsibility.

This analysis of contributions shows that for blacks all of the offense-related variables acted to increase their log-odds of receiving harsh sentences compared to whites. For Hispanics and Native Americans, the contributions are mixed. For Hispanics, criminal history actually acted to make them less likely to receive harsh sentences while for Native Americans criminal history and region lowered the log-odds of harsh sentences. While most variables contributed to milder sentences for Asians, guilty plea and acceptance of responsibility contributed to harsher sentences.

# 6.4. Interactions Between Race/Ethnicity and Offense Type

The additive models presented above assume that the effects for race/ethnicity are the same for each type of offense. However, it may be the case that there are race/ethnic effects for certain types of offenses and not for others and that the overall effect is due to there being race/ethnic effects in one or two offense types. We investigated this possibility in analysis not shown by estimating coefficients for interactions between race/ethnicity and offense type. We found that none of the interactions were significant for blacks. Thus, the effect for blacks is the same across offense types. We found significant interactions for Hispanics. For economic, drug, and violent crimes, Hispanics were more likely than whites to receive harsh sentences. However, Hispanics were equally likely as whites to receive harsh

sentences for firearm and immigration offenses. There were significant interactions for Native Americans and Asians. The only offense type for which Native Americans were more likely to receive harsher sentences was violent and the only offense type for which Asians were more likely to receive harsher sentences than whites was immigration. Our conclusion from the interaction analysis is that disparities found for blacks and Hispanics were not due to disparities in sentencing for any single offense.

# 7. DISCUSSION

There are two sources of disparity. First, that which is due to the influence of extra-legal factors and, second, that created by defining offenses committed by specific groups or categories of offenders as more serious and deserving of harsher punishment (Alschuler, 1991; Feeley and Simon, 1992). Federal sentencing guidelines were designed to reduce, if not eliminate, the first type of disparity. However, our analysis reveals the continued existence of disparity due to race/ethnic bias and other extra-legal factors.

Our analysis also addressed whether the sentencing guidelines perpetuated structural disparity by institutionalizing discrimination present in past sentencing and parole practices (Myers, 1993). Our research clearly documents significant differences between race/ethnic groups in offense-related characteristics. For example, our analysis shows that whites are more often sentenced for less harshly sanctioned economic offenses while blacks are more often sentenced for more harshly sanctioned drug offenses and this difference in offense type accounts for part of the overall race difference in sentencing severity. Does this represent a legitimate difference, merely reflecting the propensity of blacks to commit offenses considered more serious by society, or a new form of structural unwarranted disparity? The interpretation of this difference is a matter of significant debate (Myers, 1993; Tony, 1996).

A central finding of the present investigation is that race/ethnic differences are not explained wholly by offense-related characteristics. Although not the focus of our investigation we also find significant differences between groups on other extra-legal factors such as gender, age, and education that are not explained by offense-related characteristics. The presence of these differences suggests the complexity of the sentencing context even within the controlled environment of sentencing guidelines.

Race/ethnic bias was common in indeterminate sentencing and our investigation shows that bias still occurs in the federal determinant sentencing system. Our analysis demonstrates that if blacks were identical to whites on all the legally relevant sentencing factors, that were controlled in the regression models, a substantial and significant difference in the severity of

sentence would remain. Although the federal guidelines were designed to eliminate this disparity, differences remain and demand explanation.

In particular, our results show that differences between whites, on the one hand, and blacks, Hispanics, and Native Americans decreased when offense-related factors were controlled. However, significant differences remained even with controls. Considering differences in odds without controls for offense-related characteristics, blacks were 50 percent more likely than whites, Hispanics were 39 percent more likely than whites, and Native Americans were 43 percent more likely to receive higher sentences. When offense-related variables were controlled, blacks were still 22 percent more likely than whites to receive a longer sentence while Hispanics were 15 percent more likely and Native Americans were 23 percent more likely.<sup>11</sup>

It is acknowledged that early decisions in the criminal justice system influence subsequent decisions, generally with fewer cases proceeding to the next stage in the process. The results of our analysis, focused exclusively on sentence severity, are potentially biased by this selection process (Berk, 1983; Stolzenberg and Relles, 1997). Unmeasured factors may also contribute to the observed differences. The subtle influences of legal representation, plea-bargaining, probation officer recommendation, defendant cooperation, judicial discretion are difficult to capture. The formal and constrained structure of the federal sentencing guidelines make some aspects of the sentencing process available for investigation but parts of the process are not measured.

