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ASSESSING THE DIFFERENTIAL EFFECTS OF RACE AND ETHNICITY ON SENTENCE  
OUTCOMES UNDER DIFFERENT SENTENCING SYSTEMS\*

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# ASSESSING THE DIFFERENTIAL EFFECTS OF RACE AND ETHNICITY ON SENTENCE OUTCOMES UNDER DIFFERENT SENTENCING SYSTEMS

## **ABSTRACT**

Although many states have adopted sentencing guidelines, questions remain about whether guidelines achieve one of their primary goals—reducing disparities that arise from such extra-legal factors as race and ethnicity. To date, research has not taken a cross-state approach to testing for racial or ethnic disparity in sentences imposed in guideline and non-guideline states or to examining whether less disparity exists in states with voluntary or presumptive guidelines. To address this research gap and inform sentencing scholarship, we use data from the State Court Processing Statistics program to determine whether offenders' race or ethnicity affects incarceration and sentence length decisions in jurisdictions with different types of sentencing systems. We then discuss implications of the findings for theory, research, and policy.

## INTRODUCTION

In the past three decades, sentencing guidelines have emerged as one of the most prominent policy innovations in criminal justice. Guidelines have been justified largely on the notion that they can reduce judicial discretion in sentencing, and, in particular, that they can reduce unwarranted disparities regarding such legally irrelevant factors as race, ethnicity, and sex (Brennan and Spohn, 2008; Frase, 2005; Hartley, Maddan, and Spohn, 2007; Hofer, 2007; Mears, 1998; Moore and Miethe, 1986; Spohn, 2000; Wilkins and Steer, 1993). Despite the fact that many states have implemented sentencing guidelines, only a small body of independent research has assessed their effectiveness in reducing sentencing disparities (e.g., Blackwell, Holleran, and Finn, 2008; Griffin and Wooldredge, 2006; Koons-Witt, 2002; Moore and Miethe, 1986; Stolzenberg and D'Alessio, 1994). This work has focused almost exclusively on how the effects of race, ethnicity, and sex vary before and after adoption of guidelines within a particular state. Notably, only a small number of states (Minnesota, Ohio, and Pennsylvania) have been included in this type of pre- and post-intervention analysis. Regardless, the studies suggest that sentencing guidelines appear to be effective in reducing disparities involving defendants' extra-legal characteristics. That assessment, in turn, has provided some support to legislatures that have enacted, or are considering enacting, guidelines (Frase, 2005: 1192).

Although research conducted to date has advanced scholarship on sentencing guidelines, two critical sets of questions remain. First, does less unwarranted sentencing disparity exist in states that have implemented guidelines as compared with states that have not, and does less disparity exist in states with presumptive rather than voluntary sentencing guidelines? The comparison between presumptive guidelines and voluntary guidelines stems from the enforceability between the two systems—that is, whereas presumptive guidelines have the legally binding power, the compliance with voluntary guidelines is “voluntary” (Tonry, 1988, 1996). A focus on different sentencing systems is important because, as Hunt (2007: 487) has argued, assessment of the “sentencing guideline experiment” has been, to date, “incomplete and flawed.” Echoing a similar

theme, Bushway and Piehl (2007: 463) recently emphasized that there have been no published attempts to examine “how the cross-jurisdictional differences in sentencing procedure affect the extent of disparity.” The exclusive focus on within-jurisdiction analyses is especially problematic. As Koons-Witt (2002: 321) has cautioned, the findings in a particular state are not necessarily generalizable to other states. Research thus is needed that systematically investigates cross-state differences in sentencing that may arise from guidelines (Hunt, 2007: 489), and whether, by extension, variation exists in the effects of presumptive versus voluntary guidelines (Bushway and Piehl, 2007: 463).

Second, do race and ethnicity exert differential effects on whether convicted felons receive prison or jail sentences and, among those incarcerated, on the length of sentence received, and do these effects vary depending on the type of sentencing system? Existing research on the effectiveness of guidelines has combined jail and non-custodial sanctions and then examined whether defendants are sentenced to prison versus either jail or a non-custodial sanction (e.g., Griffin and Wooldredge, 2006; Koons-Witt, 2002; Moore and Miethe, 1986; see, however, Blackwell et al., 2008). The inattention to jail sanctions as a distinct outcome stems in part from the fact that most guidelines only regulate judicial decisions about the imposition and duration of prison sentences (Frase, 2005: 1200). Even so, the oversight bears remedying because jail sentences differ from non-custodial sanctions and because the presence of guidelines may provide the equivalent of a “trickle-down” effect—that is, they not only may reduce disparity in prison sentences but also contribute to a sentencing context or culture that reduces disparities in jail sentences. A large body of sentencing research has established that unwarranted disparities exist in jail sentences (e.g., Blackwell et al., 2008; Harrington and Spohn, 2007; Holleran and Spohn, 2004; Moore and Miethe, 1986). However, given that “no existing guidelines system regulates intermediate sanctions [such as jail] to the same degree that it regulates prison terms” (Frase, 2005: 1200), guidelines may exert no effect on unwarranted jail sentence disparities or exert a lesser effect as compared to prison sentences.

The goal of this paper is to advance scholarship on sentencing by determining whether

unwarranted sentencing disparities in incarceration and sentence length decisions vary by type of sentencing system. Specifically, this study uses data from the State Court Processing Statistics program to investigate whether the race or ethnicity of offenders exert differential effects on judges' sentencing decisions in non-guideline states, states with presumptive guidelines, and states with voluntary guidelines. In so doing, we heed calls by researchers to conduct cross-state studies to investigate the effects of guidelines systems, especially presumptive versus voluntary guidelines (Bushway and Piehl, 2007; Hunt, 2007), to model prison and jail sentences separately (Harrington and Spohn, 2007; Holleran and Spohn, 2004), and to investigate guideline effects on jail sentencing disparity (Piehl and Bushway, 2007; Tonry, 1988).

We begin first by discussing sentencing guidelines systems and prior sentencing research on the effects of guidelines. Next, we develop a series of hypotheses about the differential effects of the defendant's race and ethnicity on sentence outcomes in jurisdictions with different sentencing systems. We then describe the data and methods and present the findings. Finally, we conclude by discussing the study's implications for theory, research, and policy.

## **BACKGROUND**

### Sentencing Guidelines and Presumptive versus Voluntary Guidelines

At least eighteen states and the District of Columbia have adopted sentencing guidelines (Frase, 2005). Some differences exist across these different systems, especially the specifics concerning recommended or mandated sanctions for particular offenses, but many commonalities exist as well (Piquero, 2007). The most prominent similarity involves a focus on increasing uniformity and reducing disparity (Hofer, 2007). As Frase (2005: 1202) has emphasized, the adoption and enactment of guidelines systems has been motivated in large part by "a desire to make sentencing more uniform and to eliminate disparities."

