Group Threat and Social Control: 
Race, Perceptions of Minorities and the Desire to Punish

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This research examines the individual-level and contextual correlates of punitive attitudes in the United States. Prior research suggests that the demographic composition and economic conditions of geographic areas influence public support for punitive policies. Yet, these findings rest on assumptions about individual perceptions of minority groups as threatening. This work builds on the threat framework by measuring the concept of "perceived threat" and examining the association between aggregate social conditions, perceived threat and punitive sentiments. Analysis of newly collected data suggests that individual perceptions of African Americans as threatening to economic resources is a strong predictor of punitive attitudes. In addition, respondents residing in areas with higher unemployment rates and places that experienced a recent increase in the size of the African American population are more punitive. The latter effect is largely mediated by perceptions of African Americans as threatening to material resources for white respondents. The results agree with racial threat perspectives on social control, but we go beyond extant research by unpacking the micro-level processes that are central to the threat hypothesis.

This research draws on group threat theory (Blalock 1967; Blumer 1958) to investigate the individual-level and contextual correlates of punitive attitudes. Group threat theory posits that prejudice and inter-group hostility are largely reactions to perceived threats by subordinate groups. Dominant groups seek to preserve their advantaged social position and view encroachments on their prerogatives by minority groups as disrupting to the existing social order. Accordingly, prejudice is more prevalent where sources of threat are highest, notably when and where the minority population is relatively large and where there exists competition for limited social resources, such as jobs (Blalock 1967; Quillian 1995). Although originally envisioned as a theory of prejudice and discrimination, the threat hypothesis informs a wealth of research on formal social control and criminal punishment, including work on arrest (Eitle, D'Alessio and Stolzenberg 2002), incarceration (Greenberg and West 2001; Jacobs and Carmichael 2001),

This research was supported by a grant from the David Edelstein Family Foundation. An earlier version of this paper was presented at the 2004 meetings of the American Sociological Association. We thank Penny Edgell, Doug Hartmann, Ross Macmillan, Michael Massoglia, Eric Tranby, Chris Uggen, Sara Wakefield, Allen Wong, anonymous reviewers and the editor of Social Forces for suggestions and assistance. Direct correspondence to Ryan D. King, Department of Sociology, University at Albany, SUNY, Arts and Sciences 351, 1400 Washington Avenue, Albany, NY 12222, e-mail: rking@albany.edu, or Darren Wheelock, Department of Social and Cultural Sciences, Marquette University, Laxumiere Hall 363, Milwaukee, WI 53201, e-mail: darren.wheelock@marquette.edu.

© The University of North Carolina Press Social Forces, Volume 85, Number 3, March 2007
police mobilization (Earl, Soule and McCarthy 2003), criminal justice expenditures (Jacobs and Helms 1999), felon disenfranchisement legislation (Behrens, Uggen and Manza 2003), police use of deadly force (Jacobs and O'Brien 1998), and punitive attitudes (Baumer, Messner and Rosenfeld 2003).

We suggest group threat theory, and specifically the racial threat derivative, provides a useful framework for understanding state social control practices and popular support for crime control initiatives. Yet, empirical research in this tradition rests on a number of assumptions about micro-level processes, namely the degree to which individuals actually perceive racial minorities as threatening (Liska 1997). Racial threat explanations of social control typically assume that individuals, particularly members of the dominant or majority group, perceive a sizeable racial minority group as a viable threat to existing social arrangements and thus both informal social control (Tolnay, Deane and Beck 1996) and formal social control (Jackson 1989; Liska 1992) are greater where racial minority populations are proportionately large. But we are aware of no research empirically investigating whether individual perceptions of racial minorities as threatening are correlated with punitiveness or whether such perceptions help explain the association between aggregate demographic composition and punitive outcomes. Existing work largely operationalizes “threat” using aggregate level measures and relies heavily on inferences and assumptions about individual perceptions of racial minorities as threatening. To borrow Coleman’s (1990:19) terminology, empirical work on group threat and social control largely neglects the “macro to micro transition.”

Although theoretical work emphasizing minority group threat suggests a positive association between community racial demographics and perceived threat (Quillian 1995), alternative perspectives argue that this relationship may be trivial or even negative. One strand of work on inter-group relations suggests that increased contact between different groups fosters cordial relations under particular circumstances (Allport 1954; Smith 1994). Thus, examining the association between macro-level measures of threat, micro-level perceptions of threat and punitiveness has implications for research on social control and inter-group relations more broadly.

We provide a more rigorous test of the minority group threat thesis by empirically investigating how African American population size and individual perceptions of African Americans influence one facet of social control — the desire to punish criminal offenders more harshly. Investigating individual punitive attitudes is fruitful because extant research implies that individual perceptions of threat are the conduit between demographic change and social control outcomes. Moreover, sociologists are increasingly concerned with levels of criminal punishment and the implications of a punitive criminal justice system on other facets of social life, such as civic engagement (Uggen and Manza 2002) and labor force participation (Pager 2003; Western 2002), particularly for racial minorities. Despite unprecedented use of incarceration in the contemporary United States and a decade of declining crime rates, public support for punitive policies such as the death penalty remains high (Baumer, Messner and Rosenfeld 2003). Given this vast expansion of formal social control and the ramifications of a growing ex-felon population, understanding why the public continues to support harsh penal
sanctions warrants sociological inquiry. While prior research has documented the disproportionate impact of the U.S. imprisonment boom on African Americans (Pager 2003; Pettit and Western 2004; Tonry 1995), considerably less work investigates the impact of attitudes towards African Americans on continued support for punitive policies. We shed light on the latter issue.

