COMMUNITY CONTEXT AND SENTENCING DECISIONS: A MULTILEVEL ANALYSIS

by

Noelle E. Fearn

A Dissertation

Submitted to the University of Missouri-St. Louis

in Partial Fulfillment of

the Requirements for the Degree of

Doctor of Philosophy

Approved By: M Battle

Date: 11/24/03

College of Arts & Sciences

Department of Criminology and Criminal Justice

2003

Dissertation Chair/Advisor: Eric P. Baumer, Ph.D.

This dissertation research was supported, in part, by a Graduate Research Fellowship grant from the National Institute of Justice (#2002-IJ-CX-0003).

COMMUNITY CONTEXT AND SENTENCING DECISIONS: A MULTILEVEL ANALYSIS

by

Noelle E. Fearn

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

I owe a special thanks to the community of scholars, friends, and families who supported me throughout this project. I am indebted for life to my husband, Benjamin Brandon Fearn. Ben encouraged my enthusiasm during the good spells and pushed even harder during the bad ones. Without his love, support, and sacrifices this project would still not be completed. Ben, thank you. I am thankful to my parents, Ted and Pat Wear, for their support and encouragement and for instilling in me the essential values that guided me during this process—hard work, commitment, and diligence. I also drew much support from my other parents, Bill and Nancy Fearn, whose emotional support and advice will not be forgotten. Also, Sophie, Isabel, and Walter, thank you! Finally, my dissertation committee, Professor Eric P. Baumer, Professor Robert J. Bursik, Jr., Professor Scott H. Decker, and Professor George J. McCall went above and beyond the call of duty in guiding me throughout this research. They challenged me, encouraged me, supported me, and greatly improved the quality of my work. I thank them for their time, effort, and patience.

ABSTRACT

This dissertation uses data on a large sample of felony defendants processed in a nationally representative sample of large urban counties, in conjunction with data on the characteristics of the jurisdictions in which their cases were adjudicated, to examine the influence of community characteristics on sentencing decisions. Drawing on prior theoretical and empirical research, hierarchical linear and generalized linear models (HLMs and HGLMs) are estimated to determine whether various characteristics of the jurisdictions (e.g., racial composition, age structure, sex ratio, political affiliation, religious affiliations, geographic location, unemployment rates, violent crime rates, and sentencing guidelines) affect the likelihood that criminal defendants receive harsher punishments, net of other factors associated with these outcomes. In addition, this research examines whether community characteristics condition the effects of defendant age, race, and sex on sentencing, including whether any observed race disparities in sentencing outcomes vary in magnitude across jurisdictions and, if so, whether contextual features such as racial composition, age structure, or sex ratio help to explain that variation.

With one notable exception, the results from a series of logistic, multinomial, and linear multilevel models suggest that the community characteristics included in the analysis do *not* affect the in/out incarceration decision, the likelihood of prison versus probation/fine, jail versus probation/fine, prison versus jail, or the sentence length imposed on convicted defendants. Religious affiliation—measured as the percent of community residents who are Protestant—exerted a consistent positive effect on the sentence length outcome. Specifically, convicted defendants adjudicated in counties with a relatively larger proportion of Protestants

receive longer custodial sentences than convicted defendants in other counties. The findings also indicate that none of the community characteristics condition the effects of defendant age, race, or sex on any of the sentencing outcomes. However, there is statistically significant variation in each of these sentencing outcomes, across the counties included in the analyses. Due to the null effects observed for most of the community characteristics and the significant amount of sentencing variation, across counties, to be explained, the limitations, strengths, and implications of the present findings are discussed and future research goals outlined.

CHAPTER ONE: COMMUNITY CONTEXT AND SENTENCING DECISIONS

INTRODUCTION

This research uses data from the 1998 State Court Processing Statistics (SCPS) collection and a specially created county-level data set to examine the effects of community context on individual-level sentencing outcomes. Using multilevel models, I address two primary, interrelated research questions. First, net of the influence of defendant and case characteristics, does community context affect sentencing outcomes for criminal defendants? And second, does community context shape—or condition —the influences of several defendant age, race, and sex on sentencing outcomes?

Although the examination of community context on criminal justice decision making been identified as an important avenue of research (see Black, 1989; Dixon, 1995; Farrell and Holmes, 1991; Hagan and Bumiller, 1983; Myers and Talarico, 1987; Sampson and Laub, 1993; Savelsberg, 1992; Wooldredge, 1998) empirical evidence in the literature is scarce. It seems however, that most people believe that community context does influence legal outcomes. Intuitively, it makes sense that the context in which decisions are made does, at least to some extent, affect those decisions. Yet, past sentencing research has not examined the extent to which community attributes such as age structure, sex ratio, religious affiliation, or political orientation influence sentencing outcomes at the individual level or the extent to which these and other community characteristics (e.g., racial composition) condition the influence of defendant race, sex, and age on sentencing decisions.

To be sure, casual references in the research literature suggest that the likelihood and severity of legal sanctions for criminal defendants might vary across communities,

independent of defendant and case characteristics (see Beaulieu and Messner, 1999; Wooldredge, 1998). For example, Wooldredge (1998:157) reports that not only are findings of disparity in case processing outcomes mixed, but that any reported disparities "may depend on...the specific jurisdiction [examined]." Beaulieu and Messner (1999:50) also suggest the possibility of jurisdictional variation in criminal sanctioning concluding: "Another factor that might underlie the inconsistencies in the research...is that of jurisdictional variation."

In addition to these references to jurisdictional variation in legal outcomes, recent research provides evidence that the application of "three strikes" laws varies across California counties (Austin and Irwin, 2001). These laws are implemented to guide decision makers and to specify the nature of sentences for certain types of defendants. Austin and Irwin (2001) report that the variation associated with the "three strikes" application is due, at least in part, to variation in public sentiment. This evidence, although not a direct examination of legal outcomes, provides further support that sanctions for criminal defendants may vary across communities.