Despite the popularity of guidelines systems, relatively few assessments of their impact on sentencing disparity exist. Extant research has almost exclusively focused on within-jurisdiction

analysis by comparing sentencing disparities before and after the implementation of state sentencing guidelines. Reviews undertaken by sentencing commissions in virtually all states that adopted sentencing guidelines have concluded that the guidelines increased consistency and reduced racial and gender disparities (Piehl and Bushway, 2007; Tonry, 1996). Independent reviews also have established that sentencing guidelines reduce disparity to some degree (Blackwell et al., 2008; Griffin and Wooldredge, 2006; Koons-Witt, 2002; Miethe and Moore, 1986; Moore and Miethe, 1986; Stolzenberg and D'Alessio, 1994). For example, Moore and Miethe (1986) evaluated the degree of sentencing uniformity and neutrality achieved under regulated and unregulated sentencing decisions in Minnesota; they found that regulated sentencing practices were significantly more predictable and neutral than unregulated practices.

Juxtaposed against this body of research stands a paucity of studies that systematically and directly compare sentencing practices in the two most prominent types of guidelines systems—presumptive and voluntary (Frase, 2005). In voluntary guidelines systems, the guidelines are “voluntary” because judges are not required to comply with them (Tonry, 1988: 276). More specifically, “nothing happens if a judge ignores the guidelines altogether or imposes a sentence not specified in the applicable guidelines. The guidelines lack statutory force or mandate and generally are not adopted as court rules” (Tonry, 1988: 276). For this reason, we might anticipate that sentencing disparities would persist under voluntary guidelines. However, as Moore and Miethe (1986: 274) have emphasized, a voluntary guideline system may be less likely to “incur resistance from judges and other criminal justice officials and thus, in its own way, actually facilitate the process of sentencing reform.”

Even so, an argument can be made that sentencing disparities should be smaller in presumptive guidelines systems than in voluntary guidelines (Tonry, 1988, 1996; Frase, 2005; Reitz, 2005a, 2005b). For example, as compared with voluntary guidelines, presumptive sentencing guidelines give more weight to the objective of eliminating unwarranted disparity (Frase, 2005: 1202). As importantly, presumptive guidelines “carry the weight of law” (Moore and Miethe, 1986: 257). Although departures from recommended sentences are allowed, they are



regulated by legal standards and must be justified. To illustrate, the specific legal standards in Minnesota include a list of offense attributes that judges may legitimately use in departure decisions, as well as a list of case and offender attributes (e.g., race and ethnicity) that judges may not use in justifying a departure. In addition, all other departures must be justified by the general standard of “substantial and compelling” reasons, and any sentencing outcome based on a proscribed contemplation must be appealed (see Moore and Miethe, 1986). Judges—especially those likely to impose sentences that differ sharply from court norms—are more likely to comply with guidelines when faced with the threat of appellate review (Hunt, 2007: 488).

These differences aside, it is far from a certainty that racial and ethnic disparities will be smaller in jurisdictions that use presumptive rather than voluntary guidelines. Perhaps the most prominent reason stems from the fact that under presumptive guidelines systems, judges still retain at least some discretion in assigning the type and the severity of sanctions (Frase, 2005; Reitz, 2005a). In addition, poor implementation of presumptive guidelines may hinder any potentially greater effect that one might expect on theoretical or logical grounds. As Tonry (1988: 269) has emphasized, “presumptive sentencing guidelines systems can by and large achieve their goals [but that] does not mean that they will: More sentencing commissions have failed in their efforts to develop and implement presumptive guidelines than have succeeded.”

The few existing studies suggest that presumptive guidelines reduce sentencing disparities (Engen and Gainey, 2000; Moore and Miethe, 1986) and that voluntary guidelines systems do not (Tonry, 1988; Ulmer, 2000; Bushway and Piehl, 2001). Unfortunately, these studies suffer from methodological limitations, most notably the failure to incorporate comparisons with other states. Indeed, to date, no study has directly and systematically compared sentencing disparities in presumptive sentencing guidelines systems to those in jurisdictions operating under voluntary guidelines systems. That situation has prompted scholars to advocate for cross-jurisdiction research to systematically examine how these two types of guidelines systems affect the extent of unwarranted disparity (Bushway and Piehl, 2007; Hunt, 2007).

## Racial and Ethnic Sentencing Disparity and the Focal Concerns Perspective

A primary goal of those who have championed sentencing guidelines is the elimination—or at least the reduction—of unwarranted sentencing disparities. Racial and ethnic disparities have constituted an especially critical area of concern at the federal and state levels. Thus, evidence that guidelines reduce such disparities has been a cause for optimism among policymakers. Two concerns exist, however. First, as emphasized above, there have been relatively few studies of sentencing guidelines that compare different states and types of guidelines systems. Second, a considerable body of research underscores the continuing salience of race and ethnicity in the criminal justice system and, by extension, the possibility that guidelines systems cannot effectively eliminate the myriad ways in which race and ethnicity may influence sentencing decisions (Mitchell, 2005; Spohn, 2000). As Griffin and Wooldredge (2006: 895) have argued, “the effects of sentencing reforms on reducing extralegal disparities in court disposition could be limited when judges are motivated to maneuver around restrictions placed on their discretion.”

The focal concerns perspective, articulated by Steffensmeier (1980; see also, Steffensmeier, Ulmer and Kramer, 1998), provides a theoretical rationale for the contention that race and ethnicity may have enduring effects on sentencing decisions, even in the face of guidelines systems, whether presumptive or voluntary. According to this perspective, judges’ sentencing decisions reflect their assessments of the blameworthiness or culpability of offenders, their desire to protect the community by incapacitating dangerous offenders or deterring potential offenders, and their concerns about the practical consequences, or social costs, of sentencing decisions. Because judges rarely operate with enough information to accurately determine a defendant’s dangerousness or threat, they develop a “perceptual shorthand” (Hawkins, 1981: 230; see also, Bridges and Steen, 1998) based on stereotypes and attributions that are themselves linked to offender characteristics such as race, sex, and age. Thus, “race, age, and gender will interact to influence sentencing because of images or attributions relating these statuses to membership in social groups thought to be dangerous and crime prone” (Steffensmeier et al. 1998: 768).

Research consistently documents that blacks and Hispanics tend to be objects of crime-related fear and are perceived as particularly threatening in the contemporary United States (Britt, 2000; Chiricos, Welch, and Gertz, 2004; Spohn, 2000; Spohn and Holleran, 2000; Steffensmeier et al., 1998). As such, they constitute offenders who readily comport with the focal concerns that courts are held to use when deciding cases. That is, racial and ethnic minorities may appear to courtroom actors to be more blameworthy and to pose a greater threat to community safety. This perception, when coupled with a compelling need to process large volumes of cases rapidly, may generate racial and ethnic sentencing disparities that persist even in the face of guidelines.

