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2010

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PRINT VERSION CITATION: Wang, Xia, and Daniel P. Mears. 2010. "A Multilevel Test of Minority Threat Effects on Sentencing." *Journal of Quantitative Criminology* 26(2):191-215.

PRE-PRINT VERSION

A MULTILEVEL TEST OF MINORITY THREAT EFFECTS ON SENTENCING*

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Running head: Minority Threat Effects

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A MULTILEVEL TEST OF MINORITY THREAT EFFECTS ON SENTENCING

ABSTRACT

Prior studies of criminal sanctioning have focused almost exclusively on individual-level predictors of sentencing outcomes. However, in recent years, scholars have begun to include social context in their research. Building off of this work—and heeding calls for testing the racial and ethnic minority threat perspective within a multilevel framework and for separating prison and jail sentences as distinct outcomes—this paper examines different dimensions of minority threat and explores whether they exert differential effects on prison versus jail sentences. The findings provide support for the racial threat perspective, and less support for the ethnic threat perspective. They also underscore the importance of testing for non-linear threat effects and for separating jail and prison sentences as distinct outcomes. We discuss the findings and their implications for theory, research, and policy.

Key words: minority threat effects; sentencing

INTRODUCTION

Sentencing decisions stand at the heart of the criminal justice system and for that reason have garnered considerable attention from researchers. However, prior studies have focused almost exclusively on individual-level predictors of sentencing and document that those who have committed serious crimes and have prior offenses are more likely to receive more severe punishment (e.g., Albonetti, 1986, 1991, 1997; Spohn, 2000; Steffensmeier, Ulmer, and Kramer, 1998). They also have examined the impact of extra-legal factors on sentencing and typically have shown that men and minorities are sentenced more harshly, even after controlling for offenders' prior criminal record and offense seriousness (e.g., Bushway and Piehl, 2001; Engen and Gainey, 2000; Everett and Wojtkiewicz, 2002; Mitchell, 2005; Mustard, 2001; Spohn, 2000; Spohn and Holleran, 2000; Steffensmeier and Demuth, 2000, 2001, 2006).

More recently, sentencing research has moved in a new direction, focusing on whether sentencing outcomes vary across jurisdictions and how contextual factors may affect individual-level sentencing decisions (Hartley, Maddan, and Spohn, 2007). These studies have examined such dimensions as racial and ethnic composition, unemployment, crime, and political affiliation (Britt, 2000; Fearn, 2005; Helms and Jacobs, 2002; Johnson, 2003, 2005, 2006; Johnson, Ulmer, and Kramer, 2008; Kautt, 2002; Ulmer and Johnson, 2004; Weidner, Frase, and Pardoe, 2004; Weidner, Frase, and Schultz, 2005; Wooldredge, 2007; Wooldredge and Thistlethwaite, 2004). Collectively, this body of work suggests that social context can have an effect, net of individual offenders' characteristics and offense seriousness, on courtroom decision-making.

In the past decade, the racial and ethnic minority threat perspective has emerged as a particularly prominent avenue of inquiry into sentencing. Studies using this perspective have attempted to identify whether there is an association between sentencing severity and the size of the minority—typically operationalized as the black—population (Britt, 2000; Fearn, 2005; Helms and Jacobs, 2002; Ulmer and Johnson, 2004). Although such research has advanced scholarship, a number of questions and issues remain. First, the studies to date provide mixed evidence regarding the association between minority population size and individual-level

sentencing severity, with some finding a positive association and some finding none. Second, there is a question as to whether these studies provide an adequate test of the minority threat perspective. For example, Stolzenberg, D'Alessio, and Eitle (2004) have emphasized the need for tests of the minority threat perspective within a multilevel framework. They, along with many other scholars, have also emphasized the importance of examining different measures of minority threat, especially economic and political measures, both of which are central to Blalock's (1967) original articulation of the minority threat perspective (Dixon, 2006; Eitle, D'Alessio, and Stolzenberg, 2002). Not the least, it remains unknown whether racial threat or ethnic threat differentially influence the likelihood of individuals receiving prison rather than jail sentences (Blumstein et al., 1983; Harrington and Spohn, 2007; Holleran and Spohn 2004).

Against this backdrop, the goal of this paper is to contribute to theoretical and empirical research aimed at understanding how contextual effects influence sentencing, and, in particular, how minority threat may influence decisions to sentence individuals to prison or jail rather than to non-incarcerative sanctions.¹ Using data from the State Court Processing Statistics and other data sources, we test whether three distinct ecological measures of racial and ethnic threat are associated with individual-level jail versus prison sentencing decisions. Below we begin by discussing the relevant theoretical and empirical research and then develop a series of hypotheses derived from this work. After describing the data and measures, we present the findings and discuss the study's implications for theory, research, and policy.

THEORETICAL BACKGROUND

The Minority Threat Perspective

Over four decades ago, at a time when studies of social control ascended into prominence (Liska, 1992; Spitzer, 1975; Turk, 1966), Blalock (1967) developed what has come to be called the minority threat perspective (Kent and Jacobs, 2005; King, 2007; King and Wheelock, 2007; Parker, Stults, and Rice, 2005; Stults and Baumer, 2007). He argued that a growing racial and ethnic minority population poses a threat to white majorities. More specifically, he suggested

that as the relative size of racial and ethnic minority group increases, members of the majority group—in this case, whites—may perceive a growing threat to them and, in turn, take actions to reduce it. Blalock went on to assert that the source of perceived minority threat can take on two different forms: economic threat and political threat. Specifically, he asserted that as minorities compete for jobs, housing, and other economic resources, whites increasingly feel that their economic well-being and dominance is threatened. Second, he argued that as minorities enhance their political power, whites increasingly feel that their political hegemony is threatened.

As a result of either type of minority threat, whites may demand intensified social control to maintain their economic, political, and social dominance. Blalock, however, offered divergent predictions about the consequences of minority economic and political threat: The relationship between both types of threat and social control should be curvilinear, though the forms of non-linearity should differ (p. 145). According to Blalock, under conditions of minority economic threat, increases in the minority population should produce smaller increments in inter-group competition in situations where the minority population size is already large (p. 148). This is what Blalock termed a decelerating threat effect: The relationship between minority economic threat and social control should become weaker as economic threat increases. In reference to political threat, however, Blalock argued that in most circumstances, as the minority population size becomes larger, “the need for a higher degree of mobilization of resources by the majority group to maintain dominance becomes extremely great” (p. 154). Therefore, as one goes from areas lower in political threat to those that are higher, the amount of social control exerted should be modestly higher at lower levels and then disproportionately higher at higher levels. Blalock termed this phenomenon an accelerating threat effect: The relationship between minority political threat and social control should intensify at higher levels of political threat.

We focus here specifically on Blalock’s (1967) arguments because they have been central to a broader literature on social threat and social control (e.g., King, 2007; King and Wheelock, 2007; Mitchell, 2005; Ruddell and Urbina, 2004) and, more specifically, because they accord with the unifying theme of research on threat groups, which has been that “social control is a response of elites, authorities, and majorities to acts, people, and distributions of people deemed

threatening to their interests” (Liska, 1992: 174). Despite the critical role of Blalock’s work in theoretical and empirical studies of social threat, there remain relatively few sentencing studies that empirically test his arguments about the two types of threat and their non-linear effects.

Minority Threat and Sentencing

In sentencing research, minority population size has been used as an indicator of racial or ethnic threat that, in turn, has been used to predict individual-level sentencing outcomes (Britt, 2000; Crawford et al., 1998; Fearn, 2005; Helms and Jacobs, 2002; Johnson, 2003, 2005, 2006; Johnson et al., 2008; Myers and Talarico, 1987; Ulmer, 1997; Ulmer and Johnson, 2004; Weidner et al., 2005). The studies to date collectively provide divergent findings regarding the association between minority population size, typically measured as the percent of the population that is black, and sentencing severity. For example, whereas Myers and Talarico (1987) found that county-level black percentage was positively associated with imprisonment (see also Britt 2000; Weidner et al. 2005), other scholars have found no evidence of a relationship between individual sentencing decisions and the size of the black population (Fearn, 2005; Helms and Jacobs, 2002; Kautt, 2002; Ulmer, 1997; Ulmer and Johnson, 2004; Weidner et al., 2004).