Although empirical evidence is sparse, there is speculation in the theoretical literature about the influence of social context on legal outcomes (e.g., Black, 1989). Additionally, attorneys often report substantial variation across local jurisdictions in how criminal cases tend to be handled. The perception from these complementary positions is that in some jurisdictions defendants are likely to receive harsh sanctions whereas in other jurisdictions similarly situated defendants are treated more leniently. Although many different factors could account for this differential treatment (e.g., case load, court resources, institutional resources, etc.), a potential interpretation, and the one examined in the present research, is

that certain characteristics of local communities affect the outcomes in criminal cases so that individuals adjudicated in particular communities are subjected to more severe sentences. But, why does this contextual variation in sentencing matter? Why is important to examine the role of community context in shaping sentencing outcomes?

In addition to the appealing intuitiveness of and speculation surrounding the influence of community context on sentencing outcomes, the two research questions addressed in the present study are important for several reasons. Generally, Savelsberg (1994, 1992) argues that a primary concern of sociological research should be to learn more about how societies punish criminals. Sampson and Lauritsen (1997) concur and point out that, although this issue has been deemed important, empirical efforts have been lacking in the research literature. More specifically, they suggest that it is important to understand the extent to which punishment is influenced by the larger social context in which it occurs. My study addresses this concern by examining both the main and conditioning influence of community context on individual sentences. By examining community variation in criminal sentences, I contribute to current knowledge of how formal social control (e.g., the criminal justice system) operates and is embedded within and shaped by the local social context.

My research questions about the direct and conditioning influences of community context on individual-level sentencing outcomes are important theoretically, empirically, and for informing policy. Addressing my two primary research questions is important theoretically because, as Mears and Field (2000:1012) point out, "...further theoretical development is needed linking studies of macro-level and micro-level variation in sanctioning." As elaborated in Chapter 3, there is a lack of theoretical development to guide multilevel studies of criminal justice outcomes. Thus, producing answers to these two

questions is a critical first step in providing a foundation for the development of theoretical perspectives that embed individual-level outcomes within their broader context.

There are also important empirical benefits associated with addressing the two questions that provide the focus of the present research. Using a multilevel approach and a specially designed data set that includes individual-level defendant, case, and sentencing outcome measures merged with contextual characteristics from a relatively large number of U.S. jurisdictions, the results of the study will provide a more comprehensive understanding of the importance, strength, and direction of the effects of community characteristics on individual sentencing decisions than has prior research. In addition, the results will increase our understanding of the influences of defendant and case characteristics, especially the contextual nature of those factors.

The study also has important practical implications for criminal justice policies and policymakers. It addresses some of the public and political concerns about criminal justice decision makers' discretion and how they use it. It sheds light on the issues of disparate and discriminatory treatment of defendants and examines, at both the individual and community levels, potential sources of this differential treatment. The data, methods, and analytical strategy employed in the research will provide accurate and reliable results which will enable me to discuss whether, and the extent to which, community context affects the types of sentences imposed on individual defendants, and whether these sentences are imposed fairly and systematically on all types of defendants adjudicated in urban areas across the United States. If this turns out not to be the case, the findings of the present study will provide information about the mechanisms (e.g., local sentencing structures, other contextual features) that do shape the punishment decisions of local decision makers. This information

can then be used to encourage the development of policies and practices that enhance the equity and neutrality of criminal justice outcomes. The development of these equitable and neutral policies will work to strengthen the integrity of the criminal justice system and may increase the public's faith in this system.

Despite the significance of the research questions addressed in the present study, relatively little is known about the influence of social context on sentencing outcomes. In general, there have been three analytical approaches to this issue: macro-level studies, court organizational studies, and multi-level analyses.

There is a large body of research that has focused primarily on aggregate explanatory and outcome measures, especially imprisonment rates (e.g., Austin and Allen, 2000; Bailey, 1981; Beckett and Sasson, 2000; Box and Hale, 1986, 1985, 1982; Bridges and Crutchfield, 1988; Carroll and Doubet, 1983; Chiricos, 1987; Holmes et al., 1996; Jacobs, 1978; Jankovic, 1977; Liska and Chamlin, 1984; Liska et al., 1981; Marenin et al., 1983; Parker and Horwitz, 1986; Sutton, 2000; Williams and Drake, 1980). Overall, the findings from this macro-level research reveal generally consistent relationships between a limited number of contextual characteristics and imprisonment rates. In particular, this research shows a significant association between incarceration rates and the following community conditions: unemployment rates, crime rates, geographic nature (e.g., urbanicity) and location (e.g., region), and racial composition.

The positive relationship between an area's unemployment rate and its incarceration rate is well-established in the macro-level literature. That is, the higher the rate of unemployment in a given area (i.e., nation, state, county, jurisdiction), the higher the rate of incarceration in that area (Beckett and Sasson, 2000; Box and Hale, 1986, 1985, 1982;

Bridges and Crutchfield, 1988; Greenberg, 1977; Jankovic, 1977; Sutton, 2000; Wallace, 1981; Yeager, 1979). Similarly, macro-level research has shown that areas with high crime rates exhibit high rates of incarceration. It is important to note that the crime rate has been defined in several ways in these studies (e.g., overall crime rate, violent crime rate,); however, the relationship generally remains consistent and positive regardless of the measure used (Bailey, 1981; Jacobs, 1979; Liska et al., 1981; Williams and Drake, 1980). The relationship between geographic region and incarceration is fairly straightforward as well. Southern locales (i.e., states, counties, jurisdictions) have higher incarceration rates than their counterparts (e.g., Galster and Scaturo, 1985). Macro-level research indicates that urban locations have higher rates of incarceration than either suburban or rural areas (e.g., Hagan, 1977). The relationship between incarceration rates and racial composition in macro-level studies is somewhat more ambiguous (see, e.g., Bailey, 1981; Carroll and Doubet, 1983), but in general the results suggest that the relative size of the minority population in an area is associated with higher incarceration rates. That is, relatively larger black populations tend to foster higher imprisonment rates (Bridges and Crutchfield, 1988; Jacobs, 1978; Joubert et al., 1981).