### Prison versus Jail Sentences

Most prior research that evaluates sentencing guidelines has combined jail and non-custodial sanctions; little attention has been paid to jail sentencing disparity. For several reasons, this issue is especially relevant to assessing the differential effects of race and ethnicity in jurisdictions with different sentencing procedures. First, guidelines typically govern prison sentences, not jail sentences. Second, the focal concerns perspective suggests that race and ethnicity considerations strongly influence courtroom actors, and thus, logically, that efforts to inhibit such considerations in prison sentences might result in displacement of them to other decisions, such as jail sentencing. Third, studies that fail to separate jail sentences from non-custodial sanctions are unable to detect when disparities exist for jail but not prison sentences (Piehl and Bushway, 2007: 110; also see Holleran and Spohn, 2004). Combining the two types of outcomes is especially problematic given evidence that racial/ethnic disparities are concentrated in sentencing decisions for less serious offenses (Blumstein et al., 1983; Spohn and Cederblom, 1991), which have a greater likelihood of receiving jail rather than prison sentences.

What grounds exist for anticipating that racial/ethnic disparities in jail sentences will be smaller in jurisdictions with guidelines—especially presumptive guidelines—than in jurisdictions without guidelines? The basic argument centers around the notion that guidelines

should foster a general culture within the courtroom community that prioritizes and values uniformity and consistency in sentencing. From this perspective, guidelines that govern only prison sentences may create an environment in which courtroom actors seek to apply a similar decision calculus to jail sentences. Prior research, however, suggests that the opposite may occur—that is, there may be more disparity in judges’ decisions regarding jail than in judges’ decisions regarding prison. For example, D’Alessio and Stolzenberg (1995) reported that judges increased their use of jail sentences after imposition of Minnesota’s sentencing guidelines, especially when prisons became crowded, and Moore and Miethe’s (1986) post-guideline analysis of sentencing within the first year of Minnesota’s reform revealed greater disparities in “unregulated decisions” (e.g., jail sentences) not governed by the guidelines. Moore and Miethe suggested that judges might have used jail as a condition of probation to avoid presumptive sentences when they believed incarceration was justified but not applicable under the guidelines. In a related line of investigation, Frase (2005) has argued that judicial discretion likely is greater for jail sentences precisely because guidelines do not regulate them.

### Hypotheses

This review of the prior literature gives rise to three main hypotheses. First, *there will be no racial or ethnic disparity in the likelihood of a prison sentence and the length of a prison sentence in presumptive guideline states; by contrast, there will be some racial and ethnic disparity in voluntary guideline states and non-guideline states, and the disparity will be more pronounced in non-guideline states than in voluntary guideline states.* This hypothesis stems from three observations. First, one of the explicit goals of state sentencing guidelines is to reduce unwarranted disparities. Second, sentencing guidelines regulate the type of sentence and the duration of prison sentences. Third, because presumptive guidelines “carry the weight of law,” there should be more uniformity—and less disparity—in sentences imposed by judges in states with presumptive as opposed to voluntary guidelines.

Second, based on prior literature, we propose two competing hypotheses about racial and

ethnic disparity in jail sentences. *Hypothesis 2a contemplates that there will be no racial or ethnic disparity in the likelihood of receiving a jail sentence and the length of a jail sentence imposed in presumptive guideline states; by contrast, there will be racial and ethnic disparity in voluntary guideline states and non-guideline states, and the disparity will be greater in non-guideline states than voluntary guideline states.* The argument is that guidelines foster a local legal culture that emphasizes uniformity and proportionality in sentencing and that this culture influences not only prison sentences but also jail sentences. The competing hypothesis (*hypothesis 2b*), which finds more support in prior research (D'Alessio and Stolzenberg, 1995; Moore and Miethe, 1986), argues that *there will be greater racial and ethnic disparity in jail sentences in guideline states, especially presumptive guideline states, as compared with non-guideline states.* This counter-hypothesis stems from the argument that judges, when constrained in assigning prison sentences, may seek opportunities to expand their discretion. Guidelines systems typically dictate decisions about prison sentences and, in particular, the length of a prison term. They do not typically regulate jail terms. For this reason, judges in guidelines systems, especially in presumptive guideline contexts, may be more inclined to exercise discretion in meting out jail terms. To the extent that a focal concerns perspective informs their decisionmaking, judges can be expected to assign racial and ethnic minorities to jail terms rather than to various types of non-custodial sanctions more than they would for whites.

Third, *any observed racial and ethnic disparity in jail sentences will be greater than in prison sentences in states with guidelines.* This hypothesis stems from the reasoning that no existing guidelines regulate intermediate sanctions, including jail and non-custodial sanctions, as closely as prison sentences (Frase, 2005; Tonry, 1988). Therefore, a more pronounced disparity, if any exists, should be observed with jail sentences than with prison sentences in guideline states.

## **DATA AND METHODS**

### Data

To assess the differential effects of race and ethnicity on sentence outcomes in jurisdictions with different types of sentencing systems, this study uses the State Court Processing Statistics (SCPS) 1998, 2000, and 2002 data. The three-year data include 46,071 felony defendants processed in 60 large urban counties across 23 states (Bureau of Justice Statistics, 2006). In this study, we focus on felons because most state sentencing guidelines regulate only felony crimes (Frase, 2005; Tonry, 1988). In addition, we examine the effectiveness of guidelines only on convicted felons because “state systems . . . base recommended sentences much more closely on the *conviction* offense(s)” (Frase, 2005: 1208, emphasis added; see also Frase, 2007: 425).

The SCPS data have several strengths relevant for this study. For example, the data contain rich information regarding defendants’ demographic and prior criminal history variables. The most important aspect of the SCPS data is that they provide sentencing cases across a large number of states, including states without guidelines and states with presumptive or voluntary guidelines. The data thus afford us a unique opportunity to examine whether racial and ethnic disparities vary in states with different types of sentencing systems.<sup>1</sup>

Approximately 18 percent of the SCPS cases were missing at least one variable included in this study. To address this issue, we follow the lead of other researchers who have analyzed the data (e.g., Demuth and Steffensmeier, 2004a-b; Steffensmeier and Demuth, 2006) and use multiple imputation. Compared to other approaches for addressing missing data (e.g., listwise deletion), multiple imputation has several advantages. It generates approximately unbiased estimates of all parameters; it produces good estimates of standard errors; and it can be used with any kind of data and analysis (Allison, 2000: 301-302; see also Acock, 2005; Brown and Kros, 2003). For these reasons, it is considered to be “one of the most attractive methods for general-purpose handling of missing data in multivariate analysis” (Allison, 2000: 301).

