# Racial and Ethnic Threats in Pretrial Release Processing

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#### **Abstract**

Although extant research highlights the importance of race in determining pretrial detention outcomes, few studies have examined the ecological factors that shape these extralegal disparities. Building on minority threat theories, this project uses hierarchical modeling techniques to examine how county-level ethnic and racial composition impacts pretrial release outcomes for adult defendants charged with drug felonies. Results indicate that racial and ethnic threats significantly influence the amount of bail set, the probability a defendant posts bail, and the likelihood a defendant is detained prior to trial. The paper concludes with a discussion of the structural differences between racial and ethnic threats.

## 1. Introduction

Although studies of courtroom racial/ethnic biases have traditionally focused on final sentencing outcomes, recent scholarship marks the pretrial release stage as a crucial site for producing and promoting racial/ethnic injustices (Freiburger & Hilinski 2010). Blacks and Hispanics are more likely than Whites to be denied bail, receive higher bail amounts, fail to post bail, and be detained prior to trial (Schlesinger 2005). The legal and social ramifications of this racial/ethnic bias are severe: While pretrial detention increases the likelihood of conviction (Schlesinger 2007), incarceration limits economic opportunities, destabilizes social networks, and increases chances of criminal recidivism (Freiburger, Marcum & Pierce 2010).

Despite the importance of the pretrial release process to the well-being of the defendant and the equity of the criminal justice system, the literature on pretrial judicial decision-making remains underdeveloped. In particular, extant research has failed to examine how social ecology structures preadjudication racial/ethnic disparities. Given that courtroom actors are nested within the social, economic and ideological contexts of the surrounding community (Johnson 2006), studying the ecological predictors of pretrial detention outcomes can yield key insights into how racial/ethnic bias forms during the pretrial release process.

To address this gap in the literature, the present research uses pretrial detention data on adult drug felony defendants to examine how social context shapes judicial decision-making during the pretrial release process. Drawing upon minority threat theories, this study tests whether county-level racial/ethnic composition impacts (1) the decision to deny a defendant bail, (2) the decision to offer a defendant a nonfinancial release option, (3) the level of bail set by a judge, (4) the likelihood that the accused will post bail, and (5) the probability that the defendant will be released prior to trial. To this end, the following essay is divided into six parts. Section 2 establishes the theoretical framework for examining minority threat effects in the context of

pretrial detention, as well as provides an overview of the relevant empirical literature. Sections 3 and 4 then describe the data and methodology used to test the minority threat hypothesis for pretrial detention outcomes. Section 5 presents model results and section 6 concludes the paper with a discussion of the theoretical implications that stem from these findings.

# 2. Minority Threats: Theory and Related Literature

Minority threat theories argue that there is a community-level component to courtroom racism. Specifically, the theory posits that White elites view the growth of racial/ethnic minority populations as an imminent threat to their socio-economic dominance (Kane 2003). In an attempt to neutralize this perceived danger, the governing strata will use a variety of social control mechanisms such as policing or imprisonment to "manage" or oppress threatening subpopulations. As a result, defendants adjudicated in counties with large minority communities are expected to face a more punitive judicial environment, with those minorities deemed most dangerous receiving the harshest punishments (Wang & Mears 2010).

In addition to positing that minority threats condition individual-level race/ethnicity effects, a number of theorists hypothesize that minority threat effects have a nonlinear structural form (Liska 1992). Keen & Jacob (2009), for instance, suggest that minority population growth initially leads to a tightening of social control mechanisms; however, once the racial/ethnic group is large enough to significantly influence local political outcomes, stringent social control measures begin to relax as the subpopulation asserts its new governing powers. Consequently, these theories predict an inverted U-shaped relationship between county-level racial/ethnic composition and pretrial adjudication severity.

Despite the extensive theoretical foundations for a minority threat phenomenon, empirical testing has yielded mixed results. Britt (2000), for instance, finds that the proportion of county

population that self-identifies as Black (i.e., percent Black) is positively and linearly correlated with the likelihood of incarceration, but negatively associated with sentence length. In contrast, Ulmer & Johnson (2004), using the same dataset from a later time period, conclude that neither incarceration decisions nor sentencing lengths are significantly associated with percent Black. These studies, however, may have misspecified the structural form of the minority threat. Kane (2003), for instance, finds evidence of nonlinear associations between percent Hispanic and police deployment patterns. Similarly, Wang & Mears' (2010) more recent analyses point to curvilinear relationships between minority populations and sentencing severity; importantly, this study also finds that percent Hispanic and percent Black exert opposite effects on sentencing outcomes, alluding to important differences between racial and ethnic threats.