Research suggests that indicators of racial threat, often measured by the size of the African American population, are related to both prejudice (Taylor 1998; Quillian 1996) and punitive social control (Jacobs and Carmichael 2001, 2002). In line with this body of work, we contend that support for punitive crime control practices is fueled in part by whites' perceptions of African Americans as threatening to economic resources. We advance this idea by directing attention to the relationship between an individual's perception of African Americans as threatening and punitive attitudes, an association largely assumed but rarely tested in existing research. One likely reason why prior work has not explicitly linked aggregate population dynamics, perceptions of threat and punitiveness is because perceptions of threat are rarely measured in large scale surveys such as the General Social Survey. We take advantage of new survey data on the topics of race, perceptions of minorities and attitudes towards punishment among adults residing in the United States. These data, taken from the American Mosaic Survey, are used to examine the association between perceptions of African Americans as threats and punitive sentiments. Further, we test if perceived threat explains the statistical association between aggregate demographics and punitive attitudes, a relationship proffered by theories emphasizing minority group threat.

Background: Minority Group Threat, Prejudice and Social Control

Blumer's (1958) and Blalock's (1967) work on prejudice, competition and group threat serves as the theoretical foundation for a wealth of research on inter-group relations and, more recently, criminal punishment. Blumer's (1958) concept of group threat suggests dominant groups seek to preserve their advantageous position in society and view gains in power by subordinate groups as threatening. Dominant groups fear that subordinate groups will upset existing social arrangements, thus spurring feelings of prejudice and out-group hostility. In other words, "The greater the sense of threat to [the dominant group's] prerogatives, the more likely are members of the dominant group to express prejudice against threatening outsiders." (Quillian 1995:588)

Fluctuations in prejudice or ethnic conflict should thus vary with changes in perceived threats, which are typically measured by (1) the size of the minority group relative to the majority group or (2) economic conditions (Blalock 1967; Quillian 1995). Dominant groups view increases in the relative size of minority groups as problematic because, in a zero-sum sense, greater numbers of minority group members increase competition for valuable but limited social resources, such as access to schools, jobs or housing. Recent empirical work supports this thesis, finding that areas with larger or growing minority populations show greater support for right-wing political candidates (Giles and Buckner 1993), increased attacks on minority groups (Green, Strolovitch and Wong 1998), and higher levels of negative attitudes toward minorities (Quillian 1995, 1996; Taylor 1998).
The racial composition of places is also associated with levels of government social control. Incarceration rates are on average higher in states with larger African American populations independent of potential mediating factors such as crime and unemployment rates (Greenberg and West 2001; Jacobs and Carmichael 2001; Myers 1990). Larger African American populations are also associated with other forms of state social control, such as policing (Jackson 1989; Jackson and Carroll 1987) and criminal justice expenditures (Jacobs and Helms 1999). Moreover, community demographics influence public opinion about crime and punishment. Individuals residing in areas with a higher concentration of African Americans are more apt to perceive higher crime rates (Quillian and Pager 2001) and support capital punishment (Baumer, Messner and Rosenfeld 2003).

Both prejudice against out-groups and social control also co-vary with economic conditions. Competition for limited resources increases during times of economic turmoil (Olzak 1992) and thus levels of prejudice (Brustein 2003; Quillian 1995) and intergroup violence (Hoveland and Sears 1940; Tolnay and Beck 1995) also increase during periods of economic decline. With respect to formal social control, higher imprisonment rates are associated with elevated levels of unemployment (Becket and Western 1999; Greenberg and West 2001; Sutton 2000) and the degree of income inequality (Jacobs and Carmichael 2002; Jacobs and Helms 2001).

We do not investigate the administration of criminal punishment in this study, but focus instead on racial threat and popular support for harsher penal sanctions. Given the association between the size of the African American population, economic conditions and formal social control, we suggest that the racial threat thesis provides a useful lens for investigating punitive beliefs. We focus specifically on racial threat as opposed to the broader idea of “group threat” because of the unique association between African Americans and criminal sanctioning in the United States (Kennedy 1997). Research finds that the size of the African American population, more so than Hispanic or other minority group populations, is associated with prejudice (Taylor 1998) and punitive social control (Jacobs and Carmichael 2002). Still, we do not employ the racial threat thesis uncritically. We argue that extant research over-relies on aggregate level measurement of threat and, accordingly, conclusions frequently rest on tenuous assumptions about individual perceptions of threat.

Macro-level Measures and Micro-level Assumptions Regarding Race and Punishment

The racial threat literature largely relies on macro-level indicators of threat measured at the city, county or state levels of analysis, such as African American population size or economic conditions in a geographic area (Quillian 1996; Taylor 1998; Giles and Evans 1986; Liska, Chamblin and Reed 1985; Eitle, D’Alessio and Stolzenberg 2002; Meyers 1990; Greenberg and West 2001; Jacobs and Carmichael 2001; Jacobs and Helms 1999). Aggregate racial demographics and relative economic deprivation are also linked with higher support for punitive policies (Baumer, Messner and Rosenfeld 2003). Research in this vein typically
examines temporal variation in African American population size and its effect on prejudice or punitive outcomes, thus essentially tracking change in African American population size. In line with this body of work, we suggest the following hypothesis with respect to punitive attitudes:

Hypothesis 1: *Punitive attitudes increase with the size of the African American population and the unemployment rate.*

That hypothesis, however, is contingent on the race of the respondent. We find no research indicating that African Americans perceive increases in the African American population as threatening. Rather, prior work finds that white respondents and to a lesser extent other minority groups perceive African Americans as competitive threats (Bobo and Hutchings 1996). As a corollary to Hypothesis 1 we suggest an interaction between respondent's race and aggregate racial demographics. Specifically,

Hypothesis 2: *Punitive attitudes are more strongly associated with the size of the African American population for white respondents.*

Hypotheses 1 and 2 are consistent with prior work, yet such reliance on aggregate-level indicators of threat is complicated by at least two problems. First, using aggregate level measures of threat assumes that individuals actually perceive increases in African American population size or deteriorating economic conditions as threatening. This assumption, however, is tenuous because research rarely demonstrates an empirical association between aggregate demographics and individual perceptions of threat. Baumer, Messner and Rosenfeld (2003:868) emphasize this dilemma in their work on race and support for capital punishment, stating, "We cannot test directly the causal mechanisms that account for the association between racial composition and support for the death penalty. It could reflect differences in perceived threat, but it also could present some other macro- or micro level process." Their insight encapsulates a wealth of research in this tradition that is unable to account for individual perceptions of threat.