The present findings that blacks are less likely to plead guilty and also less likely to receive the sentence reduction for acceptance of responsibility provides evidence for the contention that distrust and suspicion on the part of blacks renders them unwilling and unable to cooperate and "work" the criminal justice system to their best advantage (Hagan and Peterson, 1996). As a result blacks are perceived as less cooperative and more trouble and treated with greater harshness both formally and informally by the system (Bridges and Steen, 1998). Blacks and other minorities are less likely to take advantage of the structured opportunities for sentence reduction. These factors may indirectly influence later decisions in the sentencing process including placement within the established sentence range.

The results of our investigation are interpretable within the context of recent debates regarding criminal justice policy. In particular, they are consistent with the argument about the "malign neglect" of recent sentencing policies which target for extremely harsh punishment the crimes more often committed by blacks (Tony, 1995). In addition, our results show that

 $<sup>^{11}</sup>$ We calculated the odds multipliers by taking the antilog of the log-odds coefficient. For example,  $e^{0.4072} = 1.50$ .

federal sentencing reform did not eliminate race/ethnic differences beyond those due to "legitimate" offense-related characteristics. In spite of reformed federal sentencing policy, the issue of race disparities remains and requires further research.

# 8. CONCLUSION

Our results are consistent with the predictions of attribution, uncertainty avoidance, and conflict theory. We find distinct differences between race/ethnic groups on offense characteristics as defined by the guidelines and these characteristics are strongly related to sentence severity. Of particular importance is that blacks and Hispanics as well as Native Americans are convicted more often than whites of offenses which receive harsher sentences. Conflict theory explains that crime closely associated with minorities will be sanctioned more harshly by the criminal justice system and the observed pattern appears consistent with this assumption. The harsher punishment of certain types of offenses, particularly drug offenses, reflects the structure of the federal sentencing guidelines.

Although some of the difference between race/ethnic groups is attributable to offense-related characteristics these factors do not account for all of the difference in sentence severity. In particular, results from the ordered logistic regression models demonstrate that a significant part of the difference between minorities and whites remains unexplained by offense-related characteristics. Both attribution and conflict theory argue that all things being equal minorities tend to receive harsher punishments compared to white offenders and our results support these ideas.

Offense level and criminal history should be the primary factors in determining sentences under the federal guidelines. We find that these factors explain a large part but not all of the race/ethnic differences in sentencing. Our analysis shows that offenders are sanctioned partially for what they have done (offense characteristics, criminal history), for who they are (race/ethnicity, age, gender) and also for what they may fail to do during the punishment process (plead guilty or express remorse). Uncertainty avoidance and attribution theories argue that guilty pleas and acceptance of responsibility by the offender will be rewarded. Our bivariate analysis shows that blacks and Hispanics are less likely to plead guilty or accept responsibility and this contributes to their longer sentences. Our findings are consistent with previous research on sentence outcomes for drug offenses under the federal guidelines (Albonetti, 1997).

Although recent investigations have increased our knowledge of punishment under the federal guidelines, our understanding of the sentencing process remains asymmetrical. On the one hand we are gaining insight into the thinking and decision-making of court actors when meting out punishment (Albonetti, 1997; Bridges and Steen, 1998). On the other hand, our understanding of why race/ethnic minorities are less likely to plead guilty or accept responsibility remains underdeveloped (Hagan and Peterson, 1995). Future research should place greater emphasis on the influence of the offender within the court context. Finally, we concur with others that future research on sentencing will benefit from more field research and ethnographic explorations to elaborate the findings of our various statistical models (Bridges and Steen, 1998; Kramer and Ulmer, 1996).