While inconsistencies plague the minority threat literature on final sentencing, I was only able to identify two studies that directly tested for minority threat effects on pretrial release outcomes. The first utilizes data from 65 counties in a northeastern state to examine the effects of minority population size on the pre-adjudication detention of juvenile delinquents (Armstrong & Rodriguez 2005). Although results indicate that percent minority positively impacts the likelihood of pretrial incarceration, the fact that the sample of defendants is drawn from a single state and that the criminal justice process clearly differs between juveniles and adults limits the extent to which these findings can be generalized. Moreover, Armstrong & Rodriguez's (2005) decision to aggregate African Americans, Asians and American Indians into a single minority threat masks the possibility that minority threat effects vary by racial/ethnic group.

The second study to test the minority threat hypothesis in the context of pretrial detention is an unpublished doctoral dissertation (Junkhyuk 2009). Junkhyuk uses the *State Court Processing Statistics (SCPS)* database to test whether racial composition and economic deprivation explain

between-county variation in pretrial detention outcomes. Strikingly, the study fails to find a consistent relationship between minority population size and criminal justice severity: while percent Black and percent Hispanic are positively correlated with the likelihood of being denied bail, percent Black is found to be *negatively* associated with the amount of bail set for a defendant. These contradictory findings may, however, stem from a number of methodological and theoretical shortcomings. First, the study fails to adequately address the issue of missing data and, as such, may suffer from biased coefficients. More importantly, the study does not test for nonlinear minority threat effects and so may suffer from model misspecification.

Thus, a review of the literature on final sentencing and pretrial detention indicates two areas for further research. The first revolves around the lack of contextual predictors in pretrial detention analysis; the second centers on the unresolved debate over racialized social control and the need to extend tests of the minority threat hypothesis to different criminal justice outcomes. The present study exploits the overlap between these two research agendas by examining whether the racial context in which defendants' are adjudicated influences pretrial release outcomes. Specifically, this paper seeks to (1) test the minority threat hypothesis on pretrial release outcomes, (2) identify the structural form of significant racial/ethnic threat effects, and (3) determine whether Black (Hispanic) threat effects fall hardest on Black (Hispanic) defendants.

#### 3. Data and Variables

## 3.1 Data

To determine the extent to which minority threats impact the pretrial release process, this study merges data drawn from the *State Court Processing Statistics (SCPS)*, 1990-2006 with an array of county-level variables. Since the effects of legal and extralegal sentencing predictors

may vary across crime categories (Schlesinger 2005), the scope of the current analysis is restricted to Black, Hispanic, and White defendants charged with drug felonies in 1998 and 2000.

The SCPS data contains detailed information on felony cases adjudicated in large urban U.S. counties. The database is notable for its rich array of data on the demographic characteristics, criminal history, arrest charges, and pretrial release processing of felony defendants. Of course, no dataset is perfect and Schlesinger (2005) highlights three important limitations of SCPS: (1) rural courts are not represented in the sample, (2) the database lacks information on the defendants' employment status, family ties, and residential stability, and (3) the dataset does not contain information on judge characteristics.

Contextual variables are drawn from a variety of data sources. Measures of county racial composition, economic health and education levels are derived from the 2000 Census. Indicators of county crime levels come from the 1998 and 2000 Uniform Crime Reports, while measures of jail space are derived from the 1999 National Jail Census. Data on county political orientations are collected from ICPSR's *County Characteristics* (2000-2007) database and information on state sentencing structures is drawn from Stemen & Wilson (2005).

## 3.2 Dependent Variables

Five dependent variables are used to represent the pretrial release process: (1) a binary indicator for whether a defendant is denied bail (1=yes), (2) a dichotomous variable for whether a judge grants a defendant a nonfinancial or financial release option (1=nonfinancial), (3) the logged bail amount set by a judge<sup>1</sup>, (4) an indicator variable for whether a defendant posts bail (1=yes), and (5) a dummy for whether the defendant is ultimately detained prior to trial (1=yes). The advantage of dividing the pretrial release process into these five critical junctures is that it

<sup>&</sup>lt;sup>1</sup> A log transformation was used due to severe skewness of the bail amounts.

allows the researcher to distinguish between legal decisions and processing outcomes (Demuth 2003). Legal decisions (variables 1, 2, and 3) are the direct product of judicial decision-making; in contrast, processing outcomes (variables 4 and 5) reflect both the legal decisions and the defendant's ability to respond to those legal decisions (Schlesinger 2005). For instance, whether a defendant posts bail depends both on the level of bail set and the defendant's economic resources.

## 3.3 Minority Threat Variables

Percent Black and percent Hispanic of county population measure racial and ethnic threats. Since minority population size is by far the most commonly used measurement of minority threats (Wang & Mears 2010), results from this study can be compared to a wide range of minority threat studies. To address the possibility of nonlinear minority threat effects, second degree percent Black and percent Hispanic polynomials are included in analyses.