Although prior work has generated insights into minority threat influences on sentencing, it suffers from several limitations. First, extant studies typically have provided only a narrow test of the minority threat perspective articulated by Blalock (1967), relying almost exclusively on racial and ethnic composition as indicators of threat. In so doing, they have largely ignored economic threat and political threat, even though the two are central to Blalock’s theoretical arguments about conflict between dominant and dissimilar minority groups and efforts by the former to control the latter (Dixon, 2006; Eitle et al., 2002).

Second, few studies have investigated whether there is an ethnic threat effect on sentencing (Steffensmeier and Demuth, 2001). Thus, we know little about whether racial threat findings extend to different ethnic groups. Although the logic of the minority threat argument applies equally well to ethnic groups, it ultimately is an empirical question as to whether ethnic threat effects exist and whether they parallel those found in racial threat studies. In this regard, a focus

on Hispanics is particularly warranted because they are, as Esqueda, Espinoza, and Culhane (2008: 182) recently observed, “the largest and fastest growing minority group [in the United States], representing 14 percent of the U.S. population.” For this reason and because of concomitant concerns about competition for jobs and threats to Anglo-American culture, they may constitute a greater perceived threat than do blacks (Steffensmeier and Demuth, 2001: 152). Even so, the history of blacks in America varies greatly from that of Hispanics, and public opinion research suggests that race may be a more salient threat marker than is ethnicity (Dixon, 2006; Gilliam, Valentino, and Beckmann, 2002; Johnson, 2008; Quillian, 2006).

Third, although Blalock (1967) expressly argued that threat effects would be non-linear, and would vary depending on whether the threat was rooted in concerns about economic competition versus political power, empirical work on his theory has typically tested only for linear effects when applied to sentencing (see, however, Fearn, 2005).² The consequences of failing to test for non-linearities are two-fold. Non-linear effects may exist even if linear effects do not, and if so the problem of model misspecification arises. That is, in failing to detect a linear effect, one might assume that no relationship between, say, percent black, and sentencing exists. However, there may be an effect and it may only be observable with a non-linear specification. And since Blalock argued for a non-linear relationship, studies should test directly for it.

Finally, most studies examining the effect of minority population size on sentencing decisions have combined prison and jail outcomes into one category (see, however, Fearn, 2005). Thus, the largely unaddressed question is whether different dimensions of racial and ethnic threat affect sentencing equally and whether any identified relationships affect prison and jail decisions equally. The latter issue is important because, as Holleran and Spohn (2004: 235) have argued, an assessment of the odds of receiving prison versus jail versus non-custodial sanctions provides a more meaningful picture of sentencing than does a total incarceration variable. According to Spohn and her colleagues, prison and jail constitute qualitatively different types of punishment that may be meted out for distinct reasons and thus should be separated in sentencing studies (Harrington and Spohn, 2007; Holleran and Spohn, 2004; see also Blumstein et al., 1983). Steffensmeier et al. (1993: 422), drawing on Kramer and Scirica’s (1986) work, have made much

the same argument, noting in particular that “a sentence of county jail time is viewed typically as less stigmatizing and less punitive than state prison time.” By extension, should threat effects exist, they may be manifest more through prison sentences rather than jail sentences.

In short, what is needed are studies of Blalock’s (1967) minority threat arguments, and of threat theories in general, that (a) examine different dimensions of threat (e.g., economic and political), (b) assess ethnic threat, (c) test for non-linear effects, and (d) model jail and prison outcomes separately. The present study aims to fill these research gaps and in so doing contribute to an emerging body of research that develops more nuanced, multilevel accounts of sentencing.

Hypotheses

The above observations give rise to a series of hypotheses about minority threat effects on sentencing. The first, which flows directly from prior minority threat scholarship, asserts that the greater the minority threat, as measured by population size, the more punitive the sanctioning.

The second and third hypotheses test a related idea that has been given less attention but nonetheless is central to Blalock’s (1967) original theoretical work. The second argues that the greater the minority economic threat, the greater the likelihood of punitive sanctioning. In addition, and consonant with Blalock’s theory, this effect should be non-linear; in particular, there should be a decelerating effect whereby higher levels of economic threat produce relatively smaller increases in levels of punitive sanctioning.

The third hypothesis argues that minority political threat should be positively and non-linearly related to punitive sanctioning. Specifically, and again in accordance with Blalock’s theory, there should be an accelerating effect, with higher levels of political threat associated with relatively greater increases in levels of punitive sanctioning.

The fourth hypothesis anticipates that any identified minority threat effects will be more pronounced in predicting prison versus jail sentences. That is, the greater the level of minority threat, the greater the likelihood that a defendant will receive a jail sentence or a prison sentence. Further, because sentencing decisions are related to each other and prison sentencing represents a

more punitive sentence than a jail term (Harrington and Spohn, 2007), the probability of receiving a prison sentence will increase as threat increases; in turn, the probability of receiving a jail sentence will decline because the defendant is receiving a prison term, instead of a jail term.³

The fifth hypothesis is that minority threat effects will be greater when the focus is on measures of black threat rather than Hispanic threat. The reasoning stems from a large body of studies that find that whites' views consistently tend to be more prejudicial toward blacks than toward Hispanics (e.g., Bobo and Hutchings, 1996; Dixon, 2006; Taylor, 1998) and from some studies that suggest that racial threat effects are greater than ethnic threat effects (see, e.g., Bontrager et al., 2005). Thus, while both groups may constitute perceived threats, blacks may be viewed as more threatening. That said, an emerging body of scholarship suggests warrant for taking seriously the counter-hypothesis that a threat effect may be more pronounced when the focus is on Hispanic populations (Esqueda et al., 2008; Steffensmeier and Demuth, 2001).

DATA AND METHODS

Data

We test these hypotheses using a combination of individual-level sentencing data and contextual-level data. The sentencing data come from the State Court Processing Statistics (SCPS) for 1998, 2000, and 2002, which include 46,071 felony defendants processed in 60 large urban counties across 23 states (Bureau of Justice Statistics, 2006). The data, available from the Inter-university Consortium for Political and Social Research (study number 2038), have been used by a number of scholars (see, e.g., Bushway and Piehl, 2007; Demuth and Steffensmeier, 2004; Fearn, 2005; Piehl and Bushway, 2007; Steffensmeier and Demuth, 2006; Weidner et al., 2004; Weidner et al., 2005) and have several strengths, including information about the processing of defendants and their race, ethnicity, and prior contact with the criminal justice system. In addition, the data identify the types of sanctions (e.g., jail or prison) that defendants received. Another important strength of the SCPS data is that, in contrast to the data used in many sentencing studies, they include felony cases filed across a large number of states and counties, thus affording an opportunity to investigate ecological effects on sentencing. As with

most research on individual sentencing outcomes, the SCPS data lack information on judge and victim characteristics and defendants' demeanor and socioeconomic status. They nonetheless provide a unique opportunity to extend work on ecological-level influences on sentencing.

Contextual-level data were obtained from several sources and then merged with the SCPS data. The 2000 U.S. Census data were used to capture county-level variations in social structural characteristics (e.g., percent black, percent Hispanic, white-to-black unemployment ratio, white-to-Hispanic unemployment ratio, levels of resource deprivation, and population density). The Current Population Survey in the 2000 U.S. Census was the source for the state-level voting rates for whites, blacks, and Hispanics, respectively, in the 2000 presidential election. The 1999 National Jail Census was the source for computing a county jail capacity measure, and the 2000 Census of State and Federal Adult Correctional Facilities was the source for computing a state prison capacity measure. County-level index crime rates were obtained from the Uniform Crime Reports (UCR). In addition, sentencing guideline states were identified by drawing on the National Center for State Courts' report on state court organization (Rottman et al., 2000).

Below, we describe each variable in the analyses. Table 1 provides the means and standard deviations for all the study variables, and appendix A provides the zero-order correlations of all the county-level variables, including the ecological measures of racial and ethnic threat and the control variables. Overall, this final data set, which combines the SCPS data and a range of contextual measures, provides a rich and detailed body of information for examining the influence of ecological measures of racial and ethnic threat on sentencing severity.