Although extremely informative, this body of research has several limitations. Most importantly, macro-level empirical research neglects two sets of predictors with well-established relationships to sentencing outcomes: defendant and case characteristics. By its very nature, the macro-level research typically does not account for the influence of defendant and case characteristics. That is, it only specifies an aggregate-level relationship between an area's incarceration rate and other aggregate-level attributes (e.g., unemployment rate, crime rate, etc.). Although suggestive of the importance of community effects on

sentencing outcomes, these studies do not take into account the nature of the individuals being incarcerated or the nature of the cases for which individuals are incarcerated in different areas. So, the correlation between aggregate-level factors such as imprisonment, unemployment rates, and crime rates could simply reflect differences across communities in the types of cases or the types of defendants sentenced.

At the extreme, this may mean that all of the macro-level incarceration research is misspecified and the findings rendered highly ambiguous. On a more positive note, it means that although macro-level analyses do not assess both individual-level and contextual-level effects and thus, cannot inform us of the relative importance of individual versus contextual characteristics, it still makes a substantial contribution to the literature (by identifying the contextual features that might be important to include in more appropriate research designs). However, we still can not infer from macro-level studies whether social context influences sentencing decisions directly, net of defendant and case characteristics, nor whether it interacts with individual-level defendant characteristics to affect subsequent sentencing outcomes. Even the best designed macro-level research cannot address the latter issue. The limitations of macro-level empirical research lead to a discussion of a second analytical approach that has been used to examine the influence of community context on sentencing outcomes: studies of court organizational contexts.

Much of the court organization research focuses on a limited number (usually less than three) of court jurisdictions (see e.g., Dixon, 1995; Eisenstein et al., 1988; Ulmer, 1997; Ulmer and Kramer, 1998, 1996). However, these studies provide rich details about specific court contexts and organizational features. Although more narrow in focus than an in-depth examination of both individual and contextual characteristics, these studies have provided us

with invaluable information on the types of court organizational characteristics (e.g., case load, level of resources, type of processing and sentencing "norms," "going rates," courtroom workgroups, elected versus appointed court officials, plea bargaining strategies) associated with variation in case processing and outcomes (Dixon, 1995; Eisenstein and Jacob, 1977; Eisenstein et al., 1988; Fine, 1984; Flemming et al., 1992; Nardulli et al., 1988; Ulmer, 1997; Ulmer and Kramer, 1998, 1996). These studies also stress the importance of court efficiency (e.g., reducing the court's case load and case processing time, avoiding backlogs) and the ways in which court actors strive to achieve maximum organizational efficiency (e.g., plea bargaining, standardizing workgroup "templates") (Eisenstein and Jacob, 1977; Eisenstein et al., 1988; Fine, 1984; Flemming et al., 1992; Nardulli et al., 1988; Ulmer, 1997; Ulmer and Kramer, 1998, 1996).

The court organizational studies not only suggest that sentencing outcomes vary across different court contexts, but also that the influences of other key predictors (defendant and case characteristics) might vary due to differences in court contexts as well. One of the primary issues throughout this body of research is the distinction between rural and urban court contexts (e.g., Clayton, 1983; Hagan, 1977; Kempf and Austin, 1986; Miethe and Moore, 1986; Myers and Talarico, 1986a; Pope, 1976). Some of the findings indicate that sentences handed down in rural courts are more punitive than those disposed of in urban courts (Clayton, 1983; Hagan, 1977; Pope, 1976), while others indicate just the opposite (Kempf and Austin, 1986; Miethe and Moore, 1986; Myers and Talarico, 1986a). The studies of specific court organizational contexts are rich in detail and provide valuable descriptive information on the types of courtroom workgroup relations formed and the ways in which these workgroups process caseloads and reduce backlogs. Yet, they are unable to

address systematically the influence of the *broader* community context on case outcomes. These studies typically focus on a limited number of courts and jurisdictions, which precludes generalizing the findings beyond the observation sites. Additionally, prior court organization studies have focused on a narrow range of contextual features, none of these outside of the court itself. In spite of these limitations, court organizational research provides valuable information on the kinds of court features that may influence criminal justice outcomes. However, as the primary focus of this study is on the influence of community characteristics, theoretical and empirical direction from court organizational studies that emphasize features inside the court is understandably limited. This leads to the third, and most relevant, approach used in prior research on community context and sentencing outcomes: multilevel analyses.

While not nearly as numerable as macro-level studies, or as rich in detail as the court organizational studies, there are a few studies that take a third general approach to assess the influence of community characteristics: multilevel analyses that incorporate both data on the defendant and the communities in which they reside (Britt, 2000; Demuth, 2000; Dixon, 1995; Kramer and Ulmer, 1996; Myers and Talarico, 1987; Steffensmeier et al., 1998, 1993; Ulmer, 1997).

The results of prior multilevel studies indicate the importance of including individual-level defendant and case characteristics in analyses of sentencing outcomes, net of the inclusion of contextual factors. That is, even in studies that do examine contextual characteristics as predictors of individual-level sentencing outcomes, defendant characteristics (e.g., race, age, sex, criminal history) and case/legal characteristics (i.e., offense seriousness, plea bargaining, pre-trial detention) remain strong predictors of these

legal decisions (Britt, 2000; Demuth, 2000; Dixon, 1995; Kramer and Ulmer, 1996; Myers and Talarico, 1987; Steffensmeier et al., 1998, 1993; Ulmer, 1997). This point underscores the importance of using a multilevel approach to examine sentencing outcomes, as opposed to macro-level approaches that neglect the importance of these individual-level factors.