## 3.4 Controls

In accordance with the pretrial detention literature, models contain a variety of legal and extralegal variables. To control for the defendant's criminal history, models contain the following measures: total number of prior felony convictions, total number of prison sentences, a dummy indicating whether the defendant ever previously failed to make a court appearance (1=yes), and a dummy that signifies whether the defendant had an active criminal justice status at the time of arrest (1=active). In addition, regressions include a binary indicator coded "1" if the individual is charged with a drug sales crime and "0" otherwise. Female, Black and Hispanic dummy variables (1=yes) control for relevant extralegal characteristics. Following the lead of extant literature (Schlesinger 2005), age and age squared are included.

Models also control for relevant county characteristics. Per capita income and percentage of families living below the poverty line measure county economic health, while UCR index crime rates account for possible associations between pretrial detention outcomes and county crime levels. A measure of local jail capacity is also included. Since prior research suggests that criminal sentencing is more severe in politically conservative communities (Fearn 2005), regressions use percentage of the county population that voted for George Bush in the 2004 presidential election as a proxy for county political orientation. To account for possible variation in courtroom attitudes towards drug crimes, models also contain a dummy variable for whether there exist statewide habitual offender laws for drug charges. By increasing the sentencing length for drug offenders with prior felony convictions, states that enact habitual drug offender laws take a more punitive stance towards drug crimes. The daily decisions of local judges may reflect this "official" position on drug infractions. Lastly, all models include a year dummy (1=2000).

Table 1 reports the sample means for both dependent and explanatory variables by race/ethnicity, while table 2 provides zero-order correlations for ecological measures.

Descriptive statistics indicate that Hispanics face less favorable outcomes than Whites at all five stages of the pretrial release process. In contrast, Black-White differentials seem to vary by pretrial release outcome. Black and Hispanic defendants are also more likely than Whites to be adjudicated in counties with large minority populations, low per capita incomes, high poverty levels, and high crime rates. Table 2 suggests that multicollinearity will not be a problem in analyses. Since intercorrelations do not exceed 0.70 and variance inflation factors were found to be less than 5 for all individual and contextual variables, prior research suggests that standard errors will not be drastically inflated (Kane 2003).

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<sup>&</sup>lt;sup>2</sup> Jail space was calculated as the total rated capacity of jail facilities within a county divided by the total county-level jail population in 1999. Hence, values greater than 1 indicate that county jails have space to house additional detainees.

**Table 1:** Descriptive Statistics

<b>Fable 1:</b> Descriptive Statistics				
	Black N=4413	White N=2531	Hispanic N=2814	Total N=9758
Dependent Variables				
Bail denial	0.055	0.056	0.063	0.054
Nonfinancial release	0.317	0.383	0.335	0.34
Bail amount (logged)	8.83	9.01	9.49	9.04
Held on bail	0.46	0.398	0.60	0.47
Pretrial detention	0.34	0.295	0.43	0.34
<b>Individual Level Predictors</b>				
Age	30.96	32.71	29.94	31.31
Female	0.17	0.27	0.12	0.19
Drug sales	0.53	0.37	0.50	0.47
Number of charges	1.97	2.23	2.13	2.07
Prior failure to appear before court	0.37	0.28	0.36	0.34
Number of prior felony convictions	1.41	0.94	0.89	1.11
Number of prior prison sentences	0.54	0.27	0.34	0.42
Active criminal status	0.39	0.34	0.40	0.38
<b>Contextual Level Predictors</b>				
Percent Black	24.74	22.05	18.16	21.01
Percent hispanic	19.54	14.56	32.88	23.03
Per capita income	22959.59	24108.58	22808.45	23139.87
Family poverty	12.06	9.04	12.85	11.45
Crime rate	11.33	9.57	13.95	12.07
Jail space	1.02	0.98	0.99	0.99
Bush votes	35.82	44.95	39.10	39.25
Drug habitual	0.07	0.15	0.12	0.11
Year	0.55	0.57	0.50	0.53

Table 2: Correlation Matrix								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Percent Black (1)	1.00							
Percent Hispanic (2)	-0.34	1.00						
Per capita income (3)	-0.12	-0.23	1.00					
Family poverty (4)	0.38	0.38	-0.53	1.00				
Crime rate (5)	-0.19	0.46	-0.20	0.16	1.00			
Jail space (6)	0.11	-0.09	-0.13	0.26	-0.27	1.00		
Bush votes (7)	-0.52	0.06	-0.06	-0.53	-0.06	-0.08	1.00	
Drug habitual (8)	-0.26	-0.06	-0.08	-0.17	-0.01	0.17	0.32	1.00

## 4. Statistical Methods

With roughly 18% of the SCPS case histories containing missing values for at least one variable, missing data problems had to be addressed prior to model estimation. Following the lead of Wang & Mears (2010), this study used Patrick Royston's Imputation by Chained Equations (ICE) program to impute missing values. Like other multiple imputation procedures, ICE begins by filling in the missing data at random (Royston & White 2011). The first variable with missing values is then regressed on the remaining covariates in the dataset. Missing data are replaced with predicted values and the newly imputed variable is then used, along with the other covariates, to impute the missing values of the next variable. Once the missing values for each variable have been imputed, the entire imputation cycle is repeated 10 to 20 times, allowing for the stabilization of imputed values (Royston & White 2011). These iterations ultimately yield a complete dataset with no missing data. The imputation procedure is then repeated to generate multiple imputed datasets. Regression models are estimated separately on each dataset and parameters are then pooled across regression models, yielding the final results (Acock 2005).