Insert table 1 about here

Dependent Variable

The incarceration decision variable in this study was coded "1" if the offender was sentenced to any length of confinement in a county jail, "2" if the offender was sentenced to any length of confinement in a state prison, and "3" if the offender was sentenced to any combination of non-incarceration options (e.g., probation, fine, or other). Non-custodial sanction was used as the reference category in all of the statistical models. Among the convicted felons, 37.3 percent were

sentenced to county jails, 38.1 percent were sentenced to state prisons, and 24.6 percent received a non-custodial sanction.

Contextual-Level Racial and Ethnic Threat Variables

Following the lead of Kane (2003), we investigate the contextual effects of racial and ethnic threat separately. The first racial threat measure is the size of the non-Hispanic, black population at the county level. This measure is the most commonly used indicator of racial threat in sentencing studies (see, e.g., Britt, 2000; Fearn, 2005; Kautt, 2002; Ulmer and Johnson, 2004), and threat research generally (e.g., Kent and Jacobs, 2005; Stults and Baumer, 2007). To evaluate the possible non-linear effects of racial composition, we include linear and squared versions of this variable in the analyses.

In addition, we examine two other measures of threat—economic and political. Following the lead of Eitle et al. (2002), we measured black economic threat using the ratio of white-to-black unemployment rates. A higher value represents a higher level of white unemployment compared to minority groups and, in turn, a higher level of economic threat posed by such groups. Black political threat was measured as the ratio of black-to-white voters who voted in the 2000 presidential election. First, we derived the voting-age population that is black or white from the 2000 U.S. Census. Second, we obtained the percentage of blacks and whites who voted in the 2000 presidential election in each state from the Current Population Survey in the 2000 U.S. Census. Third, we multiplied the white and black voting-age population in each county (from the first step) with the corresponding percentage of whites and blacks who voted in that state (from the second step), respectively, to obtain the black and white subpopulation who voted for the 2000 presidential election. Finally, we computed the ratio of black-to-white voters by dividing the black subpopulation by the white subpopulation obtained from the previous step. All three racial threat measures were coded such that higher scores indicate higher levels of racial threat.

After examining racial threat, we investigate the ecological effects of ethnic threat on sentencing. Similar to the construction of three racial threat measures, there are three ethnic threat measures: the size of the Hispanic population (measured by percent Hispanic), Hispanic

economic threat (measured by white-to-Hispanic unemployment ratio), and Hispanic political threat (measured by Hispanic-to-white voting ratio). Once again, the coding of these ethnic threat measures is such that higher values indicate higher levels of threat.

Control Variables

The analyses include several control variables. At the individual level, we controlled for the offender's race (1=non-Hispanic black; 0=otherwise), ethnicity (1=Hispanic; 0=otherwise), sex (1=male; 0=female), and age at arrest (in years). Prior research has consistently showed that offenders' criminal history and offense severity are associated with sentencing outcomes. Here, we constructed measures similar to those used in prior sentencing studies, and, in particular, to studies that have used the SCPS data (e.g., Bushway and Piehl, 2007; Demuth and Steffensmeier, 2004; Fearn, 2005; Steffensmeier and Demuth, 2006; Weidner et al., 2004). The first is criminal history, which we obtained by summing across four dummy variables that measure an offender's prior contact with the criminal justice system, including prior felony arrest, prior felony conviction, prior jail incarceration, and prior prison incarceration (Cronbach's alpha=.80). The second is criminal justice status (1=yes; 0=no), which reflects whether the convicted felon was already involved with the criminal justice system at the time of his or her most recent arrest.⁴

To control for offense severity, we included a dummy variable designed to capture whether a defendant had multiple arrest charges (1=yes; 0=no). We also included three dummy variables to capture the most serious offense type for which the offender was convicted: violent offense (1=yes; 0=no), property offense (1=yes; 0=no), and drug offense (1=yes; 0=no), holding other offense as the reference category (see Fearn, 2005; Johnson, 2005, 2006; Ulmer and Johnson, 2004).⁵ Prior research also emphasizes that the type of disposition and pre-trial detention may affect sentencing severity (e.g., Albonetti, 1986, 1991; Fearn, 2005; Ulmer and Johnson, 2004). We thus controlled for these factors: guilty plea, which indicates whether the defendant pled guilty or went to trial (1=conviction resulting from guilty plea; 0=otherwise), and detention (1=detained prior to trial; 0=otherwise). Since the defendants were processed in the state courts in years 1998, 2000, and 2002, there might be differences resulting from changes in laws,

policies, and law enforcement and court practices from year to year, and so we created dummy variables for years 1998 and 2000, and, in the models, held 2002 as the reference year.

There are a number of county-level factors that could influence sentencing decisions. For example, sentencing could be a function of county jail and state prison capacity. In the analyses, we controlled for county jail capacity and state prison capacity. County jail capacity was computed by dividing the jail population by the jail capacity.⁶ Similarly, state prison capacity was computed by dividing the prison population by its rated prison capacity. Higher scores on these two measures indicate that jails and prisons have less capacity to accept more inmates. Sentencing could also be a function of local crime rates. Thus, we controlled for the average UCR index crime rates from 1998-2002 (Cronbach's alpha=.97).⁷

In addition, we controlled for population density, which may increase pressure on communities to respond to crime (Eitle et al., 2002). The natural log of the density measure was used to correct for skew. Following Sampson and Laub (1993), we controlled for county-level resource deprivation. We extracted several variables from the 2000 U.S. Census, including: median family income, median household income, percent receiving public assistance, percent below poverty, percent unemployed in civilian populations above 16 years old, and per capita income. Because these variables were highly correlated, we used principal components analysis to generate a weighted factor score (eigenvalue=4.77, Cronbach's alpha=.73).

Finally, possible regional and state differences in sentencing practices and the explanatory variables were controlled for by including two dummy variables—one distinguishes counties located in a Southern state, and the other indicates whether counties are located in a state that has sentencing guidelines. We recognize that some measures, such as guideline presence and state prison capacity, are state-level data. However, as Johnson et al. (2008: 755) have observed, “the practical consequence of this limitation is that variation in this measure is reduced, which is likely to make statistical significance tests more conservative.”

Analytic Strategy

One issue that arises in sentencing studies is missing data. For the analyses in this study,

approximately 18 percent of the individual-level cases had missing data. Following the lead of prior researchers who have used the data, we address the issue by using multiple imputation, an approach typically considered superior to dealing with the problem through listwise deletion and to using mean substitution. In Allison's (2000: 301) assessment, "multiple imputation (MI) appears to be one of the most attractive methods for general-purpose handling of missing data in multivariate analysis." The use of multiple imputation has several advantages. For example, by "introducing appropriate random error into the imputation process, . . . it (is) possible to get approximately unbiased estimates of all parameters" (Allison, 2000: 301-302). In addition, "repeated imputation allows one to get good estimates of the standard errors" (p. 302), and "MI can be used with any kind of data and any kind of analysis without specialized software" (p. 302, see also Acock, 2005; Brown and Kros, 2003). In a recent comparison of the different approaches to managing missing data, Acock (2005) echoed this assessment, and, at the same time, underscored that listwise deletion produces the largest percentage error in parameter estimates. For these reasons, then, all the analyses presented here use multiple imputation.

In the original SCPS data, among the 46,071 defendants, 27,019 (58.6 percent) were convicted. In the end, after eliminating 248 cases that were closed before bail, 26,771 cases were left for multiple imputation. In this study, multiple imputation was performed using Patrick Royston's Imputation by Chained Equations (ICE) program, which is implemented in Stata (see Horton and Kleinman, 2007). The main advantage of using the ICE program is that it does not require the multivariate normal distribution assumption, which, in turn, allows the program to impute different types of variables together, such as binary and categorical variables. This advantage is of particular relevance to the current study because most of the variables were binary or categorical in nature. The variables that we used for multiple imputation consisted of those used for the subsequent analyses. In addition, and in accordance with recommended approaches to imputation (see Acock, 2005: 1026), we incorporated additional variables, including the most serious arrest charge, whether the most serious arrest charge was classified as "attempted," prior misdemeanor arrest, and prior misdemeanor conviction. We performed 10 imputations in total.⁸ After imputation, and because of the focus of this study, we included only

defendants who were white, black, or Hispanic.⁹ We also included only defendants who were older than 13. Finally, following Fearn (2005) and Griffin and Wooldredge (2006), we focus on sentencing decisions imposed on convicted felons.¹⁰ In the end, the imputed datasets consisted, on average, of 21,169 convicted felons who were sentenced in 60 large urban counties.