Second, prior research offers many plausible interpretations as to why individuals would perceive African Americans as threatening. Individuals may fear African Americans as threats to public safety and crime (Chiricos, McEntire and Gertz 2001; Quillian and Pager 2001), particularly interracial crime (Eitle, D'Alessio and Stolzenberg 2002). Threat may also stem from concerns that African Americans are gaining political power at the expense of whites (Behrens, Uggen and Manza 2003), economic privilege at the expense of other groups (Bobo and Hutchings 1996) or abusing social welfare (Quadagno 1994). While attempts to adjudicate between potential macro-level sources of threat are fruitful (Eitle, D'Alessio and Stolzenberg 2002), little empirical research measures and investigates perceived racial threat at the individual-level of analysis.

We posit that perceived threat is an equally or more important concept than aggregate measures of threat for understanding punitive attitudes. In line with Blumer's (1958) original premise, perceived threat is defined as individual
perceptions that minority groups, in this case African Americans, pose a threat to the existing social order or will menace social institutions. With the exception of work by Chiricos and colleagues (2001), who measure individuals' perceptions of racial heterogeneity in their neighborhoods, this conceptualization of threat has received scant attention in extant research despite its theoretical salience in classic group threat formulations (Blalock 1967).

We specifically point to two potential sources of racial threat. First, drawing from work on crime perceptions, individuals may perceive African Americans as a threat to personal safety. African Americans are frequently associated with perceptions of crime and violence (Chiricos, McEntire and Gertz 2001; Mendelberg 2001; Peffley, Hurwitz and Sniderman 1997; Quillian and Pager 2001; Russell 1998). If support for harsher penal policies is greater in areas with a higher concentration of minorities (Baumer, Messner and Rosenfeld 2003), and individuals associate the presence of minorities with the presence of crime (Chiricos, McEntire and Gertz 2001; Quillian and Pager 2001), then we propose the following:

Hypothesis 3: Perceptions of African Americans as threats to public safety are positively associated with punitive attitudes.

Second, the racial threat thesis suggests that whites seek to maintain existing power arrangements and control access to economic resources (Blalock 1967). Implicit in this argument is that racial minorities represent a source of competition for economic capital (Olzak 1992), which can yield punitive sentiments via two mechanisms. One line of argument, consistent with instrumental perspectives on minority group relations (Blalock 1967), suggests that competition for employment can be mitigated via state social control of competitors, akin to mitigating political threats via disenfranchisement (Behrens, Uggen and Manza 2003). This explanation assumes that whites understand criminal punishment as a means of suppressing African American encroachment into the labor market and limiting access to material resources. There is some evidence to support a direct connection between economic threat and informal social control (Tolnay and Beck 1995). However, we are aware of no research demonstrating a direct link between individual perceptions of economic threat and punitiveness.

Alternatively, African Americans are often perceived as a burden on public resources that, in turn, generates resentment among elites (Gilens 1999; Quadagno 1994). White respondents who perceive African Americans as abusing social welfare may advocate social control as a response. To that end, and in line with contemporary ideas of laissez-faire racism (Bobo et al. 1997), whites who perceive African Americans as exploiting economic resources are likely ambivalent towards the disparate impact of punishment on the African American community. The nexus of competition, resentment, and ambivalence towards racial disparities in punishment begets the following hypothesis:

Hypothesis 4: Perceptions of African Americans as straining material resources are positively associated with punitive beliefs.
Finally, it is consistent with the racial threat thesis that individual perceptions of African Americans as threatening mediate the association between aggregate social conditions and punitive attitudes. While we expect perceived threat to partly temper the effect of aggregate economic conditions (e.g., unemployment rates) on punitive attitudes, perceived threat should explain a sizeable proportion of the covariation between changes in African American population size and punitiveness. Further, classic group threat formulations (Blalock 1967) suggest that perceived threat is particularly salient for majority group members, in this case white respondents. We thus propose the following:

Hypothesis 5: For white respondents, perceptions of racial threat explain the association between punitive attitudes and aggregate demographics and economic conditions.

This latter hypothesis has notable implications for explanations of social control that emphasize racial threat. As stated above, extant work assumes that whites residing in places with growing African American populations perceive such demographic change as threatening, which in turn has consequences for punitive attitudes and practices. Perceptions of threat are thus the lynchpin in racial threat theories of punishment, yet this linkage is often inferred and rarely tested in extant research. We take explicit steps towards modeling the relationship between aggregate conditions, perceived threat and punitiveness.

Data

Our data are from the 2003 AMS, a national telephone survey of adults residing in the United States using random-digit dialing and Computer Assisted Telephone Interviewing. The University of Wisconsin Survey Center administered the survey to 2,081 adults during the summer of 2003. The survey was designed to gather data on attitudes about race, religion, politics and perceptions of the criminal justice system, as well as respondents' background information. The AMS is thus unique in that it inquires about punitive attitudes, demographic characteristics and, importantly for our research, respondents' attitudes toward African Americans. We are aware of no other survey containing each of these items, which makes the AMS well suited for investigating the effect of perceived threat on punitive attitudes.

The survey administrators randomly selected households, and then respondents were randomly selected within households. Because a primary goal of the survey was to collect data on respondents' attitudes about the role of race in American society, African Americans and Hispanics were oversampled to assure adequate representation of these populations for making comparisons across racial groups. This oversampling was accomplished by calling more heavily in areas that have high concentrations of African Americans and Hispanics.