The ICE procedure enjoys several advantages over more traditional approaches for working with missing data. First, the ICE package allows researchers to specify different estimation methods for different variables. Consequently, this study was able to use logistic models to impute values for binary variables and linear regressions to predict the missing values of "continuous" variables. Second, multiple imputation methods produce more accurate parameter standard errors that reflect the uncertainty of the imputation process itself (Azur, Stuart, Frangakis & Leaf 2011). As a result, ICE is viewed as superior to list-wise deletion, mean substitution or single imputation methods (Acock 2005).

For each pretrial release outcome, five imputed datasets were generated.<sup>3</sup> All model variables were included in the multiple imputation process, although county-level missing values were addressed separately in order to simplify the ICE procedure.<sup>4</sup> Observations with missing values in the dependent variable were deleted prior to imputation.

In light of the multilevel structure of the data, this study used hierarchical generalized linear models (HGLMs) to analyze minority threat effects. Because similarities are likely to occur among criminal cases that are adjudicated in the same county court, regression techniques that fail to correct for within-county error correlations will bias hypothesis testing results (Ulmer & Johnson 2004). Multi-level modeling, however, not only adjusts parameter standard errors to reflect this error heterogeneity, but also offers researchers the opportunity to explicitly model cross-county variation of the dependent variable. Moreover, by treating individual-level slope coefficients as random effects, researchers can explore how the effects of individual-level characteristics (e.g., race) vary across counties.

Racial and ethnic threats were tested in separate random coefficient models. Kane (2003) justifies the specification of individual racial and ethnic threat models on the grounds that Blacks and Hispanics "pose differential 'threats' to dominant group interests" (276). From a statistical standpoint, specifying Black and Hispanic threats as predictors in separate equations has the added advantage of reducing multicollinearity. Of course, testing for racial and ethnic threats in separate models also increases the chances of omitted variable bias. For instance, if Black threats are a function of Hispanic population size, coefficient estimates on percent Black will be biased

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<sup>&</sup>lt;sup>3</sup> If the assumption of missing at random is satisfied, 5 imputations are sufficient to generate efficient and accurate estimations (Acock 2005).

<sup>&</sup>lt;sup>4</sup> The only contextual variable to contain missing values was jail space. Specifically, jail information was not provided for Bronx, Kings, Queens, New Haven, and Hawaii counties. Following Wang & Mears (2010) suggestion, the three New York counties were assigned New York City's jail space value. For New Haven and Hawaii, imputed values were calculated based on racial composition, population size, percent Republican and income levels.

in regressions that do not include a percent Hispanic predictor. To explore this potential source of bias, models that included both Black and Hispanic threat predictors were estimated. While standard errors in the combined racial-ethnic threat model were (not surprisingly) higher, coefficient estimates on percent Black and percent Hispanic did not change. Thus, since these findings downplay concerns of omitted variable bias, only results from the separately estimated racial and ethnic threat models are presented in this paper.

Likelihood Ratio (LR) tests were then used to identify random intercepts and coefficients. While it would have been ideal to investigate random effects for all individual-level variables, simultaneously estimating the variance and covariance components for 12 parameters exceeded available computing capacity. Consequently, only the coefficients for Black and Hispanic dummies were allowed to vary across counties. Race/ethnicity coefficients that did not have significant between-county variation were treated as fixed effects. Finally, all models investigated the possibility of cross-level interactions between the percent Black (percent Hispanic) and Black (Hispanic) dummies; only significant interactions are displayed in the final results.

## 5. Findings

Estimates of the control variables are displayed in table 3. Results from the racial and ethnic threat hypothesis tests are presented in tables 4 and 5, respectively. Since control measures did not vary significantly between models, they are omitted from tables 4 and 5 to conserve space. For all three tables, odds ratios and coefficient estimates are provided for logistic and linear regressions, respectively; Z-scores are reported in parentheses. Estimates of intercept and race/ethnicity parameter variances are provided in the Random Effects section with variance standard errors reported in parentheses; "zero" indicates that race/ethnicity is a fixed effect.