Due to the nature of the data and the use of a multinomial outcome, we use hierarchical generalized linear modeling (HGLM), which incorporates a unique random effect into the statistical model for each county and produces more robust standard errors than non-hierarchical models allow (Raudenbush and Bryk, 2002: 100). Hierarchical models have other advantages, such as “the modeling of heterogeneity in regression coefficients, and the proper estimation of cross-level interaction effects” (Johnson et al., 2008: 756; see also Britt, 2000; Ulmer and Johnson, 2004). In addition, following previous studies that have examined this trichotomous outcome (Fearn, 2005; Harrington and Spohn, 2007; Holleran and Spohn, 2004), we employ multinomial logistic regression models, which reflect the assumption “that the sentencing judge follows a series of decision rules in determining the appropriate sentencing . . . [and the decisions to sentence defendants into one of the three outcomes] are made more or less simultaneously” (Harrington and Spohn, 2007: 50-51).¹¹ Because HLM 6.0 supports the analysis of multiply-imputed datasets (Raudenbush et al., 2004: 46), we applied HGLM to the imputed data (see Raudenbush et al., 2004: 179-182).¹² For all the analyses, we present the model estimates with robust standard errors.¹³ For reference, appendix B displays results for two regression models—one includes only the individual-level controls and the other includes the individual-level and county-level controls.¹⁴ In the analyses that we discuss below, these measures are included in all models but, to conserve space, are not shown in the tables (the full models are available upon request). Inspection of appendix B reveals that, consistent with prior studies, blacks and Hispanics, compared to whites, are more likely to receive punitive sanctions and that legal variables, such as defendants’ prior record, significantly predict the decision to incarcerate.

RESULTS

Racial Threat

We begin first by presenting results of analyses aimed at testing the racial threat hypotheses. Review of table 2 shows that when racial threat is operationalized as county-level black population size, both the linear and quadratic terms are statistically significant for the jail sentences, but only the quadratic term is statistically significant for the prison outcome.¹⁵ To facilitate discussion of the results, figure 1 presents the predicted probabilities of receiving a non-custodial, jail, or prison sentence, setting all covariates at their means.¹⁶

Insert table 2 about here

Inspection of the figure reveals that percent black influences the likelihood of receiving a prison sentence versus non-custodial sanction differently than the likelihood of receiving a jail sentence versus non-custodial sanction. For example, and as predicted, the probability of receiving a prison sentence increases at an accelerating rate, as percent black increases. That is, the probability of receiving a prison sentence increases as percent black increases, but the increase becomes greater at around 21 percent, as evidenced by the modestly steeper slope after this point.¹⁷ By contrast, the probability of receiving a jail sentence decreases as percent black increases, but it decreases at a decelerating rate. Here, again, the inflection point occurs around 33 percent. We anticipated that the probabilities of prison sentences would increase and that the probabilities of jail sentences would decrease as percent black increased because sentencing decisions are related and prison sentencing represents a more punitive sanction. The results point to a clear threat effect that results in increased prison sanctions and decreased jail sanctions.

Insert figure 1 about here

Returning to table 2, we now focus attention on the black economic threat and political threat models. As can be seen from model 2, there is no evidence of a black economic threat effect. However, when we turn to model 3, there is evidence of a black political threat effect. Specifically, the linear and quadratic terms for the black-to-white voting ratio are statistically significant in predicting jail sentences, and the quadratic term is statistically significant in predicting prison sentences. Here, again, we plotted the probabilities of each of the three

outcomes across different values of the political threat measure. The pattern of results largely mirror those shown in figure 1 and underscore, again, that greater amounts of threat are associated with a greater probability of receiving a prison sanction, and that this effect is more pronounced at higher values of threat.

In short, although we find no support for the black economic threat hypothesis, we do find support for the racial threat hypothesis when threat is operationalized as percent black or when a variant, political threat, is operationalized as the black-to-white voting ratio. In addition, we find support for the non-linear, accelerating relationship proposed by Blalock (1967). That is, as percent black or political threat increases, the likelihood of a convicted felon receiving a prison sentence increases at a higher rate. We also find that increased threat is associated with a decreased probability of receiving a jail sentence. At a general level, the finding reinforces arguments that the drivers of jail sanctions may differ from those of prison sanctions. It also suggests that, to the extent threat effects exist, they are expressed through recourse to what is typically the most punitive sanction available to the courts.

Ethnic Threat

We turn now to a focus on whether ethnic threat is linked to more punitive sanctioning. The results, presented in table 3, stem from analyses that parallel those used in assessing the racial threat hypotheses. The sole difference is that three ethnic threat measures are included in the models: percent Hispanic, Hispanic economic threat, and Hispanic political threat.

Insert table 3 about here

Beginning with model 1—the percent Hispanic model—we see that both the linear and quadratic terms are statistically significant in predicting the probability of a jail outcome, but neither is significant in predicting a prison outcome. That pattern contrasts with the racial threat percent black results (table 2, model 1) in two ways: The directions of the linear and quadratic coefficients are reversed, and racial threat is statistically significant in predicting prison sanctions. Here, again, to facilitate discussion of the substantive significance of the results, we

plotted the predicted probabilities of the different outcomes for varying levels of percent Hispanic. As can be seen in figure 2, there is clearly a positive, non-linear relationship between percent Hispanic and the probability of receiving a jail sentence. Here, the inflection point is roughly 36 percent. Below that point, the threat effect is more pronounced (i.e., the slope is steeper); past that point, it is less pronounced (i.e., the slope is flatter). Notably, there is no statistically significant difference in the effect of increased levels of percent Hispanic on prison versus non-incarcerative sanctions. More specifically, the higher the percent Hispanic, the greater the probability that a convicted felon received a jail sentence and the lower the probability that he or she received either a prison sentence or a non-incarcerative sanction.

A substantially more muted threat effect thus emerges from these analyses. When the focus is on racial threat, the results indicate that greater levels of ecological-level threat are associated with increased individual-level probabilities of receiving a prison sentence. By contrast, when the focus is on ethnic threat, the results indicate that greater levels of threat are associated with decreased probabilities of receiving a prison sentence but increased probabilities of receiving a jail sentence.

We discuss the contrasting racial and ethnic threat results in the conclusion. However, it first bears emphasizing that, in other respects, the results are similar across both sets of threat analyses. Observe, for example, that in table 3, ethnic economic threat is not significant (model 2), just as the racial economic threat is not significant. In addition, ethnic political threat is statistically significant in predicting jail sentences (model 3), and the effect, when plotted as probabilities (not shown here), indicates that the pattern of results in models 1 and 3 are largely the same. A similar pattern emerged in the racial threat models, with the plotted probabilities from models 1 and 3 in table 2 revealing similar changes in the probabilities of the three sentencing outcomes across varying levels of threat.

Insert figure 2 about here

Before proceeding to the discussion and conclusion, one final set of ancillary analyses bears mention. We assessed if minority threat effects on sentencing were more heavily targeted at

members of perceived threat groups, such as blacks and Hispanics (Steffensmeier et al., 1998; Ulmer and Johnson, 2004; Ulmer, Kurlychek, and Kramer, 2007). Many studies argue that threat effects are diffuse, that they apply equally to minority and non-minority groups (see, e.g., Liska and Yu, 1992). However, threat effects may be targeted in that they may be more pronounced for members of perceived threat groups (see, e.g., Ulmer and Johnson, 2004; Bontrager et al., 2005). To test this idea, we estimated cross-level interactions by specifying individual-level race or ethnicity as a function of ecological-level racial or ethnic threat measures, focusing in particular on whether the different ecological threat measures exerted a greater effect on black and Hispanic convicted felons as compared with whites. Consistent with prior work on the decision to incarcerate (Britt, 2000; Ulmer and Johnson, 2004), the analyses revealed no statistically or substantively significant interaction effects (results available upon request). The lack of a targeted threat effect, however, does not mean that there were no individual-level race and ethnicity effects. As appendix B shows, blacks and Hispanics were more likely to receive tougher sanctions.