In the SCPS data, 27,019 (71%) of the 46,071 defendants were convicted, of whom 25,340 received a valid sentence, including a prison, jail or non-custodial sentence. After eliminating defendants who were convicted of misdemeanor offenses or unknown felonies, 20,692 defendants remained and were used for the multiple imputation. After assigning zero values to

jail or prison incarceration length for those defendants who received non-custodial sanctions and removing incarcerated felons who did not have valid jail or prison incarceration lengths, 20,516 cases remained and were used for the multiple imputation of sentence-length decisions.

We performed ten imputations using Patrick Royston's Imputation using Chained Equation (ICE) program, which is implemented in Stata (see Horton and Kleinman, 2007). In addition to being simple to use, the ICE program does not require the multivariate joint distribution assumption, thus allowing the program to impute different types of variables (e.g., binary and categorical variables) together. The variables used in this study are primarily binary or categorical in nature, so the use of the ICE program for multiple imputation is especially appropriate. In the multiple imputation process, we followed Acock's (2005: 1026) recommendation and included the following variables in addition to those used for the subsequent analyses: prior misdemeanor arrest (1=yes, 0=no), prior misdemeanor conviction (1=yes, 0=no), a dummy variable indicating whether the most serious arrest charge was classified as "attempted" (1=yes, 0=no), and the most serious arrest charge (a series of dummy variables that reflect the most serious offense for which a defendant was arrested). Given our focus, we included only defendants who were white, black, or Hispanic and excluded defendants who were younger than age 13 at arrest. Each imputed dataset contained, on average, 20,181 convicted felons for the analysis of incarceration decisions. For the analysis of sentence length decisions, we focused only on defendants who received a term of incarceration (N=15,114).

To identify states with sentencing guidelines, we relied on Frase's (2005: 1196) classification, which in turn was based on "the National Association of Sentencing Commission (NASC) website and its references, previous state guidelines surveys which were conducted by legal scholars, and various published and unpublished state-specific reports." Among the 23 states, ten were classified as having sentencing guidelines, with five classified as having presumptive guidelines and the other five as having voluntary guidelines.<sup>2</sup> States that have presumptive guidelines include Florida, Michigan, Ohio, Tennessee, and Washington. States that have voluntary guidelines include Maryland, Missouri, Pennsylvania, Utah, and Virginia.<sup>3</sup>

Below, we describe each variable in the study.

### Dependent Variables

Since Wheeler, Weisburd, and Bode (1982), sentencing research has broken down the sentencing decision into two distinct but related stages: the decision to incarcerate and the decision regarding length of sentence if incarcerated (e.g., Britt, 2000; Johnson, 2006; Ulmer and Johnson, 2004). We follow this practice, not least because previous research has established that the presence of state sentencing guidelines has differential effects on incarceration versus sentence length decisions (e.g., Britt, 2000; Griffin and Wooldredge, 2006; Ulmer and Johnson, 2004). In addition, at both sentencing stages, we separate prison sentences from jail sentences because we hypothesize that racial and ethnic disparity will differ in prison sentencing from that in jail sentencing in jurisdictions with different types of sentencing systems.

The decision to incarcerate has three categories: prison (if the convicted felon was sentenced to any length of confinement in a state prison), jail (if the convicted felon was sentenced to any length of confinement in a county jail), and non-custodial sanction (if the convicted felon was sentenced to any combination of non-incarceration options, such as probation, restitution, fine, or other sentence). Non-custodial sanction serves as the omitted outcome category in the models analyzing the effect of race and ethnicity on the decision to incarcerate. For those incarcerated, the sentence-length variables were coded as the months of incarceration in a county jail or in a state prison, respectively. We take the natural log of jail and prison incarceration lengths due to extreme skew.<sup>4</sup>

### Independent Variables

The main focus of this study is to examine racial and ethnic disparity across different sentencing contexts. For all of the analyses, the offender's race is coded as a dummy variable (1=black, 0=white) and so, too, is ethnicity (1=Hispanic, 0=white). Across all models, we estimate whether statistically significant race or ethnicity effects emerge net of other factors.



We introduce as controls variables commonly used in sentencing studies. Besides the offender's race and ethnicity, other extra-legal variables in the analyses include the offender's age at arrest (in years) and the offender's sex (1=male, 0=female). We include a squared term of age because previous research has identified a significant non-linear relationship between age and sentencing severity (see, e.g., Steffensmeier, Kramer, and Ulmer, 1995).

In addition, we control for a number of legally relevant variables, including the offender's prior criminal history and offense seriousness. We have three variables to measure the offender's prior criminal history. The first is the offender's prior official criminal record, which is the sum of four dummy variables, including prior felony arrest, prior felony conviction, prior jail incarceration, and prior prison incarceration (Cronbach's alpha=.80). This indicator reflects the defendant's prior contact with the criminal justice system, with a higher score indicating a more extensive official criminal record. The second variable is the offender's criminal justice status at arrest, which indicates whether the offender was on probation or parole or in custody at the time of arrest (Steffensmeier and Demuth, 2006: 249). The third variable is a dummy variable reflecting whether the offender ever failed to appear (FTA) in court (1=yes, 0=no). Offense seriousness is measured by the most serious offense that the convicted felon was convicted for and whether multiple arrest charges occurred (1=yes, 0=no). Consistent with other sentencing research (e.g., Bushway and Piehl, 2007; Fearn, 2005; Harrington and Spohn, 2007; Johnson, 2005, 2006), we include three dummy variables that capture the most serious offense type for which the defendant was convicted: violent offense, property offense, and drug offense, holding public order offense as the reference category.

We also control for the type of disposition in the case and for the offender's pre-trial status, given prior research showing that these factors may affect sentence severity (Albonetti, 1986; Fearn, 2005; Ulmer and Bradley, 2006; Ulmer and Johnson, 2004; Wooldredge, 2007). The type of disposition is a dummy variable (1=guilty plea, 0=trial). Pre-trial status also is operationalized as a dummy variable (1=detained prior to trial, 0=released prior to trial). We introduce two dummy variables for the years 1998 and 2000 to address the possibility that there might be

differences in sentencing stemming from year-specific changes in laws, policies, or court practices. Year 2002 serves as the reference year in all the models.

Finally, we introduce dummy variables for states because states may differ in whether they have guidelines systems (presumptive vs. voluntary vs. non-guideline). They also may differ in their political, economic, and social contexts, and incorporation of the dummies takes this likelihood into account, thus producing more robust estimates for the effects of race and ethnicity in states with different types of sentencing systems.