- Pretrial Release Processing-

Table 3 Control Measures	Bail denial	Nonfinancial release	Bail amount (logged)	Held on bail	Pretrial detention
Individual Controls					
Age	1.03	0.97*	0.02**	1.08***	1.07***
	(0.82)	(-1.76)	(2.19)	(4.15)	(4.72)
Age <sup>2</sup>	1.00	1.00*	-0.00**	1.00***	1.00***
	(-0.95)	(1.93)	(-2.01)	(-3.51)	(-4.23)
Female	0.79 (-1.60)	1.39*** (4.80)	<b>-</b> 0.16*** (-3.84)	1.01 (0.09)	0.77 (-4.09)
Black	1.05	0.89	-0.01	1.86***	1.46***
	(0.31)	(-1.39)	(-0.27)	(6.54)	(4.46)
Hispanic	1.49**	0.56**	0.18***	2.35***	2.56***
	(1.96)	(-2.70)	(3.25)	(3.56)	(5.18)
Drug sales	1.45***	0.37***	0.80***	0.77***	1.96***
	(3.25)	(-15.74)	(23.50)	(-3.48)	(12.69)
Number of charges	1.02	0.91***	0.07***	0.96*	1.04**
	(0.84)	(-4.27)	(8.57)	(-1.93)	(2.46)
Bail amount (logged)	-	-	-	1.88*** (19.87)	-
Prior failure to appear before court	1.13 (1.01)	0.86 (-2.25)	0.04 (0.96)	1.46*** (4.92)	1.37*** (5.11)
Number of prior felony convictions	1.13***	0.79***	0.04***	1.10***	1.21***
	(3.40)	(-8.92)	(3.12)	(4.01)	(9.94)
Number of prior prison sentences	1.06	0.94**	0.11***	1.05	1.12***
	(1.02)	(-1.27)	(5.40)	(1.09)	(3.46)
Active criminal status	11.27***	0.53***	0.08**	1.67***	2.55***
	(18.39)	(-9.45)	(2.28)	(7.26)	(16.00)
Contextual Controls					
Per capita	1.00 (-0.59)	1.00 (-0.66)	-0.00 (-1.50)	1.00 (-1.25)	1.00* (-1.89)
Family poverty	0.95	0.99	-0.10	1.00	0.91***
	(-0.64)	(-0.12)	(-3.16)	(0.00)	(-3.10)
Crime rate	1.00	0.94	-0.01	0.99	1.03*
	(0.17)	(-2.13)	(-0.81)	(-0.31)	(1.88)
Jail space	1.48	0.73	-0.06	1.48	1.44*
	(0.74)	(-0.76)	(-0.27)	(1.60)	(1.77)
Percent Bush votes	1.01 (0.25)	0.96*** (-2.24)	0.00 (0.01)	1.00 (-0.42)	1.00 (0.44)
Drug habitual	1.64	3.79*	<b>-0</b> .74**	1.61	0.62
	(0.50)	(1.78)	(-1.97)	(1.09)	(-1.34)
Year	1.02	1.24***	0.03***	0.92	1.09**
	(0.15)	(2.54)	(8.30)	(-1.07)	(1.48)
Sample Size	10,166	8,251	6,052	6,322	10,709

Significance levels: \* p < .1; \*\* p < .05; \*\*\* p < .01

In line with prior research, table 3 reveals statistically significant race/ethnicity effects.

Interestingly, while Hispanics are more disadvantaged than Whites at all five pretrial release junctures, significant Black-White differentials only appear in processing outcome models. This suggests that Black-White pretrial release disparities stem more from differential access to economic resources than from racial bias in judicial decision-making.

## 5.1 Racial Threat Model

Table 4 presents the results for the racial threat model.<sup>5</sup> While Black threats do not predict bail denial and nonfinancial release outcomes, racial composition is significantly correlated with the amount of bail set for a defendant, whether a defendant posts bail, and whether a defendant is detained prior to trial.

Table 4 Racial Threat Effect	Bail denial	Nonfinancial release	Bail amount (logged)	Held on bail	Pretrial detention
Percent Black	1.07 (1.20)	0.97 (-0.81)	<b>-0</b> .06*** (-2.79)	0.95** (-2.02)	0.94*** (-2.81)
Percent Black <sup>2</sup>	1.00 (-1.02)	1.00 (0.60)	0.00** (2.46)	1.00 (1.14)	1.00** (2.09)
Random Effects					
Var(intercept)	2.79 (0.70)	1.69 (0.38)	0.44 (0.10)	0.66 (0.16)	0.47 (0.11)
Var(Black)	0.03 (0.39)	0.06 (0.56)	zero	zero	0.07 (0.06)
Var(Hispanic)	zero	0.05 (0.07)	0.02 (0.02)	0.20 (0.11)	0.09 (0.08)
Var(residual)	-	-	1.30 (0.02)	-	-