DISCUSSION AND CONCLUSION

The goal of this paper was to contribute to sentencing research by examining different dimensions of racial and ethnic threat and exploring whether they exert differential non-linear effects on prison versus jail versus non-custodial sentences. The focus on different dimensions of racial and ethnic threat—including minority population size, minority economic threat, and minority political threat—stems from the fact that recent studies emphasize the role that social context can play in courtroom decision-making and from the need for more precise conceptualizations of racial and ethnic threat. The focus on modeling jail and prison outcomes separately arises from concerns raised in the literature that the two constitute distinct sanctions and combining them would mask important differences in the types of criminal sanctions imposed on white, black, and Hispanic defendants. Building on prior research and Blalock's (1967) minority threat theory, including his argument that threat effects are non-linear, we developed and tested a series of hypotheses using the State Court Processing Statistics data in

combination with a range of contextual-level data.

The main findings can be summarized as follows. Minority threat (as measured by population size) and political threat (as measured by the minority-to-white voting ratio), but not economic threat, were associated with more punitive sanctioning. The population size and political threat effects were more pronounced for racial threat than for ethnic threat and were expressed, in the case of racial threat, primarily through an increased probability of prison sentences and, in the case of ethnic threat, primarily through an increased probability of jail sentences.

The variation in the results by race and ethnicity bears elaboration. In areas with greater black population size or political threat, the probability of receiving a prison sentence was greater while the probabilities of jail sentences declined. The threat effect on prison sentences was more pronounced at higher levels of black political threat, lending support to Blalock's (1967) argument that there should be an accelerating rate effect. The racial threat analyses thus suggest relatively strong support for our hypotheses, although the fact that no economic threat effect surfaced tempers that assessment.

By contrast, in areas with greater Hispanic population size or political threat, the probability of receiving a jail sentence was greater while the probabilities of receiving prison sentences or non-incarcerative sanctions declined. Thus, the ethnic threat analyses suggest mixed support for the hypotheses. On the one hand, there was a negative, not a positive, association between the measures of threat and prison sentences. That finding would seem, if anything, to provide contrary evidence for the theory. However, a strong positive association between these measures and the probability of receiving a jail sentence emerged. This finding lends some support to threat arguments, given that a jail sentence is typically viewed as more punitive than various non-incarcerative options. Even so, jail sentences clearly are less punitive than prison sentences.

We turn now to a synopsis of the tests of our hypotheses. First, we found mixed support for the hypothesis that minority population size is associated with more punitive sanctioning. Racial threat clearly was linked to increased use of prison sentences but not jail sentences, while ethnic threat was linked to increased use of jail sentences and decreased use of prison sentences.

Second, and consistent with some prior studies (e.g., Stolzenberg et al., 2004), we found no

support for the economic threat hypothesis. Third, we found some support for the political threat hypothesis, with the results largely similar to those for the population size analyses. Fourth, we found mixed support for the hypothesis that minority threat effects would be expressed primarily through increased prison rather than jail sentences—that was true in the racial threat analyses but not the ethnic threat analyses. Fifth, we found support for the hypothesis that racial threat effects would be greater than ethnic threat effects. Specifically, racial threat was linked to a greater likelihood of receiving a prison sentence while ethnic threat was not and, instead, was linked to a greater likelihood of receiving a jail sentence.

Two questions emerge from these findings and bear discussion. First, why were black population size and political threat associated with a greater probability of receiving a prison sentence but not a jail sentence? As discussed earlier, sentencing decisions are related to each other. As racial threat increases, the probability of receiving a prison sentence—a more punitive sanction—increases, and in turn, the probability of receiving a jail sentence decreases because defendants are receiving prison terms, instead of jail terms. In addition, it is possible that in largely black communities, the police may make more arrests (Liska and Chamlin, 1984; cf. Stolzenberg et al., 2004: 693). In turn, jails may be used more for temporary confinement of offenders awaiting trial. In such a situation, there is likely to be less capacity for jail sentences (see Ulmer and Johnson, 2004), and so the two remaining options are prison sentences and non-incarcerative sanctions. The plausibility of that argument is reflected in part by the fact that higher levels of black population and political threat were associated with greater probabilities of receiving a non-incarcerative sanction.¹⁸

Second, what accounts for the divergent results between the racial and ethnic threat analyses? That is, why racial threat was positively associated with prison sentencing whereas ethnic threat was positively associated not with prison sentencing but rather with jail sentencing? Two possible explanations present themselves. The first is linked to the observation that, in American society, whites may perceive Hispanics as less threatening than blacks. Dixon (2006) has noted that there exists a historically and culturally rooted racial and ethnic hierarchy in the U.S. in which some minority groups may shift positions. One argument holds that Hispanics have

ascended in the racial and ethnic hierarchy because they are perceived as culturally assimilated. As a result, Hispanics may be perceived as less threatening and even be viewed as “honorary whites,” whereas “blacks have long been perceived as so physically and culturally different from whites to warrant a separate ‘racial’ category both in the public mind and the legal sphere” (Dixon, 2006: 2184; see also Bobo and Hutchings, 1996: 963). The differing perceptions about the two groups is likely to be compounded in so far as crime has been racialized in such a way as to create or reinforce views among whites that blacks constitute a criminal class (Chiricos, Welch, and Gertz, 2004; Quillian and Pager, 2001). The result of the different historical contexts of blacks and Hispanics and the ways in which crime has been racialized may lead to a situation in which the minority threat perspective either does not apply to minority groups other than blacks or may only apply in a more muted or nuanced way (Stults and Baumer, 2007: 539).

A variant of this explanation centers on the notion that Hispanics, as a group, may hold different views about appropriate sanctioning. In turn, these views may hold more sway in areas where Hispanics comprise a greater proportion of the population or have more power. Some evidence for this view comes from opinion polls, which suggest that Hispanics are less punitive than whites. For example, in one national poll, whereas 38 percent of Hispanics felt that the government should make a greater effort to rehabilitate violent criminals, only 23 percent of whites expressed such a view; similarly, whereas 50 percent of Hispanics felt that there should be a greater effort to punish violent criminals, 64 percent of whites expressed such a view (Gerber and Engelhardt-Greer, 1996: 72). When asked about the death penalty, 52 percent of Hispanics said they favored it compared with 77 percent of whites (Longmire, 1996: 100). Given such differences, it is possible that in communities where Hispanics are more prevalent, there may be less willingness to endorse punitive measures, especially those, such as prison, that constitute a qualitatively tougher sanction than either jail or various non-incarceration sanctions. At the same time, there may nonetheless be an ethnic threat effect that results in a greater willingness to seek punitive sanctions, just not prison. In such a context, jail sentences emerge as the natural option since they typically are tougher than non-incarcerative sanctions and less punitive than prison sentences. Whether these explanations account for the different racial and

ethnic threat effects can only be adjudicated, of course, by future research.

Before turning to implications of this study, two limitations should be mentioned. First, our use of offense type (i.e., violent offense, property offense, and drug offense) may not adequately control for crime seriousness. To remedy this problem, we ran models with 15 individual offense dummies, and found that the findings for the variables of interest—that is, ecological-level racial and ethnic threat—remained almost identical. Second, how jurisdictions handle misdemeanor offenses may potentially affect sentencing decisions for felony offenses. Accordingly, when examining threat effects on felony sentencing decisions, it would have been preferable to control for misdemeanor conviction rates, the extent to which misdemeanor convictions result in jail sentences, and the duration of such sentences. Why? Minority threat effects may increase the probability that misdemeanor offenses result in jail sentences and consume jail capacity; as a result, felony offenders may be more likely to be sentenced to prison rather than jail. Sentencing research has not systematically investigated this issue, but future studies ideally should do so.