Multilevel sentencing research has focused primarily on the influence of two contextual features: racial composition (see Demuth, 2000; Kramer and Ulmer, 1996; Myers and Talarico, 1987; Steffensmeier et al., 1998, 1993; Ulmer, 1997) and socioeconomic conditions (e.g., poverty and unemployment) (Britt, 2000; Myers and Talarico, 1987). With regard to the influence of these contextual characteristics on sentencing outcomes for individual defendants, the findings are mixed. Some multilevel research suggests that the relative size of a community's minority population is positively related to the severity of sanctions for some, if not all, criminal defendants (Demuth, 2000; Kramer and Ulmer, 1996; Myers and Talarico, 1987; Steffensmeier et al., 1998, 1993). For instance, blacks and Hispanics may be at a greater disadvantage in communities with relatively large minority populations whereas white defendants might not (see, e.g., Demuth, 2000; Kramer and Ulmer, 1996; Steffensmeier et al., 1998, 1993). However, Myers and Talarico (1987) found a relationship between the relative size of the black population and the severity of sentences imposed on all defendants, regardless of racial background. Other multilevel research finds no effect of racial composition on individual-level sentencing decisions (Ulmer, 1997).

Similarly, multilevel research using data from Georgia counties (Myers and Talarico, 1987) reports that defendants adjudicated in a jurisdiction with a high rate of unemployment are more likely to receive an incarceration sentence than similarly situated defendants adjudicated in a jurisdiction with a lower unemployment rate. On the other hand, Britt

(2000), using a more rigorous analytic technique, reported no relationship between socioeconomic conditions (income and unemployment) and individual-level sentencing outcomes in Pennsylvania.

Although fewer in number and narrower in focus than either the macro-level studies or the court organizational research discussed above, these multilevel sentencing studies have contributed significantly to what we know about the contextualized nature of sentencing decisions. The importance of including both individual- and community-level factors in sentencing research cannot be overemphasized as multilevel research suggests. Moreover, this research indicates that community characteristics may affect sentencing outcomes and might even condition the influence of individual attributes on sentencing decisions. Multilevel techniques allow for an evaluation of the factors, at both the individual and community level, that may influence sentencing outcomes. As with the macro-level research and the court organizational studies, however, there remain several limitations associated with the multilevel studies conducted to date.

First, and perhaps most importantly, past multilevel studies have typically focused on a single state, usually Pennsylvania or Georgia. Thus, the findings produced by this research are seriously limited with respect to generalizability. There may be something particular about the defendants, cases, or counties either in Pennsylvania or Georgia that makes the results of these studies inapplicable to other areas across the United States. Additionally, prior multilevel sentencing studies have examined a relatively limited number of jurisdictions (most include three or less) and most have suffered by taking what Britt (2000) has termed a "cross-jurisdictional" approach. With this approach a relatively small number of contexts are examined and compared with one another by including dummy variables for each jurisdiction

in the models or by running separate models for each jurisdiction included in the analyses (Dixon, 1995; Ulmer, 1997; Ulmer and Kramer, 1996). While informative, this approach has two important limitations: 1) it does not allow for broad comparisons across a large number of different jurisdictions, and 2) simply comparing the effects of jurisdictional dummy variables on sentencing outcomes does not tell us anything about the specific features of these contexts that may be responsible for the variation in sentencing outcomes.

Second, prior multilevel studies (Dixon, 1995; Kramer and Ulmer, 1996; Myers and Talarico, 1987; Steffensmeier et al., 1993; Ulmer, 1997) use ordinary least squares (OLS) or logistic regression techniques that are inappropriate for multilevel data. These techniques, unlike multilevel modeling strategies, fail to take into account the fact that individual defendants are nested (or clustered) within the contextual unit of analysis (e.g., state, county, jurisdiction). Analyzing variables from different levels at one single common level, as is the case when using traditional statistical methods (e.g., OLS, logistic regression), creates two sets of problems. The first is a statistical problem. The traditional approaches treat all of the individual-level data values as independent information from the higher-level sample (i.e., county). However, for nested or clustered data, the proper sample size for these variables is the number of higher-level units. In the case of traditional statistical approaches, the larger number of lower-level units (i.e., individual-level cases) is used as the sample size which leads to significance tests that reject the null hypothesis far more often than the standard .05 *p*-level would suggest. Using statistical approaches that do not account for the hierarchical and nested structure of the data, and that fail to assign the appropriate values of the higher-level variables to those individual-level cases within each specific higher-level unit, produces spuriously significant results.

Analyzing variables from different levels at one single common level also poses a conceptual problem: the possibility that the researcher will commit the fallacy of the wrong level when interpreting the results. This refers to analyzing the data at one level and drawing conclusions at another level (e.g., the ecological fallacy). Regardless of whether it involves interpreting aggregate data at the individual level or interpreting individual data at the aggregate level, the subsequent discussion and conclusions are misleading. Statistically and conceptually, a multilevel model approach is appropriate for analyses that involve nested data at more than one level.

In summary, the criminological literature suggests that both individual-level and macro-level factors are important in explaining sentencing outcomes. We also know that examining both the main and conditioning effects of community context on sentencing outcomes is critical for theoretical, empirical, and policy development. Many people perceive the influence community context on sentencing as a given, yet the available evidence is ambiguous. The three main approaches that have been used to empirically examine the importance of this community context in sentencing decisions have serious weaknesses and limitations. A comprehensive understanding of legal decision making requires an analytic approach in which both defendant and case characteristics are considered along with the characteristics of the communities in which these decisions are made. Specifically, what is needed is a rigorous examination of 1) whether community context influences the sentences imposed on criminal defendants, net of the influence of defendant and case characteristics; and 2) whether community context conditions the effects of defendant demographic characteristics on sentencing outcomes. These are the issues addressed in the present study.