The survey response rate of 36 percent compares favorably with the response rates achieved by most national RDD-based studies. More importantly than the response rate, however, is the degree of response bias and the extent to which our data are representative of the U.S. adult population. The response rate for
the present data falls below that typically achieved by the General Social Survey, although prior work on response bias indicates few systematic differences between higher response rates (50 to 60 percent) and RDD surveys achieving rates between 27 to 36 percent with respect to demographic and attitudinal indicators (Keeter et al. 2000). Consistent with this assessment, our data compare well with other national surveys such as the GSS and the Current Population Survey on responses to a selection of a demographic, belief and behavioral measures.\(^5\)

The survey design entailed a split ballot, with one module of about half of respondents receiving a battery of questions on stereotypes concerning African Americans and a second module inquiring about other minority groups.\(^6\) Our interest in this research is with the concept of racial threat specifically, and thus we isolate our analysis to survey Module A that asked respondents about perceptions of African Americans.\(^7\) This analysis is based on 1,103 survey respondents.

**Variables**

**Dependent Variable**

Our dependent variable, punitive attitudes, is comprised of three indicators. Respondents were asked whether they strongly agree, somewhat agree, somewhat disagree or strongly disagree with three statements concerning the treatment of criminals. The three statements were:

1. The courts are too lenient with criminals.
2. We need tougher prison sentences for repeat offenders.
3. A person convicted of murder should receive the death penalty.

The response choices were recoded so that, for each measure, higher scores indicated stronger agreement with each statement (respondents refusing to answer and those answering "don't know" were coded as missing).\(^8\) The three measures were combined into a single index with a standardized Cronbach's alpha value of .69.\(^9\) The punitive attitudes index ranges from 0 (low punitiveness) through 9 (high punitiveness). Descriptive statistics for the dependent variable are provided in Table 1.

**Independent Variables**

We first measure aggregate threat as indicated by economic conditions and the demographic composition of counties where respondents reside. The percentage of the county population that is African American (logged) is taken as an indicator of aggregate racial threat.\(^10\) Because related work on inter-group conflict also suggests out-group hostility is influenced by changes in racial composition rather than contemporaneous percentages (Green, Strolovitch and Wong 1998; Olzak 1992), the change in percent African American between 1990 and 2000 in the county where the respondent resides (logged) is also taken into account.\(^11\) Aggregate economic conditions are measured using the percent unemployed in the county. That percentage is calculated as the number of persons 16 years
Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Range</th>
<th>Mean (Standard Deviation)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punitive attitudes</td>
<td>0-9</td>
<td>6.04 (2.35)</td>
<td>999</td>
</tr>
<tr>
<td><strong>Aggregate Threat</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County unemployment rate</td>
<td>23.73-65.56</td>
<td>41.39 (6.65)</td>
<td>1103</td>
</tr>
<tr>
<td>Change in percent African American (logged)</td>
<td>.16-3.55</td>
<td>2.02 (.34)</td>
<td>1103</td>
</tr>
<tr>
<td>Percent African American (logged)</td>
<td>.03-4.40</td>
<td>2.42 (1.09)</td>
<td>1103</td>
</tr>
<tr>
<td><strong>Perceived Threat</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>African Americans pose a threat to public safety</td>
<td>0-1</td>
<td>.15 (.36)</td>
<td>1090</td>
</tr>
<tr>
<td>African Americans divert public resources</td>
<td>0-3</td>
<td>.85 (1.01)</td>
<td>1072</td>
</tr>
<tr>
<td><strong>Crime and Fear of Crime</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afraid to walk alone in neighborhood at night</td>
<td>1-4</td>
<td>1.83 (1.03)</td>
<td>1102</td>
</tr>
<tr>
<td>County homicide rate (per 100,000)</td>
<td>0-41.05</td>
<td>8.10 (6.90)</td>
<td>1076</td>
</tr>
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<tr>
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</tr>
<tr>
<td>Unemployed</td>
<td>0-1</td>
<td>.07 (.25)</td>
<td>1099</td>
</tr>
</tbody>
</table>

or older employed in the civilian labor force divided by the sum of persons 16 years of age or older either employed in the civilian labor force, unemployed in the civilian labor force, or not in the labor force, multiplied by 100. Because these measures are based on 2000 census data and the dependent variable is measured in mid-year 2003, there is a two to three-year lag on the aggregate threat variables. This lag is potentially beneficial in that our aggregate threat indicators temporally precede the measurement of our dependent variable.

We next measure perceived threat, which indicates respondents' perceptions of African Americans as threatening. Specifically, we examine two facets of perceived threat, which refer to whether our survey respondents (1) perceive African Americans as threats to public order and safety, and (2) perceive African Americans as a strain on public resources. The former is measured by responses to the question, "Do African Americans pose a greater threat to public order and safety than other groups, a lesser threat or about the same as other groups?" Responses were coded "1" if they responded "greater threat" for African Americans and coded "0" if respondents selected "lesser threat," "equal threat" or they were not sure. We operationalize perceived threat to material resources by respondents' agreement or disagreement with the statement, "African
Americans take away resources that should go to others, like jobs and welfare." These questions were asked to all respondents in survey module A, regardless of the respondent's race.

Third, we include measures of violent crime and fear of crime. Prior work suggests punitive beliefs, such as support for the death penalty, are related to instrumental concerns about crime and victimization (Zimring and Hawkins 1995). Respondents were thus asked how safe they feel walking alone in their neighborhood at night, with higher scores indicating greater fear of crime. Respondents answering "don't know" were given mean values. We also include the homicide rate per 100,000 residents in the county to control for violent crime, since some prior research finds a correlation between crime rates and attitudes towards punishment (Baumer, Messner and Rosenfeld 2003; Rankin 1979).

Finally, we statistically control for a number of demographic variables potentially correlated with punitive attitudes. Prior research suggests non-whites and women are less punitive, at least with respect to death penalty inquiries (Baumer, Messner and Rosenfeld 2003; Fox, Radelet and Bonsteel 1991). Respondent's sex is measured as a dummy variable (males coded "1") and race is a series of dummy variables that includes respondents identifying as white (used as the reference category), black or African American, non-black Hispanic and "other race" variable consisting of a smaller number of Native American, Asian, Arab or Middle Eastern respondents. We also statistically control for age as a continuous variable indicated by the respondent's self-reported age.