Several implications flow from this study. The first is that minority threat theory holds considerable promise for generating insights into sentencing decisions. Even so, and despite the prominence of the theory as a framework for understanding such decisions, there remains a need to develop more nuanced tests of it. If this study is any indication, racial and ethnic threat effects may not be the same. If true, it will be important to identify why the differences exist. Is it, for example, the case that Hispanics, as a group, are perceived by whites in a more positive light than blacks, or in a light that is not as closely intertwined with perceptions of criminal behavior? Several studies have found that there is no association between the presence of a large Hispanic or Asian population in a place and prejudice toward these minorities (Dixon, 2006; Taylor, 1998) or perceptions of neighborhood crime levels (Quillian and Pager, 2001). Even so, few sentencing studies have systematically compared racial and ethnic threat effects, much less examined the intervening linkages between each type of threat and specific sentencing outcomes.

Extending the above observations, we submit that the findings here underscore the need for further theoretical and empirical research on the links, if any, between different types of threat. Blalock (1967) argued that minority threat effects have an economic component, yet the results

here and in several other studies (e.g., Eitle et al., 2002; Stolzenberg et al., 2004) do not support such a conclusion. Instead, threat effects on sentencing may derive primarily from political or cultural forces (Taylor, 1998). As Dixon (2006: 2194) has recently observed, minority threat “is likely cultural—and to a lesser extent—political, rather than economic” (cf. Stults and Baumer, 2007). It is, however, just as plausible that multiple types of threat combine or interact with one another, or that they follow a progression that creates the appearance that one is more important than another. Perhaps, for example, economic competition gives rise to political threat, and then the latter effect, when coupled with minority-centered depictions of crime, gives rise to more punitive sanctioning for specific threat groups, whether these are delineated along racial, ethnic, immigrant, class, or other lines (Bontrager et al., 2005; Liska, 1992).

At a more general level, the study’s findings reinforce calls made by others for investigating how ecological-level factors may influence sentencing decisions and whether they interact with individual-level factors (Bontrager et al., 2005; Britt, 2000; Fearn, 2005; Johnson, 2006; Johnson et al., 2008; Mears, 1998; Ulmer and Johnson, 2004). One important avenue of research will be to develop theoretical accounts that help identify ways in which multiple contextual factors (state, county, neighborhood, courtroom, etc.) combine to influence sentencing (Stolzenberg et al., 2004). To illustrate, perhaps threat effects at one level amplify threat effects at another. Although we did not find statistically or substantially significant cross-level interactions, future research needs to continue considering the possibility that ecological-level minority threat may result in the targeting of minority offenders for tougher criminal justice sanctions (see, however, Novak and Chamlin, 2008). Although that possibility comports with minority threat theory, it leaves open the question of how exactly such effects might arise (see Liska, 1992: 176-178). A fruitful line of inquiry would be to connect the minority threat perspective with other related theories, including the focal concerns perspective (Steffensmeier et al., 1998; Steffensmeier and Demuth, 2000), the race-out-of-place perspective (Novak and Chamlin, 2008), and uncertainty avoidance theory (Albonetti, 1991).

Several additional research implications bear mention. It would seem that, at this point, a sufficient number of arrest and sentencing studies have accumulated to cast into doubt the

practice of combining blacks and Hispanics together as “nonwhite.” Combining the two groups creates the risk that researchers will obscure important differences between racial and ethnic threat effects.¹⁹ In a similar vein, the present study reinforces Holleran and Spohn’s (2004) argument that prison and jail sentences should be modeled separately. Here, again, the risk is that by combining the two outcomes together, important differences in the effects of sentencing predictors are obscured. Not least, future research would do well, as Stults and Baumer (2007: 520) have suggested, to develop more precise operationalizations of economic and political threat, preferably using survey data (Blalock, 1967: 154-155).

From a policy perspective, the findings from this study highlight an important question about justice in sentencing. Because courtroom decisions are only supposed to be affected by legally relevant factors (Engen and Gainey, 2000), the characteristics of the county where offenders reside should not, on the face of it, produce any discernible effect on courtroom decision-making. Clearly, that is not the case in this study and in many others (Britt, 2000; Johnson, 2006; Mears, 1998; Ulmer and Johnson, 2004; Weidner et al., 2004). When one of the extra-legal factors is the racial or ethnic make-up of the social context in which sentencing occurs, a particular concern arises, especially given the prominent debates nationally about racial and ethnic overrepresentation in the criminal justice system. Minority threat effects, as gauged by ecological measures, do not necessarily indicate that discriminatory practices are at play (Stolzenberg et al., 2004). Even so, they signal the possibility that extra-legal influences exist. For that reason, institutionalizing efforts to monitor sentencing practices within and across jurisdictions would seem to be a logical step for states to pursue.

In conclusion, this study suggests that sentencing studies would be improved by examining both racial and ethnic threat, different types of threat (e.g., economic and political), non-linear threat effects, and separately analyzing prison and jail outcomes. It remains unclear whether such approaches will yield stronger support for minority threat theories of sentencing, but they likely would provide a more complete and valid account of courtroom decision-making.

ENDNOTES

¹ We acknowledge that earlier-in-the-process decisions (such as arrest and conviction) may provide a more important context for differential and discretionary justice. However, we believe that it is important and useful to investigate the minority threat perspective in felony sentencing for at least three reasons. First, legal scholars have argued that judges have considerable discretion in assigning the type and severity of criminal sanctions even in the most structured sentencing systems (e.g., Tonry, 1988, 1996). Further, empirical evidence has accumulated to suggest that judicial discretion exists and varies across social contexts (e.g., Chiricos and Crawford, 1995; Spohn, 2000). Second, the minority threat perspective has been applied to explain the association between minority presence and levels of social control. Since sanctioning is considered to be an important crime control undertaking, sentencing decisions provide an important platform from which to test the threat perspective. Third, a number of scholars have examined the effect of the percent of blacks—as an indicator of racial threat—on sentencing decisions. Although the results are mixed, some researchers have found a significant effect of racial threat (e.g., Britt, 2000; Myers and Talarico, 1987; Weidner et al., 2005).

² To be sure, a number of studies have investigated the non-linear relationship between percent black and a range of social control measures (e.g., Kane, 2003, 2006; Eitle et al., 2002; Stolzenberg et al., 2004; Stults and Baumer, 2007). To our knowledge, however, only Fearn (2005) evaluated the possibly non-linear effects of percent black on sentencing severity.

³ We thank one of the anonymous reviewers for drawing our attention to this possibility.

⁴ Per Steffensmeier and Demuth (2006: 249): “Defendants who are on release pending another case, on probation, on parole, or in custody when arrested have active criminal justice statuses.”

⁵ We also ran models with the 15 individual offense dummies: murder, rape, robbery, assault, other violent offense, burglary, larceny, motor vehicle theft, forgery, fraud, other property offense, drug sales, weapons, driving-related offense, and other public order offense, holding other drug offense as the reference category. The findings for the variables of interest (i.e., contextual-level racial and ethnic threat variables) were almost identical.

⁶ Four counties in the state of New York did not provide county jail information in the 1999 National Jail Census. For these four counties, we used the jail capacity value for New York City.

⁷ The UCR crime index includes seven offenses: homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft, and motor vehicle theft.

⁸ Shaffer (1999: 7) has argued that “unless rates of missing information are unusually high, there tends to be little or no practical benefit to using more than five to ten imputations.” We erred on the side of caution and used ten.

⁹ Defendants listed as “other” accounted for 2.4% of the cases and included American Indians and Asians. Because we focus on black and Hispanic threat, and the defendants who were in other race category were few and heterogeneous, we removed these cases from the analysis.

¹⁰ We thus excluded convicted misdemeanants. The reasoning stems from the argument that misdemeanants and felons are sentenced through different sentencing procedures. For example, most state sentencing guidelines regulate only felony crimes (Frase, 2005; Tonry, 1988).

¹¹ Given the ordered nature of the dependent variable—the categories are increasingly more punitive, ranging from non-custodial sanctions to prison—an alternative model would be ordinal logistic regression (see Holleran and Spohn, 2004). Ordinal models assume the parameters are invariant across the response categories (Long, 1997: 141), referred to as the proportional odds assumption. We estimated an ordinal regression model using SAS’s PROC LOGISTIC which provides a test for the proportional odds assumption (HLM 6.0 does not provide this test). The ordinal logistic regression model, however, violated the proportional odds assumption ($p < .01$). As a result, we analyzed the incarceration decision using multinomial logistic regression models.