Significance levels: \* p < .1; \*\* p < .05; \*\*\* p < .01

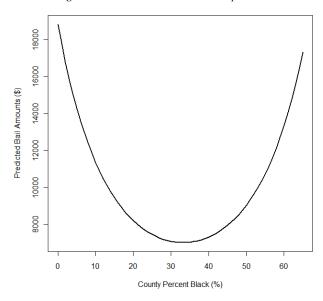
As expected, Black threats are curvilinear for both bail amount and pretrial detention outcomes. In contrast, racial composition is linearly associated with the probability of making bail. This linear relationship may, however, stem from multicollinearity problems. Note, for

<sup>&</sup>lt;sup>5</sup> All interactions between percent Black and Black were statistically insignificant and so are not displayed. Also, since residual errors are not estimated in logistic regressions, only the Bail amount model has estimates for the residual error variance.

instance, that the coefficient signs on the percent Black polynomials are consistent across all models that show significant threat effects.

Contrary to theoretical predictions, analyses depict a parabolic (as opposed to an inverted U-shaped) relationship between Black population size and criminal justice severity. Thus, bail amounts and pretrial detention probabilities decline during the earlier stages of Black population growth and then begin to rise once percent Black is sufficiently large. Equally surprising is the finding that larger Black communities increase a defendant's chances of posting bail. These threat effects are plotted below in figures 1 and 2.6

Figure 1: Predicted bail amounts versus percent Black



Pretrial Detention Outcome

-- Held on bail

-- Pretrial detention

30

County Percent Black (%)

40

50

60

Figure 2: Predicted probabilities of being held on

bail/detained prior to trial versus percent Black

5.2 Ethnic Threat Model

Table 5 presents the results from the ethnic threat model. County ethnic composition significantly impacts the probability of posting bail and the likelihood of being detained prior to

Predicted Probabilities

0.0

0

10

20

<sup>&</sup>lt;sup>6</sup> Figures 1 and 2 plot the model predictions for an average, Black male in the sample. To construct this representative Black male defendant, all individual- and contextual-level variables (save for the race/ethnicity, gender, and percent Black predictors) were held at their respective sample means. The probability plot was then generated by allowing percent Black to roam across its sample range (i.e., 1% to 65%). Thus, data points in figures 1 and 2 represent the predicted values for identical, Black, male defendants living in counties with varying Black population proportions. Subsequent probability plots are constructed using similar methods.

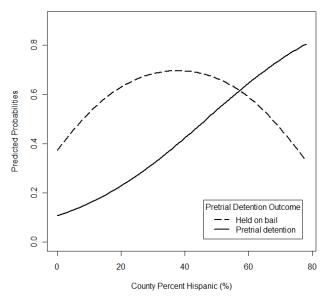
trial, but is uncorrelated with bail denial and nonfinancial release. Ethnic threats are only marginally significant in determining bail amounts.

Table 5 Ethnic Threat Effect	Bail denial	Nonfinancial release	Bail amount (logged)	Held on bail	Pretrial detention
Percent hispanic	0.97 (1.20)	1.01 (0.18)	0.03* (1.89)	1.09*** (4.41)	1.06*** (3.90)
Percent hispanic <sup>2</sup>	1.00 (-1.02)	1.00 (-0.58)	<b>-0.00</b> (-0.46)	1.00*** (-3.08)	1.00 (-1.49)
Hispanic-Percent Hispanic Interaction	-	1.01* (1.83)	-	0.99* (-1.67)	0.99*** (-2.62)
Random Effects					
Var(intercept)	2.66 (0.68)	1.83 (0.43)	0.46 (0.10)	0.56 (0.14)	0.34 (0.09)
Var(Black)	0.00	0.10 (0.06)	0.01 (0.01)	0.00	0.08 (0.06)
Var(Hispanic)	0.16 (0.14)	0.04 (0.08)	0.02 (0.02)	0.17 (0.10)	0.06 (0.06)
Var(residual)	-	-	1.30 (0.02)	-	-

Significance levels: \* p < .1; \*\* p < .05; \*\*\* p < .01

The differences between ethnic and racial threats are striking. While analyses find a curvilinear relationship between percent Black and bail amount, percent Hispanic is (marginally) linearly associated with the judicial setting of bail levels. Similarly, while percent Black is linearly

**Figure 3**: Predicted probabilities of being held on bail and of pretrial detention amounts versus percent Hispanic

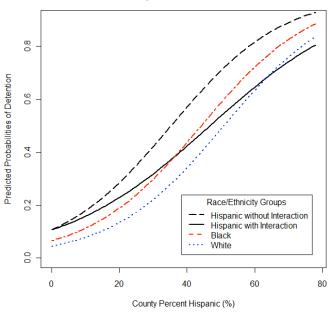


correlated with the likelihood of being held on bail, the county-level presence of Hispanics has a nonlinear effect on making bail. More surprising, however, is the reversal of signs: linear ethnic threat effects carry positive signs and curvilinear ethnic threats follow an inverted U-shaped pattern. This reversal is captured in the predicted probability plot shown in figure 3. Growing

Hispanic populations increase the probability of being held on bail until Hispanics represent approximately 38% of the population; past this point, larger percentages of Hispanics are associated with lower probabilities of not posting bail. In contrast, the likelihood of being detained prior to trial is an increasing function of percent Hispanic.