Because support for punitive policies generally dissipates as education increases, we also control for educational attainment as a dummy variable. Preliminary analyses of educational attainment and punitive attitudes suggested few differences in punitiveness for respondents with less than post graduate education. That is, respondents with less than a high school education, those with high school diplomas or associate degrees, and college graduates did not significantly differ with respect to punitive beliefs. Those with post graduate degrees, however, were considerably less punitive, and thus we include a dummy variable indicating a post graduate degree (all others in the reference category). Respondents' employment status was coded as a dichotomous indicator where the value "1" indicates the respondent is not working but currently looking for work.

This analysis also controls for several political and religious variables that are associated with punitiveness. For example, we control for Christian fundamentalism as measured by whether the respondent believes the bible is the "literal word of God" (coded "1;" else coded "0"). It is important to control for such beliefs because prior research suggests fundamentalists are more punitive (Grasmick and McGill 1994; Grasmick et al. 1992). Given that political conservatives are generally more likely to support the death penalty and prior research finds an association between punitive practices and conservatism (Jacobs and Carmichael 2001, 2002), also included is whether the respondent self-identifies as a Republican. Economic and social conservatism are also accounted for with liberals, moderates or those answering "unsure" in the reference categories.
Method and Analytic Strategy

Punitive attitudes are analyzed using random effects regression models. Our dependent variable ranges from 0 to 9 and approximates a normal distribution. The use of Ordinary Least Squares regression with our data is potentially problematic because some respondents reside in the same county, which may result in correlated error terms and deflated standard errors, and hence inflated t-values. Because the number of respondents nested in the respective counties averaged less than three (2.2 respondents per county) and the majority of counties included only a single respondent, correlated errors were not a serious concern. Nonetheless, we attempt to correct for the potential deflation of standard errors by using random effects modeling, a statistical model more frequently employed in pooled time series analysis but containing properties useful for the present data because the random effects model accounts for the error structure better than OLS regression. Random effects models include an error term with two components. One component represents the traditional error term unique to each observation and a second error term represents the difference between the cross-sectional units (counties in our data) and the intercept (Kennedy 1998). The random effects model thus better accounts for within and across unit error relative to the basic OLS model.

Our analytic strategy begins with testing our hypotheses concerning perceived threat and punitiveness by using simple bivariate correlations. Random effects models are then presented to statistically control for other explanatory factors and assess the influence of "aggregate threat." Finally, a path model is employed to test our hypothesis that perceptions of African Americans as threatening largely explains the association between county racial demographics and punitive beliefs for white respondents.

Results

Bivariate Analysis

Findings indicate initial support for Hypotheses 3 and 4: that respondents who perceive minority groups as threats to economic resources or public safety are more punitive. Figure 1 shows the bivariate relationship between punitive attitudes and responses to the question, "African Americans take away resources that should go to others, like jobs and welfare." Respondents who strongly disagree with this statement were the least punitive (average of 5.4), and punitive attitude scores increase in each subsequent category with those strongly agreeing being most punitive (7.29). In similar fashion, respondents regarding African Americans as a greater threat to public safety are on average more punitive (Figure 2), although the difference is not as sizeable (6.89 vs. 5.89).

We thus find initial support for our proposition that perceived threat is related to punitive attitudes, particularly with respect to material resources (Figure 1).

Multivariate Analysis – Random Effects Models

Model 1 of Table 2 presents the coefficients for background and control variables only. Several control variables are significant predictors of punitive attitudes.
Respondents with post secondary education, for instance, are significantly less punitive than less educated respondents (b = -1.521). Political indicators are also salient, where respondents identifying as economic conservatives, social conservatives, and Republicans are on average more punitive. Likewise, religious fundamentalists report higher punitive attitudes scores, net of the other control variables. African Americans are less punitive than whites (b = -0.657), yet no difference is detected between Hispanics, other races and whites. African Americans thus appear distinct in their attitudes towards punitive policies, likely on account of their disproportionate numbers in the American criminal justice system. Neither the homicide rate nor individual fear of crime is significantly associated with punitive attitudes in Model 1, in contrast to instrumental perspectives on punishment (Rankin 1979). This finding is not entirely surprising given that homicide rates are higher in urban settings and in the inner-city, areas that tend to be more liberal and non-white, which are also more likely to oppose harsher criminal justice sanctions.
Figure 2. Punitive Attitudes by Perceptions that African Americans are a Threat to Public Safety

Model 2 in Table 2 adds the aggregate threat measures, which include the county unemployment rate, the percentage of the population that is African American, and the change in the African American population. Adding these three variables to the model yields no meaningful change to the control variables relative to model 1. However, and supporting Hypothesis 1, punitive attitudes increase as the unemployment rate increases. The coefficient for change in percent African American ($b = .374$) is positive but significant at a modest alpha level ($p < .10$, two-tailed). In addition, the results indicate no significant association between contemporaneous African American population size and punitiveness net of the control variables.