### Analytic Strategy

We employ multinomial logistic regression for the analysis of the decision to incarcerate because this variable consists of three categories (non-custodial sanctions, jail, and prison). For sentence length decisions, we use ordinary least squares (OLS) regression. We use Stata's MIM command (a module designed to analyze multiply-imputed datasets) to analyze the ten imputed datasets. This command, as Carlin, Galati, and Royston (2008: 49) stated, can "validly fit most of the regression models available in Stata to multiply imputed datasets, giving parameter estimates and confidence intervals computed according to Rubin's results for multiple imputation inference." We report model estimates with robust standard errors that account for the clustering of cases within counties. At each sentencing stage, we estimate a model in states without sentencing guidelines, in states with voluntary guidelines, and in states with presumptive guidelines. In assessing our hypotheses, we first determine whether racial and ethnic disparity is present in each type of sentencing systems. Then, we perform a z-test to investigate if the effect of race and ethnicity is greater in one type of sentencing systems than the other (as indicated by the specific hypothesis). We use the formula that Clogg et al. (1995) developed and Brame et al. (1998) demonstrated to be applicable for maximum-likelihood regression coefficients. Although not shown in the tables, all the models include state dummies. The variance inflation factors were all below 4; thus, the multicollinearity diagnostics did not reveal any problems (Hair et al., 1998).

## FINDINGS

### Decision to Incarcerate

Table 1 presents the descriptive statistics for convicted felons in non-guideline, voluntary guideline, and presumptive guideline states, respectively. As reflected in the table, judges in non-guideline states impose prison sentences (41 percent) somewhat more often than do judges in voluntary guideline states (37 percent) and substantially more often than do judges in presumptive guideline states (27 percent). There are more non-custodial sentences in voluntary guideline states (40 percent) than in presumptive guideline states (32 percent) or non-guideline states (21 percent). In addition, when compared to presumptive and voluntary guideline states, judges in non-guideline states sentenced fewer black offenders and a larger percentage of Hispanic offenders.<sup>5</sup> To assess whether the variation in the use of prison sentences across non-guideline and guideline states can be explained by differences in caseload or the types of offenders adjudicated and sentenced, we turn to the multivariate analyses.

Insert Table 1 about here

Table 2 presents results from the multinomial logistic regression models of incarceration decisions in states without guidelines, in states with voluntary guidelines, and in states with presumptive guidelines, respectively. In support of the first hypothesis, we find that, in presumptive guideline states, the effects of race and ethnicity are not statistically significant after controlling for legal and extra-legal factors. By contrast, in voluntary guideline states and especially non-guideline states, the likelihood of a prison sentence is significantly greater for ethnic minority offenders. Further, the z-test demonstrates an absence of a statistically significant difference of the effects of race ( $z=.24, p>.05$ ) and ethnicity ( $z=.76, p>.05$ ) between voluntary guideline states and non-guideline states. Here, then, we find mixed support for the first hypothesis. On the one hand, neither racial nor ethnic disparities emerge in the likelihood of a prison sentence in states with presumptive guidelines; on the other hand, racial and ethnic

disparities still remain in voluntary guideline states and non-guideline states (with the exception of racial disparity in voluntary guideline states), but the level of disparity is not significantly different between states without guidelines and states with voluntary guidelines.

Insert Table 2 about here

Next, we investigate the second hypothesis, which focused on jail sentences. As can be seen in the table, in presumptive guideline states, racial and ethnic disparities in the likelihood of a jail sentence are absent; in non-guideline and voluntary guideline states, however, both blacks and Hispanics are more likely to receive a jail sentence than their white counterparts. Although the effect of race on the likelihood of a jail sentence in these two types of jurisdictions is similar ( $z=.06$ ,  $p>.05$ ), the effect of ethnicity is significantly greater in voluntary guideline states than in non-guideline states ( $z=3.33$ ,  $p<.01$ ). Thus, we find some support for hypothesis 2a—that is, there is no racial and ethnic disparity in the likelihood of a jail sentence in presumptive guideline states; by contrast, there is racial and ethnic disparity in the likelihood of a jail sentence in voluntary guideline states and non-guideline states. Since the effect of the offender's ethnicity on the likelihood of a jail sentence is significantly greater in states with voluntary guidelines than in states without guidelines, we also find partial support for hypothesis 2b which anticipated that there would be greater jail sentencing disparity in guideline states than non-guideline states.

Finally, regarding the third hypothesis, we find that in voluntary guideline states where racial and ethnic disparity is observed in the likelihood of a prison and jail sentence, the effect of ethnicity, but not race, is significantly greater in predicting the likelihood of a jail sentence than the likelihood of a prison sentence (Chi-Square=11.61,  $df=1$ ,  $p<.01$ ). We thus find some support for our third hypothesis when ethnic disparity is concerned; the observed ethnic disparity in voluntary guideline states is more pronounced in jail sentences than prison sentences.

### Sentence Length Decision

The above analyses focused on the decision to incarcerate. Here, we revisit the hypotheses and test them by focusing on sentence length decisions. Table 3 presents the descriptive statistics

for incarcerated felons in each of the three state sentencing contexts (non-guideline, voluntary guideline, and presumptive guideline). As one would expect, the average prison incarceration length is longer than jail incarceration length in all three types of sentencing systems. Notably, the mean prison incarceration and jail incarceration lengths are somewhat longer in voluntary guideline states than non-guideline states, and no difference in prison incarceration length exists when comparing non-guideline and presumptive guideline states. Table 3 also demonstrates that incarcerated felons who received prison sentences have a more extensive criminal record than those who received jail sentences, lending support to the view that prison and jail sentences are applied to different groups of offenders (Harrington and Spohn, 2007; Holleran and Spohn, 2004) and so should be modeled separately from one another.

Insert Table 3 about here

The sentence length analyses, shown in Table 4, can be readily summarized—specifically, no evidence of racial or ethnic disparity is evident in any of the three state sentencing systems. Put differently, it appears that, once individual- and state-level controls are introduced, there is no evidence of racial or ethnic sentence length disparity in non-guideline states and in states with presumptive or voluntary guidelines. This general pattern accords with prior research, which indicates that fewer disparities emerge in sentence length decisions as compared to incarceration decisions (Chiricos and Crawford, 1995; Spohn, 2000). In short, we find no evidence in support of the hypotheses when the focus is on sentence length rather than the decision to incarcerate.

Insert Table 4 about here

## **DISCUSSION AND CONCLUSION**

The goal of this study was to determine whether offenders' race/ethnicity differentially affects sanctioning in jurisdictions with different types of sentencing systems. In so doing, we respond to calls to perform cross-jurisdictional analyses (Bushway and Piehl, 2007; Hunt, 2007), to examine sentencing disparities in voluntary versus presumptive guidelines systems, and to investigate racial and ethnic disparity in jail sentencing in guidelines systems (Bushway and

Piehl, 2007; Tonry, 1988). To this end, we used the State Court Processing Statistics data to investigate racial and ethnic disparity in prison versus jail sentences in states without guidelines, in states with voluntary guidelines systems, and in states with presumptive guidelines systems.