# REFERENCES

- Albonetti, C. (1991). An integration of theories to explain judicial discretion. *Social Forces* 38: 247–266.
- Albonetti, C. (1997). Sentencing under the Federal sentencing guidelines: Effects of defendant characteristics, guilty pleas, and departures on sentencing outcomes for drug offenders, 1991–1992. *Law and Society Review* 31: 789–822.
- Alschuler, A. (1991). The failure of sentencing guidelines: A plea for less aggregation. *The University of Chicago Law Review* 58: 901–951.
- Becker, E. R. (1991). Flexibility and discretion available to the sentencing judge under the guideline regime. *Federal Probation* LV: 10–15.
- Berk, R. (1983). An introduction to sample selection bias in sociological data. American Sociological Review 48: 386–98.
- Bridges, G. S., and Conley, D. (1995). *Racial Disproportionality in County Juvenile Ffacilities*. Department of Social and Health Services, State of Washington, Olympia, WA.
- Bridges, G. S., and Crutchfield, R. D. (1988). Law, social standing, and racial disparities in imprisonment. *Social Forces* 66: 699–724.
- Bridges, G. S., Crutchfield, R. D., and Simpson, E. (1987). Crime, social structure, and criminal punishment: White and nonwhite rates of imprisonment. *Social Problems* 34: 345–361.
- Bridges, G. S., and Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attribution stereotypes as mediating mechanisms. *American Sociological Review* 63: 554–570.
- Cavender, G. (1984). Justice, sanctioning, and the justice model. Criminology 22: 203–213.
- Cicourel, A. (1968). The Social Organization of Juvenile Justice. John Wiley, New York.
- Clogg, C. C., Petkova, E., and Haritow, A. (1995). Statistical methods for comparing regression coefficients between models. *American Journal of Sociology* 100: 1261–1293.
- Dixon, J. (1995). The organizational context of criminal sentencing. American Journal of Sociology 100: 1157–1198.
- Drass, K. A., and Spencer, J. W. (1987). Accounting for pre-sentencing recommendations: Typologies and probation officers' theory of office. *Social Problems* 34: 277–293.
- Everett, R. S., and Nienstedt, B. C. (1999). Race, remorse and sentence reduction: Is saying you're sorry enough. *Justice Quarterly* 16: 99–122.
- Feeley, M. M., and Simon, J. (1992). The new penology: Notes on the emerging strategy of corrections and its implications. *Criminology* 30: 449–474.
- Hagan, J., and Peterson, R. (1995). Crime and Inequality. Stanford University Press, Stanford, CA.
- Hagan, J. (1974). Extra legal attributes and criminal sentencing: An assessment of a sociological viewpoint. Law and Society Review 8: 357–383.

- Heaney, G. W. (1991). The reality of guidelines sentencing: No end to disparity. *American Criminal Law Review* 28: 161–232.
- Kramer, J. H., Lubitz, R. L., and Kempinen, C. A. (1989). Sentencing guidelines: A quantitative comparison of sentencing policies in Minnesota, Pennsylvania, and Washington. *Justice Quarterly* 6: 565–587.
- Kramer, J. H., and Steffensmeier, D. (1993). Race and imprisonment decisions. Sociological Quarterly 34: 357–376.
- Kramer, J. H., and Ulmer, J. T. (1996). Sentencing disparity and departures from guidelines. *Justice Quarterly* 13: 81–105.
- Mann, C. R. (1993). Unequal Justice: A Question of Color. Indiana University Press, Bloomington, IN.
- Martinson, R. (1974). What works? Questions and answers about prison reform. *Public Interest*.
- Maxfield, L. D., and Kramer, J. H. (1998). Substantial Assistance: An Empirical Yardstick Gauging Equity in Current Federal Policy and Practice. United States Sentencing Commission, Washington, DC.
- Miethe, T., and Moore, C. (1985). Socioeconomic disparities under determinate sentencing systems: A comparison of preguidline and postguideline practices in Minnesota. *Crimi*nology 23: 337–363.
- Miethe, T., and Moore, C. (1988). Officials reactions to sentencing guidelines. *Journal of Research in Crime and Delinquency* 25: 170–187.
- Moore, C., and Miethe, T. (1986). Regulated and unregulated sentencing decisions: An analysis of first-year practices under Minnesota's felony sentencing guidelines. *Law and Society Review* 20: 253–277.
- Morris, N., and Tonry, M. (1990). *Between Prison and Probation*. Oxford University Press, New York.
- Myers, S. L., Jr. (1993). Racial disparities in sentencing: Can sentencing reforms reduce discrimination in punishment. *Colorado Law Review* 64: 781–808.
- Nagel, I. H. (1990). Structured sentencing discretion: The new Federal sentencing guidelines. *Journal of Criminal Law and Criminology* 80: 883–943.
- Nagel, I. H., and Schulhofer, S. J. (1992). A tale of three cities: An empirical study of charging and bargaining practices under the federal sentencing guidelines. Southern California Law Review 66: 501–566.
- Peterson, R., and Hagan, J. (1984). Changing conceptions of race: Towards an account of anomalous findings in sentencing research. *American Sociological Review* 49: 56–70.
- Quinney, R. (1973). Critique of the Legal Order: Crime Control in a Capitalist Society. Little Brown, Boston.
- Reitz, K. R. (1993). Sentencing reform in the States: An overview of the Colorado Law Review Symposium. Colorado Law Review 64: 645–654.
- Schulhofer, S. J., and Nagel, I. H. (1989). Negotiated pleas under the federal sentencing guidelines: The first fifteen months. *American Criminal Law Review* 27: 231–288.
- Spohn, C. (2000). Thirty years of sentencing reform: The quest for a racially neutral sentencing process. *In Policies, Processes, and Decisions of the Criminal Justice System Criminal Justice 2000*, Volume 3. National Institute of Justice.
- Steury, E. H. (1989). Prosecutorial and judicial discretion. In Champion, D. J. (ed.), *The U.S. Sentencing Guidelines: Implications for Criminal Justice*, Praeger, New York.
- Steffensmeier, D., Kramer, J. H., and Streifel, C. (1993). Gender and imprisonment decisions. *Criminology* 31: 411–416.
- Steffensmeier, D., Kramer, J. H., and Ulmer, J. (1995). Age differences in sentencing. *Criminal Justice Quarterly* 12: 701–719.