Hypothesis 2 is more strongly supported by the interaction models in Table 2 (model 3). As predicted, the main effect of change in percent African American is positive and significant ($b = .813$, $p < .05$), indicating that whites are more punitive if they reside in counties that recently experienced an increase in African American
Table 2: Random Effects Regression Coefficients: Punitive Attitudes on Threat Indicators and Control Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceived Threat</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African Americans pose a threat to public safety</td>
<td>.078</td>
<td>.078</td>
<td>.155</td>
<td>.155</td>
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<tr>
<td>African Americans divert public resources</td>
<td>-.015</td>
<td>-.015</td>
<td>-.120</td>
<td>-.120</td>
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<tr>
<td><strong>Aggregate Threat</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County unemployment rate</td>
<td>.011**</td>
<td>.011**</td>
<td>.011**</td>
<td>.011**</td>
</tr>
<tr>
<td>Change in percent African American (logged)</td>
<td>.374*</td>
<td>.813*</td>
<td>.621*</td>
<td>.621*</td>
</tr>
<tr>
<td>Percent African American (logged)</td>
<td>-.061</td>
<td>-.077</td>
<td>-.137</td>
<td>-.137</td>
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<tr>
<td><strong>Crime-related</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afraid to walk alone in neighborhood</td>
<td>.078</td>
<td>.084</td>
<td>.073</td>
<td>.073</td>
</tr>
<tr>
<td>County homicide rate (per 100,000)</td>
<td>-.015</td>
<td>-.017</td>
<td>-.018</td>
<td>-.018</td>
</tr>
<tr>
<td><strong>Demographic and Political</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Social Conservative</td>
<td>.360*</td>
<td>.356*</td>
<td>.396*</td>
<td>.353*</td>
</tr>
<tr>
<td>Economic Conservative</td>
<td>.690**</td>
<td>.694**</td>
<td>.696**</td>
<td>.669**</td>
</tr>
<tr>
<td>Religious Fundamentalist</td>
<td>.533**</td>
<td>.518**</td>
<td>.525**</td>
<td>.484**</td>
</tr>
<tr>
<td>Republican</td>
<td>.615**</td>
<td>.626**</td>
<td>.600**</td>
<td>.479**</td>
</tr>
<tr>
<td>Age</td>
<td>.001</td>
<td>.001</td>
<td>-.003</td>
<td>-.002</td>
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<tr>
<td>African American</td>
<td>-.657**</td>
<td>-.696**</td>
<td>1.500</td>
<td>1.518</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-.112</td>
<td>-.299</td>
<td>1.636</td>
<td>.537</td>
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<tr>
<td>Other race</td>
<td>-.401</td>
<td>-.408</td>
<td>-.1270</td>
<td>-.1328</td>
</tr>
<tr>
<td>Male</td>
<td>-.166</td>
<td>-.159</td>
<td>-.179</td>
<td>-.283*</td>
</tr>
<tr>
<td>Post graduate degree</td>
<td>-.152**</td>
<td>1.465**</td>
<td>1.476**</td>
<td>-1.307**</td>
</tr>
<tr>
<td>Unemployed and looking for work</td>
<td>-.012</td>
<td>.037</td>
<td>.069</td>
<td>.079</td>
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</tbody>
</table>

Note: Coefficients are presented with their standard errors in parentheses. The asterisks denote statistical significance: *p < .05, **p < .01.
Table 2 continued

<table>
<thead>
<tr>
<th>Interaction Terms</th>
<th>Estimate 1</th>
<th>Estimate 2</th>
<th>Estimate 3</th>
<th>Estimate 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American * change in percent</td>
<td>-1.057*</td>
<td>-.864*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>(.481)</td>
<td>(.473)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic * change in percent African American</td>
<td>-1.018</td>
<td>-.419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American</td>
<td>(.912)</td>
<td>(.898)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other race * change in percent</td>
<td>.452</td>
<td>.556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>(.687)</td>
<td>(.672)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Constant 5.669** 3.421** 2.591** 2.904**

(283)  (.730)  (.892)  (.879)

R² .177 .190 .196 .240

N 924 924 924 909

Note: Standard errors are in parentheses.
*p < .10  *p < .05  **p < .01; all tests two-tailed.

population size. That coefficient contrasts sharply with the effect of population change for African American survey respondents. The interaction coefficient (b = -1.057) indicates that in-migration of African Americans decreases punitive sentiments for African American respondents (-1.057 + .813 = -.244) relative to whites. For other races, however, population dynamics are not significantly associated with attitudes towards punishment.

Model 4 in Table 2 adds the perceived threat measures to the model, which yields two important findings. First, both perceived threat measures are positively and significantly associated with punitive attitudes net of aggregate threat and the control variables, which further supports hypotheses 3 and 4. Moreover, the size of the coefficients are non-trivial. For the measure of perceived economic threat, strongly disagreeing that African Americans take away resources that should go to others compared to strongly agreeing with that statement yields a difference in punitive attitudes of 1.82 (.454*4). Given a standard deviation of just over two units on the dependent variable (see Table 1), such a change is both practically and statistically significant. A second notable finding in Model 4 is that the change in the African American population size coefficient weakens when perceived threat is included in the model. The coefficient for change in percent African American decreases by 24 percent for whites (.813-.621/.813) and is significant only at a modest alpha level (p < .10). Thus, the regression models suggest that perceived threat accounts for part of the association between aggregate racial threat and punitive sentiments, although we find little evidence that unemployment is mediated by perceived threat.

In sum, the results indicate that changes in African American population size influence punitive attitudes for whites (Table 2, Model 3). Additional analyses also show that the relationship between perceived threat and punitive beliefs is most pronounced for white respondents. Given the statistical association
between race, racial demographic change and punitiveness, we next present a path analysis to examine the desire to punish as a function of perceived and aggregate threat for white respondents.

Path Analysis

The path model examines whether perceived threat mediates the effect of aggregate demographic shifts on punitive beliefs (Hypothesis 5). The analysis of white respondents provides a more direct test (1) if racial demographics are associated with whites' perceptions of African Americans as threatening, and (2) if perceptions of African Americans as threatening, in turn, affect attitudes concerning penal sanctions.