Table 5 summarizes the results of our hypothesis tests. First, in support of our first hypothesis, we found that in presumptive guideline states, there was no evidence of racial disparity in the likelihood of receiving a prison sentence. However, contrary to what we hypothesized, there was no racial disparity in voluntary guideline states. Further, and again in accordance with we predicted, racial disparity was present in non-guideline states—that is, convicted blacks were more likely than whites to receive prison sentences. When we turn to ethnic disparity, the results were the same except for one notable exception. Specifically, there was, as we hypothesized, evidence of ethnic disparity in the probability of receiving a prison sentence in voluntary guideline states. Finally, racial and ethnic disparity was not statistically different in voluntary guideline states versus non-guideline states.

Second, we identified racial and ethnic disparity in the likelihood of a jail sentence in voluntary guideline states and non-guideline states; ethnic disparity in the likelihood of a jail sentence was greater in voluntary guideline states than in non-guideline states; and racial disparity was similar in voluntary guideline states and non-guideline states. By contrast, we found no racial or ethnic disparity in the likelihood of a jail sentence in presumptive guideline states. Third, in voluntary guideline states where racial and ethnic disparities were observed, we found that, as expected, ethnic disparity was greater in the likelihood of a jail sentence than the likelihood of a prison sentence. Fourth, the sentence length analyses revealed no evidence of racial or ethnic disparities in any of the three state sentencing contexts.

These results suggest that presumptive guidelines may be more effective in eliminating racial and ethnic disparities. As argued by a number of scholars (e.g., Frase, 2005, 2007; Moore and Miethe, 1986; Reitz, 2005a-b; Tonry, 1988, 1996), the effects of presumptive guidelines systems on eliminating racial and ethnic disparity may stem from their legally binding power. This cross-jurisdiction analysis thus adds empirical evidence to the existing literature by lending support to

the view that presumptive guidelines systems may be more effective than voluntary guidelines systems in eliminating unwarranted disparity.

The findings also suggest that there is greater disparity in the sentencing of Hispanics in voluntary guideline states as compared to non-guideline states. We lack the data necessary for explaining this difference. However, we speculate that it may be that in courts where there are fewer Hispanic defendants—a situation that characterizes voluntary guideline states more so than non-guideline states—Hispanics may be perceived as more threatening. According to the minority threat perspective, as the relative size of a racial or ethnic minority group increases, the majority group may perceive them as a growing threat and take actions to reduce this threat (Blalock, 1967; Liska, 1992). A court community largely devoid of a particular minority group—in this case, Hispanics—may be especially reactive to that group. For example, they may perceive Hispanic offenders as a potentially growing threat. Thus, in states where the guidelines are not restrictive (e.g., where compliance is voluntary), there may be more leeway for courtroom actors to impose jail sentences consistent with this perceived threat.

An important limitation of this study should be emphasized. Specifically, because of data limitations, we were unable to employ pre- and post-guideline analyses, and so we cannot determine if the guidelines, especially presumptive guidelines, reduce unwarranted disparity. To illustrate, in the presumptive guideline states that we examined, little to no racial and ethnic disparities may have existed prior to the guidelines being adopted. Although possible, such a pattern would run counter to prior research, which has found that in states with presumptive guidelines systems, disparities existed prior to the adoption of guidelines and were reduced thereafter (Koons-Witt, 2002; Moore and Miethe, 1986; Stolzenberg and D'Alessio, 1994).

The present study reinforces Holleran and Spohn's (2004) argument that prison and jail sentences should be modeled separately (see also Blumstein et al., 1983; Harrington and Spohn, 2007), and, in a related vein, Bushway and Piehl's (2007) and Tonry's (1988) argument that disparities in jail sentences should be studied. The risk lies in the fact that by only examining disparities in prison sentences, unwarranted disparity in jail sentences may go undetected. At the

same time, the potential effects of offenders' race and ethnicity on sentencing severity may be obscured or, should such effects exist, go undetected.

The study also draws attention to the need to examine race and ethnicity effects in a more nuanced way. Here, for example, we examined jail and prison decisions separately. An additional, and important, next step is to examine how unwarranted disparities may arise at earlier stages of the sentencing process. For example, Bushway and Piehl (2007) have argued that "stricter sentencing structures are more likely to have discretion in sentencing take place before the point at which researchers generally assess discretion with conviction data" (p. 121; cf. Miethe, 1987). Thus, a possible negative consequence of presumptive guidelines is the hydraulic displacement of discretion—that is, discretion is more likely to be displaced to earlier-in-process decisions in presumptive guideline states (Bushway and Piehl, 2007; Piehl and Bushway, 2007). In short, presumptive sentencing guidelines may reduce unwarranted disparities related to jail and prison sentence decisions but have little to no or amplifying effect on prosecutorial charging decisions. This possibility bears investigation in future sentencing studies.

One potential policy implication of the findings here and in prior research bears mention. Recent Supreme Court decisions, including *Blakely v. Washington* [542 U.S. 296 (2004)] and *United States v. Booker* [543 U.S. 220 (2005)], have been viewed as threatening the existence and current operations of sentencing guidelines at both the state and federal levels (Piquero, 2007: 494). The decisions have led legal scholars to argue that "the U.S. Supreme Court may have taken us backward to indeterminate sentencing, by complicating the guideline movement" (Hunt, 2007: 485). The analyses here and elsewhere suggest that the Supreme Court decisions may be more likely to exert a greater effect on presumptive guidelines systems. Specifically, the possibility exists that the decisions may lead to increased unwarranted disparity in sentencing decisions in states that have presumptive sentencing guidelines (see Frase, 2007). That is, the potential disparity-reducing effects of presumptive guidelines may be reversed. Only future research, of course, will be able to assess whether such an effect in fact will occur.



## ENDNOTES

<sup>1</sup> Bushway and Piehl (2007) have argued that prior work has focused on within-jurisdiction analyses because of the lack of cross-jurisdiction data. To date, studies using the SCPS data have analyzed the data “as if they come from one jurisdiction, with little focus on how the process varies across states” (Bushway and Piehl, 2007: 463). Bushway and Piehl (2007) and Piehl and Bushway (2007) have employed the data for cross-jurisdictional analyses, but they had a different focus (charging decisions) and focused on only two states (Washington and Maryland).

<sup>2</sup> According to Frase (2005: 1204), “Wisconsin repealed its initial guidelines in 1995 but reinstated guidelines for certain crimes in 2003.” Because our data include sentencing cases in 1998, 2000, and 2002, Wisconsin is defined here as a state without sentencing guidelines.