THE PRESENT STUDY

The present research examines broadly the influence of community context on several individual-level sentencing outcomes using data from the 1998 State Court Processing Statistics (SCPS) data collection that have been merged with a unique county-level data set which provides information on the characteristics of the counties in which the defendants were adjudicated. The SCPS is a comprehensive data set that includes information critical to the research questions guiding the present study and, more importantly, addresses many of the limitations associated with data sets used in prior sentencing research. Collected biennially since 1990, the SCPS provides detailed legal and "extralegal" data on a large sample of felony defendants, representing all felony cases filed in the 75 most populous U.S. urban counties (U.S. Department of Justice, 2000). It also contains information for these defendants on several earlier stages of the criminal justice process, allowing for the inclusion of controls for differences in case processing (e.g., pre-trial detention). Critical to the present study, this data set contains the same detailed information for defendants and their cases from 39 large urban counties across 17 states. This allows for a comprehensive multilevel analysis of sentencing outcomes across multiple urban U.S. jurisdictions.

The county-level data set merged to the SCPS was created especially for the present analyses and provides detailed information on the key community characteristics examined in the study. These attributes include: the unemployment rate, the crime rates, region, the racial composition, sex ratio, age structure, political orientation, religious affiliation, and sentencing structures. Since there is no comprehensive county-level demographic data collection available that includes all of these attributes, the county data were compiled by combining information from several sources. These sources include: the Federal Bureau of

Investigation's Uniform Crime Reports (1997), the Census of Churches (1997), County and City Data books (2000), Census Bureau Summary Tape Files (2000), the American National Election Study (1996), and the National Survey of State Sentencing Structures (U.S. Department of Justice, 1998).

The SCPS individual-level data were merged to the county-level demographic data by linking county identifiers (i.e., state and county FIPS codes) common to each. The resulting data set thus provides detailed information on the felony defendants, cases, and outcomes from the 1998 SCPS as well as characteristics of the counties in which these cases were adjudicated.

These data are used to assess the main and conditioning effects of several community conditions on the nature and severity of sentences received by individual defendants. Several different measures are used as indicators of sentencing outcome. Specifically, I examine the main and conditioning effects of community conditions on the following individual-level outcomes for convicted felony defendants: 1) the incarceration decision ("in/out"); 2) the nature of the specific sentence (e.g., prison incarceration versus jail confinement versus probation/fine); and 3) the length of the confinement term received.

Drawing from two conflict-oriented frameworks—minority group threat and economic social threat—along with individual-level survey research on punitiveness and punitive attitudes, I develop and test several hypotheses related to my two primary research questions. I assess whether various community characteristics affect the likelihood of an incarceration sentence, the nature of the sentence, or the length of custodial sentences imposed on convicted defendants, net of defendant and case characteristics. For instance, does the community racial composition, the crime rate, the sentencing structure, or age

structure influence whether a defendant receives a prison or jail term and the length of that sentence? Or do community features such as the unemployment rate, sex ratio, religious affiliation, or political orientation affect the type and length of sentence imposed on convicted defendants? What is the direction and strength of these community effects? Is the influence of one community attribute more important than the others? Specifically, does any one (or two, or three, etc.) of these community characteristics do a better job than others at explaining county-level variation in sentencing outcomes? All of these questions are extensions or specifications of the primary question addressed in my research, namely, does community context affect sentencing outcomes for criminal defendants?

The specific hypotheses tested in regard to the second research question are evaluated using the same merged data set and derived from the same theoretical frameworks discussed above, as well as findings from previous research (see Steffensmeier et al., 1998). The focus of this question is somewhat different than, but complementary to, the focus of the first. While the primary research question is concerned with the main effects of community context on sentencing outcomes, the second question shifts attention to the moderating effect of community context on the influence of three key defendant characteristics on sentencing outcomes: race, sex, and age. Three potential moderating effects are considered. First, does the relative size of the minority population in a county shape how minority defendants are sentenced? If so, does it do so in a way that leads to more lenient or more severe sanctions for minorities? Second, does the county male-to-female sex ratio influence the severity of sentences imposed on male defendants? If so, is this an effect that favors males or puts them at a disadvantage? And, third, does a county's age structure influence how younger defendants are sentenced? Specifically, does the relative size of the population of older

persons in a community shape the kinds of sentences imposed on younger defendants? If so, does this conditioning effect put younger defendants in danger of a more severe sanction?

In addressing these questions, this research tests several hypotheses (outlined in detail in Chapter 3) about the ways in which community context may affect the sentencing outcomes for felony defendants in U.S. counties and the ways in which community context may influence the effects of defendant race, sex, and age on sentencing outcomes for felony defendants across counties in the United States. Due to the nature of the research questions and the data in the present study, I use a multilevel modeling approach.

Multilevel, or hierarchical, regression models have become the standard method used for estimating the effects of community characteristics on individual-level attitudes and behaviors, especially when the data contains a substantial amount of respondent clustering within communities, which is the case in the data used for the present study (Bryk and Raudenbush, 1992; Hox and Kreft, 1994). The methodological benefits associated with this approach include: 1) estimation of models that partition the variance to be explained into within- and between-community components, and 2) estimation of models that adjust for non-independence of sample members who reside in the same community. Conceptually, this strategy is appealing for the present research because it provides a direct and efficient means of describing the degree to which sentencing outcomes vary across the communities included in the data. Given that the focus of the study is on both the main effects of the community-level characteristics and on how these characteristics condition the effects of defendant characteristics, models are estimated that allow individual-level defendant characteristics to vary across counties and allow for an assessment of whether particular

community-level characteristics are associated with this variance (see Rountree et al., 1994; Sampson et al., 1997).

CONCLUSION

In summary, significant gaps remain in our knowledge and understanding of the effects of community characteristics on individual sentencing outcomes. Many previous studies of community effects have focused on macro-level characteristics and fail to take into account possible differences in types of cases or defendants across communities. Court organizational research provides extremely rich details of context, but focuses on a limited number of court contexts and organizational characteristics. Finally, the multilevel research that includes both individual- and community-level characteristics provide the most direct evidence on the questions addressed in the present study, but past work has relied on data restricted to a small number of select geographic areas, used inappropriate methods, measured jurisdictional context as dummy variables instead of the specific characteristics of jurisdictions, and focused on a limited range of contextual features (i.e., racial and economic compositions).