Figure 3a shows the unstandardized path coefficients for punitive attitudes as endogenous to the change in African American population size and the unemployment rate. The coefficients in Figure 3a largely corroborate the interaction coefficients in Table 2 (model 3), as both unemployment (b = .03) and the change in percent African American (b = .644) are significantly related to punitive sentiments. Using Figure 3a as a baseline model, Figure 3b illustrates the importance of perceived threat. Neither the unemployment rate nor the change in percent African American remains statistically significant when perceived threat is modeled (Figure 3b). The size of the path coefficient between change in African American population size and punitive attitudes is reduced by 45 percent when the perceived threat measures are modeled ([(.644 - .355)/.644]), in line with hypothesis 5. Moreover, Figure 3b illustrates how changes in African

Figure 3a. Path Analysis: Effects of Aggregate Threat on Punitive Attitudes for White Respondents without Considering Perceived Threat

* * *

*p < .05
Note: The unstandardized coefficients are reported to enable comparison between Figures 3a and 3b. The model controls for all background variables included in model 1 of Table 2, with the exception of race because only white respondents are analyzed.
American population size are associated with perceived threat, which in turn is positively associated with punitiveness. Perceptions of African Americans as an economic threat, in particular, are strongly associated with punitive attitudes for white respondents (b = .571). That series of path coefficients linking demographic change, perceptions of economic threat, and punitiveness are consistent with the tenets of racial threat theory. Yet, whereas prior work has not been able to model these three concepts simultaneously, the data at hand allow for such an assessment.

The results are less straightforward when examining the unemployment rate in relation to punitive beliefs. The direct effect of unemployment on punitive attitudes is no longer statistically significant in Figure 3b (b = .025) and the coefficient size weakens by 17 percent when perceived threat is modeled ([.03 - .025] / .03). Yet, the unemployment rate is not significantly associated with perceived threat either. Hypothesis 5 is thus more strongly supported for aggregate racial demographics than economic conditions.

Figure 3b. Path Analysis: Effects of Aggregate Threat on Punitive Attitudes for White Respondents when Considering Perceived Threat

![Path Analysis Diagram]

Note: The unstandardized coefficients are shown for the focal variables in this path model. The model controls for all background variables included in model 1 of Table 2, with the exception of race because only white respondents are analyzed.
Discussion

Prior research demonstrates an association between aggregate social conditions and punitive outcomes. An implicit assumption when interpreting such correlations is that individuals are aware of aggregate circumstances and feel threatened by an influx of racial minorities or worsening economic conditions. To this end, Baumer and colleagues (2003) emphasize that research has yet to specify the mechanism accounting for the association between minority group size and social control practices. We advance the group threat and social control literatures by elaborating the concept of perceived threat and illustrating its salience for explaining variation in punitive attitudes. Whereas data used in prior work (e.g., the GSS) did not include explicit measures of perceived threat, the AMS queried about respondents’ perceptions of African Americans with respect to crime and use of economic resources. Our analysis found that both aggregate social conditions, namely unemployment rates and changes in African American population size, as well as perceptions of African Americans as threatening are important for understanding the desire to punish. Moreover, we find that whites who live in places with a growing African American population are more punitive largely because they perceive African Americans as a threat to economic resources. The assumptions of racial threat theory were thus supported.

Interestingly, our research suggests that the change in racial composition is a predictor of punitive attitudes while the static percent African American had no effect. This finding is consistent with prior work suggesting that inter-group conflict is a function of relative change in social circumstances as opposed to static, contemporaneous conditions (Olzak 1992:98). Accordingly, findings indicate little support for realistic group conflict perspectives that emphasize minority group size alone (Levine and Campbell 1972), but our results buttress the "defended neighborhoods" proposition that whites perceive racial minorities as threatening when experiencing an influx of racial minorities into the area (Green, Strolovitch and Wong 1998).

This research goes beyond prior work by highlighting the utility of perceived threat for understanding punitive sentiments and by modeling the connection between aggregate demographic change, perceived threat, and its manifestation in punitive desires. Perceived threat has been the theoretical lynchpin connecting aggregate demographic changes and punitiveness in prior research, yet this association has remained empirically elusive. This analysis specifically models racial threat at the macro- and micro-levels of analysis, finding congruence between the two measures in their relationship to punitive beliefs. The perception that African Americans are a strain on material resources, more so than perceptions of African Americans as threats to public safety, is a particularly salient predictor of punitiveness. Many whites are not simply concerned about managing dangerous classes (Feeley and Simon 1992), but more so about managing those perceived as menacing material resources such as jobs and welfare. The strength of this indicator, particularly for white respondents in the path model (Figure 3b), suggests social control is not only a function of concerns about crime, as instrumental perspectives on punitiveness would suggest, but also about material interests.
But why, specifically, do perceptions of economic threat translate into punitive attitudes? Do whites perceive locking up minorities as a solution to job competition? Our results are consistent with such an instrumental rationale, yet we stress an alternative explanation that links race, economics and punitiveness. Respondents harboring such views likely entail a combination of resentment towards African Americans for "abusing" economic resources and ambivalence towards the disparate impact that incarceration and capital punishment have on the African American community, in line with facets of Bobo, Kluegel and Smith's (1997) "laissez-faire racism." From the perspective of the respondent who perceives African Americans as exploiting economic resources, social control would befit those who exploit social welfare, and the racially disparate impact of a punitive state would be of little concern. Future research might further explore the relative influence of perceived competition relative to perceived abuse of the welfare state and ambivalence towards the disparate impact of punitive social control on the African American community.

Our analysis also revealed an association between aggregate unemployment rates and punitive beliefs, which is consistent with the general group threat framework. Unlike the findings for demographic change, however, perceived threat did not statistically account for the association between unemployment rates and punitive beliefs. Economic conditions, it seems, play a lesser role in generating perceived threat than racial demographics. In addition, unemployment rates remained significant when accounting for respondents' education levels and employment status. This begs an intriguing question: If economic conditions are not mediated by individual perceptions of threat or individual employment status, how might we explain the effects of economic conditions on punitive attitudes?