- Steffensmeier, D., Ulmer, J., and Kramer, J. (1998). The interaction of race, gender, and age in criminal sentencing: The punishment cost of being young, black, and male. *Criminology* 36: 763–797.
- Stolzenberg, L., and DeAlessio, S. J. (1994). Sentencing and uwarranted disparity: An empirical assessment of the long-term impact of sentencing guidelines in Minnesota. *Criminology* 32: 301–310.
- Stolzenberg, R. M., and Relles, D. A. (1997). Tools for intuition about sample selection bias and its correction. *American Sociological Review* 62: 494–507.
- Tjoflat, G. B. (1991). The untapped potential for judicial discretion under the federal sentencing guidelines: Advice for counsel. *Federal Probation* LV: 4–15.
- Tonry, M. (1995). Malign Neglect Race, Crime, and Punishment in America. Oxford University Press, New York.
- Tonry, M. (1996). Sentencing Matters. Oxford University Press, New York.
- Tonry, M., and Hatlestad, K. (1997). Sentencing Reform in Overcrowded Times: A Comparative Perspective. Oxford University Press, New York.
- Ulmer, J. T., and Kramer, J. H. (1996). Court communities under sentencing guidelines: Dilemmas of formal rationality and sentencing disparity. *Criminology* 34: 383–408.
- United States Senate Committee on the Judiciary. (1983). *Comprehensive Crime Control Act of 1983*, Report No. 98–225. U.S. Government Printing Office, Washington, DC.
- United States Sentencing Commission. (1995). *Cocaine and Federal Sentencing Policy*. U.S. Government Printing Office, Washington, DC.
- United States Sentencing Commission. (1991a). The Federal Sentencing Guidelines: A Report on the Operation of the Guidelines System and Short-Term Impacts on Disparity in Sentencing, Use of Incarceration, and Prosecutorial Discretion and Plea Bargaining. U.S. Government Printing Office, Washington, DC.
- United States Sentencing Commission. (1991b). Guidelines Manual. U.S. Government Printing Office, Washington, DC.
- United States Sentencing Commission. (1987). Supplementary Report on the Initial Sentencing Guidelines and Policy Statements. U.S. Government Printing Office, Washington, D.C.
- Walker, S., Spohn, C., and Delone, M. (1996). *The Color of Justice: Race, Ethnicity, and Crime in America*. Wadsworth. Belmont. CA.
- Wilkins, W. W. (1992). Response to Judge Heaney. *American Criminal Law Review* 29: 795–821.
- Wooldredge, J. D. (1998). Analytical rigor in studies of disparities in criminal case processing. *Journal of Quantitative Criminology* 14: 155–179.