The present research addresses several of these limitations. Specifically, this research improves upon prior research of community effects and sentencing outcomes by examining the influence of community context on several sentencing decisions using a data set that contains information for a nationally representative sample of felony defendants from a relatively large number of counties spread over 17 states. The research also goes beyond previous studies of community effects by developing and testing several hypotheses of community effects, including those that specify community characteristics as moderating the effects of individual-level defendant characteristics on sentencing decisions.

The study is organized in the following manner. Prior empirical research, including macro-level, court organizational, and multilevel research that bears on the two questions addressed in the study are reviewed in Chapter 2. In Chapter 3, the major theoretical perspectives on the ways in which community characteristics may influence sentencing outcomes for individual defendants are discussed, and the specific hypotheses tested in the research are presented. In Chapter 4, the data, methods, and analytic strategy used to test the research hypotheses are presented. Chapter 5 reports the empirical results for analyses of main effects of community context on sentencing outcomes, and Chapter 6 reports on analyses of whether community characteristics moderate the influence of defendant characteristics on sentencing outcomes. Finally, Chapter 7 summarizes the study's major findings, highlights the study's theoretical, empirical, and policy contributions, and discusses needs for future research on community context and sentencing outcomes.

CHAPTER TWO: PRIOR RESEARCH

INTRODUCTION

As outlined in the previous chapter, the present research addresses two general questions. First, does community context affect sentencing outcomes for criminal defendants, net of the influences of defendant and case characteristics? And second, does community context shape condition the influence of defendant race, sex, and age on sentencing outcomes? Although both of these empirical questions have been widely acknowledged as important to furthering our knowledge about the factors that influence sentencing outcomes for criminal defendants (see Black, 1989; Dixon, 1995; Farrell and Holmes, 1991; Hagan and Bumiller, 1983; Myers and Talarico, 1987; Sampson and Laub, 1993; Savelsberg, 1992; Wooldredge, 1998), owing largely to a lack of appropriate data and theoretical direction they have received relatively little attention in the research literature. Many data sets contain information on defendants, cases, and criminal justice outcomes, others provide information on aggregate-level imprisonment or incarceration rates, but few contain information about defendants and the communities in which they are processed, which is necessary for a systematic empirical examination of the influence of community context on sentencing outcomes.

Below, I review prior empirical research relevant to the issues addressed in the present study. I begin by briefly summarizing findings reported by a large body of individual-level sentencing research. I then review macro-level research that has examined the influence of community context on imprisonment, the few organizational studies that have examined, in rich detail, small numbers of individual court contexts, and finally, the

handful of multilevel studies that have examined community context and individual-level sentencing outcomes simultaneously.

INDIVIDUAL-LEVEL RESEARCH

Although empirical research has rarely examined the effects of community characteristics on sentencing outcomes, there is a long tradition of research that focuses on the ways in which individual-level defendant and case characteristics may influence these sentencing decisions (for comprehensive reviews see Chiricos and Crawford, 1995; Spohn, 2000; Zatz, 2000, 1987). This research provides valuable information on the effects of several individual-level characteristics on sentencing decisions. Researchers have considered a variety of sentencing decisions. Many have focused on the decision to incarcerate the offender (e.g., Austin, 1981; Farnworth and Horan, 1980; Hagan, 1977; Myers, 1979; Pope, 1976; Pruitt and Wilson, 1983; Uhlman and Walker, 1979; Unnever, 1982; Unnever et al., 1980), whereas others have focused on the length of incarceration sentences (e.g., Lizotte, 1978; Peterson and Hagan, 1984; Thomson and Zingraff, 1981; Zatz, 1984).

There is evidence in the research which suggests that decisions about the type and duration of sentences are conceptually and empirically distinct (e.g., Spohn et al., 1982; Sutton, 1978; Wheeler et al., 1982). That is, the effect that defendant and case characteristics (and possibly community characteristics) have on sentencing outcomes appears to depend on the specific decision being made (i.e., in/out, prison versus jail versus probation, sentence length). For example, the findings from some individual-level sentencing research (e.g., Horan et al., 1982; Miethe and Moore, 1986; Myers, 1979) indicate that defendant race does not affect the decision to incarcerate a defendant in the same way that it affects subsequent decisions about the length of the sentences imposed (see also Myers and Talarico, 1987).

Despite differences in the definition and measurement of sentencing outcomes, defendant characteristics such as race, sex, and age have been the primary focus of this research, and most of these studies also include case characteristics (e.g., mitigating and aggravating circumstances), at least as control variables. A brief discussion of the general conclusions that can be drawn from this individual-level research on defendant and case characteristics and that is relevant to the present research follows.

With regard to research on case characteristics, the results indicate that defendants receive more lenient sentences in cases where there are mitigating circumstances (e.g., victim involvement, provocation). In these situations, the defendant is perceived as less responsible for the crime, held less accountable, and as such, receives a less severe sentence. On the other hand, prior research indicates that in cases where aggravating circumstances are present (e.g., weapon use, strangers, and victim injuries), the defendant is usually perceived as more responsible, as more dangerous, and held to a greater degree of accountability, which translates into harsher sentencing decisions (e.g., Albonetti, 1992, 1991; Boris, 1979; Myers, 1980, 1979; Spears and Spohn, 1997). Other case characteristics that have been associated with sentencing outcomes include the seriousness of the offense, prosecution charges, conviction charges, and adjudication method (see, e.g., Albonetti, 1992, 1991; Baumer et al., 2000; Boris, 1979; Myers, 1980, 1979; Myers and Talarico, 1987, 1986a, 1986b; Spears and Spohn, 1997; for comprehensive reviews, see also Chiricos and Crawford, 1995; Spohn, 2000; Zatz, 2000, 1987). Importantly, many sentencing researchers argue that inadequately controlling for case/legal variables such as offense seriousness, adjudication method, arrest/conviction charges, and crime type may lead to incorrect conclusions regarding the

effects of defendant demographic characteristics (i.e., race, sex, age) (i.e., Hagan, 1974; Kleck, 1981; Wooldredge, 1998).