<sup>3</sup> The Pennsylvania guidelines system has been recognized as “a borderline regime” that has been described as voluntary and presumptive, though the state’s Supreme Court characterizes it as voluntary (Reitz, 2005a: 157-158). Following the Supreme Court and other scholars (e.g., Bushway and Piehl, 2007; Piehl and Bushway, 2007; Ulmer, 2000), we classify Pennsylvania sentencing guidelines as voluntary because compliance with the guidelines is in fact voluntary.

<sup>4</sup> One offender was sentenced to the death penalty and 76 to life imprisonment. We assigned the maximum sentence length (1,133 months) to these 77 convicted felons.

<sup>5</sup> As one anonymous reviewer noted, voluntary guideline states have a higher percentage of convicted felons having multiple arrest charges than presumptive guideline and non-guideline states. We speculate that felons convicted of some violent or property offenses may be more likely to be charged with other offenses or multiple counts of the same offense. This speculation stems from the fact that there are a higher percentage of violent and property offenders in voluntary guideline states. To test this possibility, we obtained Kendall’s Tau coefficients which indicate that convicted robbery, assault, and burglary offenders are more likely to have multiple arrest charges in voluntary guideline states.

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**Table 1. Descriptive Statistics for Convicted Felons**

	Non-Guideline States		Voluntary Guideline States		Presumptive Guideline States	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Conviction outcome						
Not-custodial sanctions	3,076	20.58%	742	40.28%	1,078	31.80%
Jail	5,749	38.46%	421	22.86%	1,388	40.94%
Prison	6,124	40.97%	679	36.86%	924	27.26%
<i>Covariates</i>	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>
Black	.37	.48	.54	.50	.55	.50
Hispanic	.33	.47	.13	.33	.10	.29
White (ref. category)	.31	.46	.34	.47	.36	.48
Male	.82	.38	.84	.37	.85	.36
Age	30.93	9.98	30.09	10.42	31.56	10.23
Criminal record	1.97	1.50	1.59	1.44	1.93	1.46
Criminal justice status	.42	.49	.35	.48	.29	.46
Prior failure to appear	.40	.49	.34	.47	.27	.44
Multiple arrest charges	.57	.49	.75	.43	.56	.50
Convicted violent off.	.17	.38	.19	.39	.17	.38
Convicted property off.	.31	.46	.38	.49	.33	.47
Convicted drug offense	.41	.49	.35	.48	.36	.48
Convicted PO off. (ref.)	.11	.31	.08	.27	.14	.35
Detention	.56	.50	.35	.48	.45	.50
Plea bargain	.96	.20	.87	.34	.96	.21
Year 1998	.32	.47	.41	.49	.42	.49
Year 2000	.31	.46	.26	.44	.28	.45
Year 2002 (ref.)	.37	.48	.33	.47	.30	.46
<b>N</b>	14,949		1,842		3,390	

**Table 2. Multinomial Logistic Regression of Decision to Incarcerate Convicted Felons on Race and Ethnicity<sup>a</sup>**

	Non-Guideline States		Voluntary Guideline States		Presumptive Guideline States	
	Jail	Prison	Jail	Prison	Jail	Prison
Intercept	.38 (.27)	-1.23** (.46)	-2.33** (.84)	-3.06** (.83)	-.63 (.60)	-1.76** (.62)
Black	.30** (.09)	.22* (.10)	.31* (.14)	.27 (.18)	.05 (.14)	.09 (.14)
Hispanic	.24* (.11)	.30** (.11)	1.00** (.20)	.48* (.21)	.04 (.23)	.03 (.26)
Male	.24** (.06)	.50** (.06)	.15 (.19)	.44* (.20)	.12 (.11)	.69** (.14)
Age	.01 (.01)	.02 (.02)	.08 (.04)	.06 (.04)	.02 (.02)	-.03 (.02)
Age <sup>2</sup> (*100)	-.02 (.02)	-.04 (.02)	-.12* (.05)	-.10 (.05)	-.02 (.03)	.03 (.03)
Criminal record	.09 (.06)	.70** (.04)	.16 (.11)	.45** (.07)	.19** (.04)	.46** (.05)
Criminal just. status	.06 (.09)	.14 (.10)	.20 (.17)	.35** (.12)	-.08 (.18)	.34* (.15)
Prior FTA	.05 (.10)	-.11 (.09)	.73** (.20)	.27 (.18)	-.07 (.20)	.08 (.15)
Multiple arrest charges	.05 (.07)	.25** (.10)	.43 (.23)	.93** (.21)	-.06 (.14)	.33 (.18)
Convicted violent off.	-.10 (.18)	.43** (.15)	.34 (.41)	1.17* (.27)	-.52** (.19)	.99** (.24)
Convicted property off.	-.27 (.14)	-.27 (.15)	-.07 (.36)	-.56 (.30)	-.55** (.20)	.22 (.28)
Convicted drug off.	-.67** (.16)	-.71** (.21)	.05 (.40)	.32 (.27)	-.41 (.26)	.15 (.29)
Detention	.59** (.12)	1.49** (.09)	.88** (.32)	1.33** (.22)	1.14** (.11)	1.69** (.18)
Plea bargain	.46** (.13)	-.69** (.20)	.15 (.63)	-.25 (.46)	.73* (.32)	-.70* (.29)
Year 1998	.82** (.21)	.63* (.25)	.01 (.64)	1.02 (.52)	-.61 (.43)	-.62 (.40)
Year 2000	.46** (.14)	.38* (.15)	-.97** (.34)	-.14 (.43)	-.35 (.19)	-.16 (.37)
N	14,949		1,842		3,390	

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

<sup>a</sup>We employed multinomial logistic regression because the dependent variable—the decision to incarcerate—consists of three categories (non-custodial sanctions, jail, and prison sentences). Because individual felons are nested in counties, we used Stata's cluster command for robust standard errors. In the models above, we used non-custodial sanction as the omitted outcome category. Although not shown here, the models include state dummies.