Results also indicate that Hispanic-White pretrial detention disparities are conditioned by county ethnic composition. Contrary to theory, however, this cross-level interaction term is negative, suggesting that differences in pretrial detention probabilities between Hispanics and

**Figure 4**: The Effects of Percent Hispanic-Hispanic Interaction on the Probability of Pretrial Detention



Whites diminish as percent Hispanic increases. The predicted probability plot displayed in figure 4 shows how expanding Hispanic communities dampen Hispanic-White pretrial detention differentials.

Specifically, observe that, without the percent Hispanic-Hispanic interaction term, Hispanics are consistently more likely to be detained prior to trial than Blacks or Whites. Including this cross-level

interaction, however, causes pretrial detention probabilities to rise slower for Hispanics than for Blacks or Whites. In fact, when Hispanics represent greater than 40% of the county population, Hispanics are less likely than Blacks to be incarcerated prior to trial; similarly, Hispanics face lower detention likelihoods than Whites in counties where Hispanics constitute more than 60% of the total population.

## 6. Discussion and Conclusion: Theoretical Implications and Future Research

In summary, regression analyses provide mixed support for the minority threat hypothesis.

While significant racial/ethnic threats are found for bail amount, posting bail and pretrial detention models, estimated racial threats diverge from theoretical predictions. Moreover, negative cross-level interaction terms contradict expectations that punitive Hispanic threat effects will be more pronounced for Hispanics.

The structural differences between racial and ethnic threats merit additional discussion. One possible explanation for these diverging results focuses on how popular culture differentially relates Hispanics and Blacks to drug crimes. Schlesinger (2005), for instance, finds evidence that "stereotypes of Latino involvement in the drug trade may be even more entrenched than similar stereotypes of Blacks"; in contrast, racial prejudices against Blacks are more salient in the adjudication of violent crimes because Black stereotypes focus on narratives of violence and dangerousness (p. 185). Demuth (2003) similarly notes that the "current drug 'war' entails particularly harsh stereotyping of Hispanic males as drug couriers or traffickers," ultimately arguing that this "identification of drug problems and drug trafficking as closely linked with foreign groups" makes it "especially likely that Hispanic defendants suspected of drug crimes will become targets of increased legal controls" (882).

This intertwinement of Hispanic stereotypes and drug narratives may influence the extent to which judges perceive ethnic threats during their adjudication of drug crimes. Specifically, White elites may be more inclined to act upon perceived minority threats in contexts that are linked, either directly or via stereotypes, to the minority group in question.

This theory would explain the observed minority threat patterns. Since the stereotyping of Hispanics as drug dealers has "prepped" judges to look for Hispanic threats linked to drug

crimes, judges are more likely to respond to Hispanic threats when adjudicating drug crimes. As a result, positive linear or inverted U-shaped relationships will form between percent Hispanic and drug crime adjudication severity. In contrast, since Blacks are less salient in drug narratives than Hispanics, the effects of Black threats on drug crime punishments will be delayed since judges are not as prepared for identifying Black threats in the context of drug adjudication. Potentially, this "delay" could translate into a parabolic minority threat effect.

The existence of negative, cross-level interaction terms between ethnic composition and defendant ethnicity also merits consideration. One possible explanation for this theoretical divergence is that larger Hispanic populations may be able to supply Hispanic defendants with more economic resources, thereby increasing the chances that Hispanic defendants can post bail. This supposition is supported by the marginally significant, negative, percent Hispanic-Hispanic interaction term found for the held on bail model. The fact that all three legal decision models fail to unearth significant interaction terms further suggests that Hispanic population growth dampens Hispanic-White pretrial disparities by strengthening the socioeconomic networks supporting Hispanic defendants. Thus, rather than contradicting minority threat theories, these negative interaction terms suggest that large minority communities can use their pooled resources to mitigate minority threat effects and reduce racial/ethnic disparities in the criminal justice system.

Ultimately, this study serves as an exploratory first-step towards understanding how minority threats influence pretrial release outcomes. Future research should investigate whether the structural form of minority threats is tied to the legal and cultural context in which these threat effects manifest. For instance, this paper proposes testing whether minority threat effects for pretrial release outcomes vary across crime categories. In addition, alternative measures of

minority threats should be explored in the context of pretrial detention. Although using percent Black and percent Hispanic facilitates cross-study comparisons, these measures of minority threat are crude. Finer minority threat measurements may reveal new insights into the pretrial release process.