Although many studies include the case and offense characteristics discussed above, defendant race has received the most sustained attention in past empirical sentencing research (e.g., Farnworth and Horan, 1980; Hagan, 1974; Hawkins, 1987; Holmes and Daudistel, 1984; Kleck, 1981; Myers and Talarico, 1986b; Petersilia, 1983; Pruitt and Wilson, 1983; Spohn et al., 1987, 1982; Steffensmeier et al., 1998, 1993; Unnever, 1982; Welch et al., 1984; for comprehensive reviews see Chiricos and Crawford, 1995; Spohn, 2000; Zatz, 2000, 1987). But, although the amount of attention is substantial, the results have been inconsistent.

Some studies have found a race effect which favors white defendants over minority defendants (e.g., Austin, 1981; Demuth, 2000; Hagan, 1977, 1974; Holmes et al., 1996; Horan et al., 1982; Kleck, 1981; Myers, 1987; Myers and Talarico, 1986a, 1986b; Petersilia, 1983; Phillips, 1986; Pruitt and Wilson, 1983; Radelet, 1981; Spohn et al., 1987, 1982; Steffensmeier et al., 1998, 1993; Unnever and Hembroff, 1988; Welch et al., 1984). However, others have found that in certain circumstances, white defendants are actually at a disadvantage compared to non-whites during the sentencing phase (e.g., Myers and Talarico, 1987; Peterson and Hagan, 1984; Spohn and Holleran, 2000; Steffensmeier and Demuth, 2000). Whatever the relationship between race and sentencing, we have been unable to produce research that reports consistent race effects. However, the weight of the evidence suggests that defendant race does, in some complex way, affect sentencing outcomes for criminal defendants.

Turning our attention to research on the influence of defendant sex on sentencing outcomes, inconsistencies in this literature are also apparent, although there is stronger evidence of significant sex effects than is the case in analyses of race effects. The most consistent finding in the research on sentencing and gender is that females experience a comparative advantage. Daly and Bordt's (1995) comprehensive review of the sex/sentencing research reports that the results of the majority of studies support the view that females are treated more leniently by the legal system (see, e.g., Adams, 1986; Beaulieu and Messner, 1999; Bickle and Peterson, 1991; Daly, 1987; Farrell and Holmes, 1991; Langan and Dawson, 1995; Nagel and Hagan, 1983; Nagel and Weitzman, 1971; Pope, 1976, 1975; Simon and Sharma, 1979; Spohn et al., 1987; Steffensmeier et al., 1993; Sutton, 1978; Visher, 1983; Wilbanks, 1984).

However, the debate with respect to the influence of defendant sex on criminal justice outcomes continues because a number of studies have found no sex effect (e.g., Albonetti, 1992; Bernstein et al., 1977; Bishop and Frazier, 1984; Curran, 1983; Feeley, 1979; Hagan, 1975, 1974; Katzenelson, 1976; Myers, 1977; Simon, 1975; Tjaden and Tjaden, 1981). Other research indicates that female defendants receive harsher sentences than male defendants because of their inability to obtain a plea bargain or to obtain charge or sentence reductions (e.g., Chesney-Lind, 1979; Clements, 1972; Eckstrandt and Eckert, 1978; Figueira-McDonough, 1985). The overwhelming conclusion drawn from this body of research though is that males are much more likely to receive harsh sanctions from criminal justice decision makers than are their female counterparts.

The prior empirical research on the influence of defendant age on sentencing outcomes is less helpful than that of either defendant race or defendant sex. That is not to

say that sentencing research does not include measures of defendant age or control for this variable during subsequent analyses, only that during the reporting of results, interpretation of results, and discussion/conclusion sections, many studies fail to address extensively age effects (for notable exceptions see Myers and Talarico, 1987; Spohn and Holleran, 2000; Steffensmeier et al., 1998). Defendant age, at least in prior empirical research, is not a primary focus. From the limited number of studies that have discussed the influence of defendant age systematically (Myers and Talarico, 1987; Spohn and Holleran, 2000; Steffensmeier et al., 1998) the general conclusion is that younger defendants (i.e., 18 to 29 years old) receive more severe sentences than older defendants. The present study examines the influence of defendant age on sentencing outcomes and how this influence might be shaped by community context, specifically the age structure within the community.

In summary, prior research on individual-level case and defendant characteristics provides us with a better understanding of how these factors influence sentencing outcomes. However, it does not embed these relations in the community context within which sentencing decisions occur. Some of the ambiguity in the effects of race, sex, and age on sentencing outcomes could be due to the relatively limited number of jurisdictions examined or the focus on numerous jurisdictions within single states. In any case, it is not clear from this research whether sentencing outcomes vary across communities, or whether the effects of defendant attributes are conditioned by community context. Three separate approaches have been taken to broaden our knowledge of these issues: macro-level, court organization, and multilevel strategies. A discussion of the prior empirical research associated with each of these approaches follows.