**Table 3. Descriptive Statistics for Incarcerated Felons**

	Non-Guideline States				Voluntary Guideline States				Presumptive Guideline States			
	Prison		Jail		Prison		Jail		Prison		Jail	
	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>
Sentence length (ln)	3.51	.90	1.38	1.20	4.05	.83	2.31	1.11	3.55	1.01	.91	1.56
<i>Covariates</i>												
Black	.42	.49	.30	.46	.56	.50	.55	.50	.63	.48	.53	.50
Hispanic	.31	.46	.38	.49	.14	.34	.17	.37	.09	.28	.10	.30
White (ref.)	.27	.45	.32	.47	.31	.46	.28	.45	.29	.45	.37	.48
Male	.88	.33	.80	.40	.89	.32	.84	.37	.92	.28	.84	.36
Age	31.51	9.48	30.64	10.08	30.24	10.22	30.31	10.11	30.87	10.00	32.37	10.18
Criminal record	2.70	1.40	1.62	1.36	2.10	1.51	1.68	1.33	2.52	1.42	1.94	1.41
Crim. just. status	.53	.50	.38	.48	.47	.50	.41	.49	.45	.50	.25	.43
Prior failure to appear	.48	.50	.39	.49	.42	.49	.43	.50	.39	.49	.24	.43
Multiple arrest ch.	.58	.49	.59	.49	.84	.37	.83	.38	.59	.49	.54	.50
Convict viol. off.	.21	.40	.17	.37	.29	.45	.17	.37	.28	.45	.13	.34
Convict prop. off.	.30	.46	.32	.47	.28	.45	.43	.50	.34	.47	.31	.46
Convict drug off.	.37	.48	.40	.49	.36	.48	.33	.47	.28	.45	.39	.49
Convict PO off. (ref)	.12	.32	.11	.31	.07	.26	.07	.25	.10	.30	.18	.38
Detention	.74	.44	.52	.50	.54	.50	.39	.49	.67	.47	.49	.50
Plea bargain	.93	.25	.99	.12	.84	.36	.86	.35	.92	.27	.98	.15
Year 1998	.32	.47	.35	.48	.44	.50	.29	.45	.40	.49	.42	.49
Year 2000	.32	.47	.31	.46	.28	.45	.20	.40	.30	.46	.25	.43
Year 2002 (ref.)	.36	.48	.34	.48	.28	.45	.51	.50	.31	.46	.33	.47
N	6,082		5,647		680		414		923		1,368	

**Table 4. Ordinary Least Squares Regression of Sentence Length among Incarcerated Felons on Race and Ethnicity<sup>a</sup>**

	Non-Guideline States		Voluntary Guideline States		Presumptive Guideline States	
	Jail	Prison	Jail	Prison	Jail	Prison
Intercept	.64** (.23)	3.56** (.33)	2.05* (.77)	3.77** (.57)	-.64 (.64)	3.63** (.44)
Black	-.05 (.07)	.01 (.03)	.17 (.14)	.01 (.07)	.08 (.11)	.03 (.09)
Hispanic	.01 (.05)	.02 (.03)	.11 (.25)	.10 (.10)	-.10 (.11)	.03 (.13)
Male	.17** (.03)	.18** (.04)	-.06 (.15)	.14 (.07)	.26 (.13)	.01 (.08)
Age	.01 (.01)	.00 (.01)	-.02 (.03)	-.01 (.02)	.02 (.02)	.00 (.01)
Age <sup>2</sup> (*100)	-.02* (.01)	-.00 (.01)	.01 (.04)	.01 (.03)	-.05 (.04)	-.00 (.01)
Crim. record	.09** (.02)	.02 (.02)	.19* (.06)	.01 (.03)	.12** (.03)	-.01 (.03)
Criminal just. status	.10* (.04)	.03 (.05)	-.09 (.12)	-.05 (.07)	.23* (.09)	-.01 (.06)
Prior FTA	-.05 (.05)	-.08** (.03)	-.14 (.10)	-.08 (.10)	.14 (.12)	-.06 (.07)
Multiple arrest charges	.14* (.06)	.13** (.03)	.11 (.17)	.19** (.04)	.12 (.12)	.05 (.04)
Convicted viol. off.	.26** (.09)	.74** (.10)	.74 (.33)	.90** (.22)	.40** (.09)	.88** (.10)
Convicted prop. off.	.05 (.11)	.04 (.09)	.30 (.34)	.25 (.22)	.25* (.10)	.38** (.11)
Convicted drug off.	.05 (.07)	.10 (.08)	.59 (.35)	.44 (.25)	.02 (.10)	.34* (.13)
Detention	.54** (.10)	.19** (.05)	.09 (.10)	.17 (.08)	1.01** (.14)	.19* (.06)
Plea bargain	-.16 (.17)	-.93** (.19)	.38* (.16)	-.24 (.14)	-.11 (.21)	-.75** (.21)
Year 1998	.08 (.06)	.02 (.08)	.24 (.33)	-.30 (.20)	.08 (.14)	-.03 (.06)
Year 2000	.00 (.06)	.02 (.05)	-.52* (.19)	-.28 (.15)	.31** (.09)	-.05 (.06)
N	6,082	5,647	680	414	923	1,368

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

<sup>a</sup>We employed ordinary least squares (OLS) regression to predict logged prison length and jail length separately. Because individual felons are nested in counties, we used Stata's cluster command for robust standard errors. Although not shown here, the models include state dummies.

**Table 5. Results of Hypothesis Tests, by Race and Ethnicity**

	Hypotheses, by Race and Ethnicity	Incarceration Decision	Incarceration Length Decision
<i>Hypothesis 1 (Prison Sentencing Disparity)</i>			
There will be no racial or ethnic disparity in prison sentencing in presumptive guideline states.	<i>Race</i>	Supported	Supported
	<i>Ethnicity</i>	Supported	Supported
By contrast, there will be some racial and ethnic disparity in voluntary guideline states and non-guideline states.	<i>Race</i>	Supported in part	Not Supported
	<i>Ethnicity</i>	Supported	Not Supported
The disparity will be more pronounced in non-guideline states than in voluntary guideline states.	<i>Race</i>	Not Supported	Not Supported
	<i>Ethnicity</i>	Not Supported	Not Supported
<i>Hypothesis 2a (Jail Sentencing Disparity)<sup>a</sup></i>			
There will be no racial or ethnic disparity in jail sentencing imposed in presumptive guideline states.	<i>Race</i>	Supported	Supported
	<i>Ethnicity</i>	Supported	Supported
By contrast, there will be racial and ethnic disparity in voluntary guideline states and non-guideline states.	<i>Race</i>	Supported	Not Supported
	<i>Ethnicity</i>	Supported	Not Supported
The disparity will be greater in non-guideline states than voluntary guideline states.	<i>Race</i>	Not Supported	Not Supported
	<i>Ethnicity</i>	Not Supported	Not Supported
<i>Hypothesis 3 (Prison versus Jail Sentencing Disparity)<sup>b</sup></i>			
Any observed racial and ethnic disparity in jail sentences will be greater than in prison sentences in states with guidelines.	<i>Race</i>	Not Supported	N/A
	<i>Ethnicity</i>	Supported	N/A

<sup>a</sup> We provided two competing hypotheses regarding differential effects of race and ethnicity in jail sentencing under different sentencing systems in the text (hypothesis 2a and hypothesis 2b). Here, for the sake of parsimony, we only summarized the test results of hypothesis 2a.

<sup>b</sup> Hypothesis 3 was assessed only when incarceration decision was examined in voluntary guideline states because no racial or ethnic disparity was observed in presumptive guideline states and no such disparity emerged when incarceration length decision was concerned in voluntary guideline states.