¹² Ideally, we could account for potential dependence among counties nested within the same state by running three-level models. However, given that there are only 60 counties nested in 23 states and that 12 of these states only have one county, sufficient degrees of freedom do not exist to compute county-level random effects. For this reason, we proceeded with two-level models.

¹³ The variance inflation factors for all the county-level variables were all below 4. In addition, the results of condition indices indicated acceptable levels of collinearity (Hair et al., 1998: 220).

The multicollinearity test for all the offender-level variables did not reveal any problems.

¹⁴ Because not all indicted felons were convicted, concerns about potential selection bias arise. Scholars have recommended the inclusion of adjustments for such bias using the Heckman model. However, use of this model is limited to ordinary least square models (Bushway, Johnson, and Slocum, 2007; Griffin and Wooldredge, 2006). We acknowledge this important limitation which, unfortunately, characterizes most research on sentencing (see Johnson, 2006: 275).

¹⁵ We did not report odds ratios because odds ratio for the squared term of contextual-level racial and ethnic threat variables is not intuitive; instead, we present figures to facilitate discussion.

¹⁶ We computed the predicted probabilities for each sentence type using the formula provided by Holleran and Spohn (2004: 219-220).

¹⁷ We used Greenberg, Kessler, and Loftin's (1985: 696) method to determine the inflection point, which is $-b/2a$, where "a" represents the coefficient for the squared term and "b" represents the coefficient for the linear term.

¹⁸ Although we controlled for jail capacity, the measure was not statistically significant in any of the models. Our jail capacity measure, similar to what is used in sentencing studies in general, did not capture the actual capacity of jails to mete out sanctions. For example, it did not take into account the fact that jail bed space may be used for at least two distinct purposes: to sanction individuals to jail terms or to hold them prior to sentencing or transfer to prison.

¹⁹ In this study, we followed the common practice of dichotomizing race into blacks versus whites, and ethnicity as Hispanic versus non-Hispanic. Zatz and Rodriguez (2006: 46) have warned that criminal justice agents may categorize race and ethnicity in highly imperfect ways and "make decisions based on presumed attributes of the racial/ethnic group to which they assume the victim and/or offender belongs." For that reason, future research may benefit from analyses of within-race and within-ethnicity effects using data that permit such investigations. Rice, Reitzel, and Piquero (2005: 48) have found, for example, that "within ethnicity, racial self-identification plays a galvanizing role in shaping perceptions toward racial profiling," which suggests that within- and across-race and ethnicity analysis constitute a fruitful line of inquiry.

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Table 1. Descriptive Statistics

	<i>N</i>	<i>Percent</i>
3-Category Outcome Measure		
Non-custodial sanction (e.g., probation, fine, or other)	5,201	24.57%
Jail	7,903	37.33%
Prison	8,065	38.10%
	<i>Mean</i>	<i>S.D.</i>
Offender-Level Measures (N=21,169)		
Black	.41	.49
Hispanic	.27	.44
White (reference category)	.32	.47
Male	.83	.38
Age	30.95	10.09
Criminal history scale	1.93	1.49
Criminal justice status	.39	.49
Multiple arrest charges	.59	.49
Violent offense	.17	.38
Property offense	.31	.46
Drug offense	.40	.49
Other offense (reference category)	.11	.32
Detention	.51	.50
Plea bargain	.95	.22
Year 1998	.35	.48
Year 2000	.30	.46
Year 2002 (reference category)	.35	.48
County Level (N=60)		
Racial threat		
Percent black	.16	.13
White-to-black unemployment ratio	.41	.09
Black-to-white voting ratio	.28	.34
Ethnic threat		
Percent Hispanic	.17	.15
White-to-Hispanic unemployment ratio	.51	.10
Hispanic-to-white voting ratio	.18	.34
Controls		
County jail capacity	1.21	0.84
State prison capacity	1.03	.13
UCR crime rates	5,126.55	1,853.69
Population density (natural log)	6.57	1.23
Resource deprivation	.00	1.00
Southern county	.32	.47
Sentencing guideline state	.35	.48

Table 2. Regression of the Effect of Racial Threat on the Decision to Incarcerate^a

	Model 1: Black Population Size		Model 2: Black Economic Threat		Model 3: Black Political Threat	
	Jail	Prison	Jail	Prison	Jail	Prison
Intercept	.01 (1.42)	-1.52 (1.21)	.54 (3.51)	-1.13 (3.00)	.12 (1.44)	-1.75 (1.21)
Percent black	-10.22* (3.94)	-5.11 (2.89)				
Percent black ²	15.72* (6.17)	12.25* (5.86)				
White-to-black unemployment ratio			-5.65 (12.06)	-5.75 (9.95)		
White-to-black unemployment ratio ²			9.33 (13.33)	7.57 (11.41)		
Black-to-white voting ratio					-3.20* (1.39)	-1.53 (1.00)
Black-to-white voting ratio ²					2.20** (.68)	1.69** (.54)
Random effect						
Intercept, τ_{00}	1.32**	.75**	1.45**	.84**	1.34**	.70**
χ^2	2,115	1,200	2,083	1,182	2,272	1,172

*p<.05 **p<.01

a. Hierarchical multinomial logistic regression is used because the dependent variable consists of three categories (non-custodial sanction, jail, and prison sentences), and individual defendants are nested in counties. In the models above, non-custodial sanction is the omitted outcome category. Although not shown here, the models include all individual-level variables and county-level controls presented in table 1.

Figure 1. Predicted Probabilities of Receiving One of Three Sanctions at Different Levels of Percent Black