There are three likely reasons, although we cannot test these directly with our data. First, we could not account for employment security. That is, aggregate unemployment may generate frustration among employed respondents if they perceive little job security. On that regard, future work might consider the respective effects of frustration-aggression (Miller 1941) and economic stability in the study of punitiveness. Second, the employment-threat nexus may be sector specific (Olzak 1992) where general employment rates are too crude to detect sector specific nuances. A third potential explanation concerns the level of perceived social cohesion in the community. Deteriorating local economies are indicative of socially disorganized communities, which are also associated with deficient levels of social capital and collective efficacy (Sampson and Raudenbush 1999). Collective efficacy or the related concept of social cohesion are important for the study of punishment, as both classic sociological theory (Durkheim 1893 1984) and contemporary work on punitive attitudes (Tyler and Boeckmann 1997) suggest that perceptions of moral decay are predictive of punitive beliefs. Future work might further explore the link between aggregate social conditions, Durkheimian notions of moral decay and community solidarity, and the resultant impact of these concepts on individual beliefs about crime and punishment. Such analyses may further elaborate the association between aggregate economic conditions and punitive outcomes.
Overall, our findings suggest considerable interplay between individuals and their social context in the study of punitiveness. We underscore perceptions of African Americans as threatening to economic resources as a salient predictor that helps explain why demographic change influences punitive beliefs. To that end, it appears that demographic change more so than changes in crime rates provide clues to understanding the desire to punish.

Notes

1. As Savelsberg (1994) illustrates, public opinion is especially salient when examining temporal variation in justice policy in the American context.

2. Chiricos, Hogan and Gertz (1997) further suggest that the actual racial composition of neighborhoods has little effect on fear of crime among whites. Rather, white respondents perceiving larger minority populations in their neighborhood are more likely to fear crime.

3. The survey was conducted in Spanish when requested.

4. The Council on Market and Opinion Research maintains an ongoing study of response rates. Their study indicates that the current mean response rate for RDD telephone surveys is just over ten percent. Additionally, the most recent American National Election Study had a response rate of 35 percent, slightly less than the AMS response rate.

5. For instance, about 59 percent of our sample is married, mirroring the CPS figure. According to the 2000 General Social Survey, 24 percent of the nation is Catholic, while our sample is 25.5 percent. Moreover, our sample is similar to the national average in education, with 24 percent of AMS and CPS respondents having a college degree. The AMS sample also represents the racial groups that were oversampled in our survey design quite well. The AMS and GSS have comparable percentages of African American Republicans, at 14.8 percent and 12.1 percent, respectively. Hence, our sample appears consistent with the GSS and CPS, which increases our confidence in statistical inference.

6. The ballots used identical questions, but substituted different minority groups. For example, survey module A asked if African Americans pose a greater threat to public safety than other groups, while module B asked if Muslims pose a greater threat to public safety.

7. Whether the respondent received module A or module B of the survey was a function of random selection. No significant differences exist between survey modules with respect to the dependent variable and nearly all of the independent variables. The subsample that we analyze has slightly more males than the full sample (47 vs. 45 percent).

8. We also ran all analyses using mean substitution for the “don’t know” responses. The substantive results replicated in these models.
9. Our alpha reliability coefficient is remarkably similar to related research on punitive beliefs. Tyler and Boeckmann (1997:245), for instance, use similar indicators in their index with an alpha of .69.

10. A constant was added before logging because some values were equal to zero.

11. We added a constant to this variable before logging. We use logged measures because the distribution of the logged variables more closely approximated a normal distribution due to outliers, and comparisons of models using logged and unlogged variables indicated better model fit using the former.

12. This operationalization represents the county civilian unemployment rate and is consistent with census operationalizations (see, for example, Adams 1990).

13. Response choices were strongly agree, somewhat agree, somewhat disagree and strongly disagree. Respondents answering "don't know" were coded at the mean. Supplementary analyses treating the "don't know" responses as missing values yielded the same substantive results.

14. The substantive results were consistent when measuring education as an ordinal variable. However, the dummy variable measure produced better model fit.

15. Supplementary analyses also controlled for income. Income had weak and largely non-significant effects in those models once education and other covariates were statistically controlled. Also, including income did not significantly affect our aggregate threat or perceived threat effects. Because it had no robust impact on punitive attitudes but had more missing cases than other variables, we omit income from this analysis.

16. To measure social and economic conservatism, respectively, respondents were asked, "In terms of social issues, do you consider yourself conservative, moderate, or liberal?" We replaced "social" with "economic" to measure economic conservatism.

17. The results of analyses using OLS closely resemble the random effects results reported in the text, with no substantive differences. Moreover, the substantive results were the same when using the Huber-White sandwich estimate of the standard errors (Rogers 1993). We also considered employing models more commonly utilized for categorical or ordinal data, but potential problems emerged. For example, we did not use multinomial logistic regression because some categories of our dependent variable included rather few respondents (e.g., those scoring "1" on our index), and thus we questioned the stability of the coefficients. We ran additional analyses using ordered probit models and the substantive results replicated. However, since the number of cases in each category of our dependent variable substantially differed (e.g., few respondents scored "0" or "1" on the punitive attitudes index), we interpreted the probit models cautiously. Given the range and distribution of our dependent variable, we felt a linear regression model
that included additional specifications for the error structure was most appropriate, and hence we report the random effects models in the text.

18. Chi-square tests for statistical significance suggested the differences in both Figures 1 and 2 were statistically significant (p < .05).

19. The effect of the county homicide rate might not capture within county variation, and thus we are hesitant to say that violent crime is irrelevant for punitive beliefs, although that finding would align with constructivist arguments (Beckett and Sasson 2000). We also point out that the results reported in Table 2 suggest men are not more punitive than women. Subsequent analyses not shown in this paper indicate that men show greater support for the death penalty specifically, consistent with prior research, yet there is no difference when analyzing the general index of punitive attitudes.

20. These results are not shown in the text but are available from the authors upon request. Only for white respondents were the two perceived threat indicators significantly associated with punitive attitudes in the predicted direction.

21. This model controls for all variables included in model 1 of Table 2, with the exception of race (because we analyze whites only).

References