## References

- Acock, A.C. (2005). Working with missing values. *Journal of Marriage and Family*, 67, 1012-1028.
- Azur, M., Stuart, E., Frangakis, C., & Leaf, P. (2011). Multiple imputation by chained equations: What is it and how does it work? *International Journal of Methods in Psychiatric Research*, 20(1), 40-49.
- Armstrong, G.S. & Rodriguez, N. (2005). Effects of individual and contextual characteristics on preadjudication detention of juvenile delinquents. *Justice Quarterly*, 22(4), 521-538.
- Britt, C. L. (2000). Social context and racial disparities in punishment decisions. *Justice Quarterly*, 17 (4), 707-732.
- Crawford, C., Chiricos, T., & Kleck, G. (1998). Race, racial threat, and sentencing of habitual offenders *Criminology*, 36 (3), 481-512.
- Demuth, S. (2003). Racial and ethnic differences in pretrial release decisions and outcomes: A comparison of Hispanic, Black, and White felony arrests. *Criminology*, 41, 873-908.
- Demuth, S. & Steffensmeier, D. (2004). The impact of gender and race-ethnicity in the pretrial release process. *Social Problems*, 51, 222-242.
- Fearn, N.E. (2005). A multilevel analysis of community effects on criminal sentencing. *Justice Quarterly*, 22(4), 452-487.
- Freiburger, T. L. & Hilinski, C. M. (2010). The impact of race, gender, and age on the pretrial decision. *Criminal Justice Review*, *35*, 318-334.
- Freiburger, T.L, Marcum, C.D., & Pierce, M. (2010). The impact of race on the pretrial decision. *American Criminal Justice*, *35*, 76-86.
- Inter-university Consortium for Political and Social Research. County Characteristics, 2000-2007 [United States] [Computer file]. ICPSR20660-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2008-01-24. doi:10.3886/ICPSR20660.
- Johnson, B.D. (2006). The multilevel context of criminal sentencing: Integrating judge- and county-level influences. *Criminology*, 44(2), 259-298.
- Junhyuk, R. (2009). Pretrial release and social contexts: Is there a link? (Does the effect of race on pretrial release decisions vary across county?). Doctoral Dissertation. Retrieved from <a href="http://etd.ohiolink.edu/view.cgi?acc\_num=ucin1231775256">http://etd.ohiolink.edu/view.cgi?acc\_num=ucin1231775256</a>.
- Kane, R. J. (2003). Social control in the metropolis: A community-level examination of the minority group-threat hypothesis. *Justice Quarterly*, 20(2), 265-295.
- Liska, A.E. (1992). *Social threat and social control*. Albany, New York: State University of New York Press.

- Royston, P. & White, I. (2011). Multiple imputation by chained equations (MICE): Implementation in Stata. *Journal of Statistical Software*, 45(4), 1-20.
- Schlesinger, T. (2005). Racial and ethnic disparity in pretrial processing. *Justice Quarterly*, 22, 170-192.
- Schlesinger, T. (2007). The cumulative effects of racial disparities in criminal justice processing. Journal of the Institute of Justice & International Studies, 7, 261-278.
- Stemen, D., Rengifo, A., & Wilson, J. (2005). Of fragmentation and ferment: The impact of state sentencing policies on incarceration rates, 1975-2002. Final Report to the National Institute of Justice Grant No. NIJ 2002-IJ-CX-0027, August 2005.
- Ulmer, J. T. & Johnson, B. (2004) Sentencing in context: A multilevel analysis. *Criminology*, 42 (1), 137-177.
- United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. State Court Processing Statistics, 1990-2006: Felony Defendants in Large Urban Counties [Computer file]. ICPSR02038-v4. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-09-03. doi:10.3886/ICPSR02038.
- United States Department of Justice. Bureau of Justice Statistics. National Jail Census, 1999 [Computer file]. ICPSR03318-v3. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2009-07-09. doi:10.3886/ICPSR03318.
- U.S. Dept. of Justice, Federal Bureau of Investigation. Uniform Crime Reporting Program Data [United States]: County-Level Detailed Arrest and Offense Data, 1998 [Computer file]. 2nd ICPSR ed. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor], 2001. doi:10.3886/ICPSR02910.
- United States Department of Justice. Federal Bureau of Investigation. Uniform Crime Reporting Program Data [United States]: County-Level Detailed Arrest and Offense Data, 2000 [Computer file]. ICPSR03451-v4. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2006-01-16. doi:10.3886/ICPSR03451.
- Wang, X. & Mears, P. M. (2010). A multilevel test of minority threat effects on sentencing. *Journal of Quantitative Criminology*, 26, 191-215.