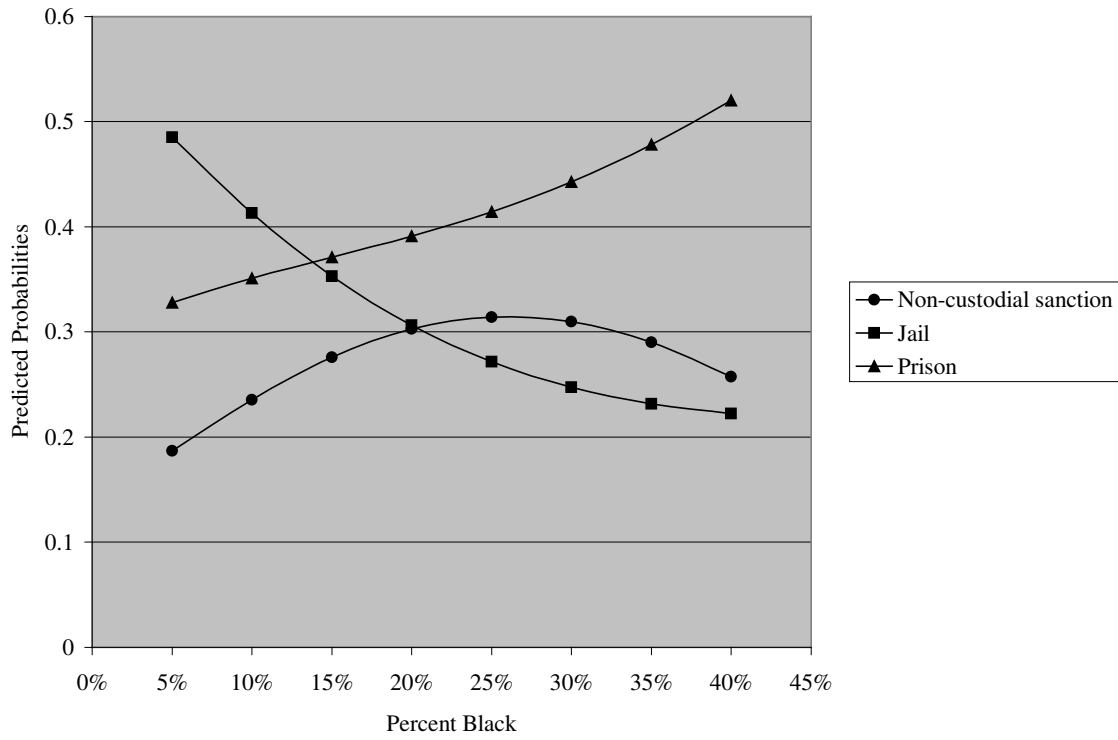


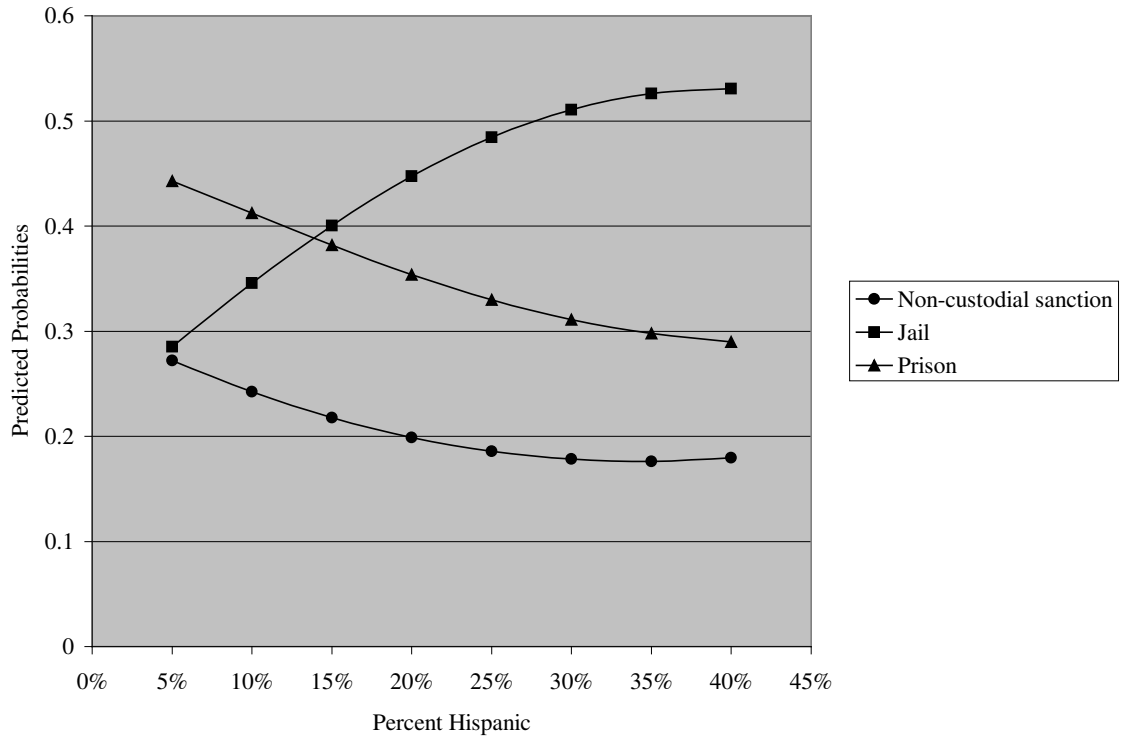
Table 3. Regression of the Effect of Ethnic Threat on the Decision to Incarcerate^a

	Model 1: Hispanic Population Size		Model 2: Hispanic Economic Threat		Model 3: Hispanic Political Threat	
	Jail	Prison	Jail	Prison	Jail	Prison
Intercept	-.65 (1.44)	-1.51 (1.19)	-5.05 (3.75)	-5.31 (3.11)	-.03 (1.32)	-1.60 (1.10)
Percent Hispanic	7.73** (2.09)	1.35 (1.99)				
Percent Hispanic ²	-10.62** (2.85)	-3.06 (2.56)				
White-to-Hispanic unemployment ratio			17.18 (12.79)	11.66 (10.33)		
White-to-Hispanic unemployment ratio ²			-14.40 (12.77)	-10.76 (10.41)		
Hispanic-to-white voting ratio					4.41** (1.43)	.53 (1.35)
Hispanic-to-white voting ratio ²					-2.54** (.69)	-.58 (.65)
Random effect						
Intercept, τ_{00}	1.28**	.82**	1.42**	.82**	1.32**	.80**
χ^2	1,809	1,117	1,912	1,138	1,713	1,066

*p<.05 **p<.01

a. Hierarchical multinomial logistic regression is used because the dependent variable consists of three categories (non-custodial sanction, jail, and prison sentences), and individual defendants are nested in counties. In the models above, non-custodial sanction is the omitted outcome category. Although not shown here, the models include all individual-level variables and county-level controls presented in table 1.

Figure 2. Predicted Probabilities of Receiving One of Three Sanctions at Different Levels of Percent Hispanic



Appendix A. Bivariate Correlations for Contextual (County-Level) Measures

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
X1 Percent black	--	--	--	--	--	--	--	--	--	--	--	--
X2 White-to-black unemployment ratio	-.38**	--	--	--	--	--	--	--	--	--	--	--
X3 Black-to-white voting ratio	.89**	-.20	--	--	--	--	--	--	--	--	--	--
X4 Percent Hispanic	-.28*	.26*	-.01	--	--	--	--	--	--	--	--	--
X5 White-to-Hispanic unemployment ratio	-.16	.55**	-.14	.06	--	--	--	--	--	--	--	--
X6 Hispanic-to-white voting ratio	-.07	.16	.20	.85**	.01	--	--	--	--	--	--	--
X7 County jail capacity	.13	.12	.09	-.21	.17	-.13	--	--	--	--	--	--
X8 State prison capacity	.00	-.06	-.02	-.28*	-.01	-.17	-.18	--	--	--	--	--
X9 UCR crime rates	.49**	-.31*	.39**	-.06	.14	.04	.05	-.10	--	--	--	--
X10 Population density (natural log)	.39**	-.29*	.46**	-.10	-.44**	.05	-.05	.15	-.12	--	--	--
X11 Resource deprivation	.53**	-.02	.65**	.36**	-.03	.48**	-.06	-.02	.43**	.21	--	--
X12 Southern county	.28*	-.05	.22	.08	.13	.18	.32*	-.42**	.39**	-.14	.04	--
X13 Sentencing guideline state	.14	.02	.06	-.36**	.13	-.14	.14	.14	.23	-.02	-.08	.25

*p<.05 **p<.01 (two-tailed test)

Appendix B. Hierarchical Multinomial Logistic Regression of Individual-Level Variables and Contextual Controls on the Decision to Incarcerate

	Model 1		Model 2	
	Jail	Prison	Jail	Prison
Intercept	-.84** (.30)	-1.59** (.27)	.44 (1.39)	-2.03 (1.13)
Offender Level				
Black	.22** (.05)	.18** (.06)	.23** (.05)	.18** (.06)
Hispanic	.39** (.08)	.30** (.07)	.39** (.08)	.29** (.07)
Male	.18** (.05)	.51** (.05)	.18** (.05)	.51** (.05)
Age	-.00 (.00)	-.01** (.00)	-.00 (.00)	-.01** (.00)
Criminal history scale	.14** (.04)	.64** (.03)	.14** (.04)	.64** (.03)
Criminal justice status	.12 (.07)	.24** (.08)	.12 (.07)	.24** (.08)
Multiple arrest charges	.16** (.05)	.43** (.06)	.16** (.05)	.43** (.06)
Violent offense	-.08 (.12)	.59** (.13)	-.08 (.12)	.59** (.13)
Property offense	-.33** (.10)	-.29* (.12)	-.33** (.10)	-.29* (.12)
Drug offense	-.49** (.14)	-.47** (.17)	-.49** (.14)	-.47** (.17)
Detention	.73** (.09)	1.56** (.08)	.73** (.09)	1.56** (.08)
Plea bargain	.33 (.22)	-.62** (.20)	.33 (.22)	-.62** (.20)
Year 1998	.49* (.19)	.47* (.23)	.49* (.19)	.48* (.23)
Year 2000	.20 (.13)	.25 (.13)	.20 (.13)	.25 (.13)
County Level				
County jail capacity			.02 (.10)	
State prison capacity				.75 (.79)
UCR crime rates			-.00 (.00)	-.00 (.00)
Population density (natural log)			-.09 (.15)	.04 (.10)
Resource deprivation			-.15 (.18)	.04 (.13)
Southern county			-.26 (.39)	.18 (.30)
Sentencing guideline state			-.31 (.34)	-.64* (.28)
Random effect				
Intercept, τ_{00}	1.46**	.86**	1.43**	.81**
χ^2	2,423	1,535	2,014	1,128

*p<.05 **p<.01