MACRO-LEVEL RESEARCH

Much of the prior empirical research on the relationship between community context and punishment outcomes has been conducted at the macro-level of analysis and has focused on prison admissions and incarceration rates as the outcome measures (e.g., Arvanites, 1992; Carroll and Doubet, 1983; Greenberg and West, 2001; McCarthy, 1990; McGarrell, 1993; Michalowski and Pearson, 1990; Taggart and Winn, 1993; Weidner and Frase, 2001). Most of these studies have used some type of states' per capita imprisonment rate as their outcome measure. Among the limitations associated with this body of research, this outcome measure confounds both the frequency and duration of prison sentences, and thus, may not be a valid gauge of either. Although this weakness and other limitations associated with this type of approach are outlined at the end of this section, this research has provided us with valuable information about the types of contextual factors that are associated with punishment outcomes and the nature, strength, and direction of these relationships. Several contextual characteristics have been the primary foci of these macro-level studies: crime rate, unemployment rate, geographic location, and racial composition.

Many studies at the macro-level have found a strong, positive relationship between crime rates, especially violent crime rates, and imprisonment rates (e.g., Bailey, 1981; Carroll and Doubet, 1983; Greenberg and West, 2001; Jacobs, 1979; Liska et al., 1981; McCarthy, 1990; McGarrell, 1993; Michalowski and Pearson, 1990; Taggart and Winn, 1993; Williams and Drake, 1980). That is, in areas that experience high rates of crime, especially violent crime, more criminal offenders are sentenced to prison.

Although not without debate (see Bailey, 1981; Carroll and Joubert, 1983), the results of most prior empirical research indicate that areas with relatively high unemployment rates (measured almost uniformly as the rate of unemployed persons aged 16 years and older, per

100,000 residents) also have high imprisonment rates (e.g., Box and Hale, 1986, 1985, 1982; Greenberg, 1977; Greenberg and West, 2001; Jacobs, 1979, 1978; Jankovic, 1977; Joubert et al., 1981; McCarthy, 1990; Wallace, 1981; Yeager, 1979). The expectation, theoretically and empirically, is that areas with high rates of unemployment will also have high incarceration rates. Theoretically, this expectation comes from the economic social threat literature, discussed in Chapter 3. But, the general argument is that unemployed individuals are seen as threatening and thus, a high rate of unemployment means a large group of threatening persons available for control and punishment through use of the formal criminal justice system.

Prior empirical research on punishment outcomes reports a strong, positive relationship between region and sentencing severity (Carroll and Doubet, 1983; Chiricos and Crawford, 1995; Michalowski and Pearson, 1990; Snell, 2000). In particular, defendants sentenced in Southern jurisdictions are more likely to receive incarcerative sanctions, longer terms of confinement, and have a greater chance of receiving the death penalty (see Snell, 2000).

Prior empirical research on the influence of racial composition on punishment outcomes is much more ambiguous than any of the other community conditions reviewed above, although we can discuss, in general, the macro-level findings on the relationship between racial composition and punishment outcomes. Racial composition has generally been measured as the percentage of the population that is African American (or more generally, minority). Measured in this way, most macro-level studies have found a positive relationship between minority racial composition and rates of imprisonment (e.g., Arvanites, 1992; Sampson and Laub, 1993; Weidner and Frase, 2001). That is, the larger the minority

population, the higher the rate of incarceration and the greater the use of imprisonment as a punishment for all criminal defendants. This fairly straightforward relationship disappears when we begin reviewing multilevel examinations of the influence of racial composition on sentencing outcomes. However, *macro-level* studies generally indicate that there is a strong positive relationship between the relative size of the minority population and punishment outcomes.

Although informative, prior empirical research at the macro-level is limited in that it ignores two sets of individual-level factors with a long history in studies of sentencing outcomes: defendant and case characteristics. This approach does not, and by its nature, cannot control for the influence of these characteristics. It is able only to specify aggregate-level relationships between imprisonment/incarceration rates and other aggregate-level attributes (e.g., unemployment rate, crime rate, etc.). While useful and informative, these types of studies do not take into account the nature of the individuals being incarcerated or the nature of the cases for which individuals are incarcerated. So, it may be that there is something especially dangerous or threatening about individual defendants or their particular crimes, but these factors are not (and cannot be) controlled for in this type of research. The present research uses a multilevel approach to replicate the findings reported by macro-level studies, but does so in a way that can control for the individual-level defendant and case characteristics excluded from the macro-level research.

In the next section of this chapter I review the findings of those few studies that have examined in-depth, specific court organizational contexts and the influence these organizational features have on punishment outcomes.

COURT ORGANIZATION RESEARCH

Court organizational research has been termed a "cross-jurisdictional" approach to examining criminal justice processing and sentencing outcomes. These studies typically compare sentencing decisions across a small number of jurisdictions (Britt, 2000). They make these comparisons by examining separate regression models for each jurisdiction or by including dummy variables for each of the jurisdictions included in the analysis. These studies focus primarily on the effects of individual-level defendant and case characteristics within a particular court and then assess how these effects vary across different courts within closely-located jurisdictions (typically less than 3 different courts/jurisdictions).

Several general conclusions have been drawn from this body of research, most of which concern the influence of specific court organizational characteristics on sentencing outcomes (i.e., the organizational culture of courts) (see Dixon, 1995). Many of these studies focus on the influence of the courtroom workgroup (prosecutors, judges, defense attorneys) and its activities on subsequent sentencing outcomes (e.g., Dixon, 1995; Eisenstein and Jacob, 1977; Eisenstein et al., 1988; Ulmer, 1997; Ulmer and Kramer, 1998, 1996). The findings indicate that the structure, cohesiveness, and style of the courtroom workgroup influences criminal case processing and sentencing outcomes (Eisenstein and Jacob, 1977; see also Myers and Talarico, 1987). The results further suggest that cases are disposed of quicker and more efficiently and case backlogs avoided in courts that have a well-structured and cohesive working relationship between the key figures involved in the process, including "support personnel" (i.e., police, probation).

Other "cross-jurisdictional" or court organizational studies have examined the impact of court context on a variety of legal processes and outcomes: sentencing (Hagan and Bumiller, 1983), guilty pleas and sentencing (Uhlman and Walker, 1979), bail status, type of

counsel (Lieberman et al., 1972), pretrial decisions and sentencing (Bernstein et al., 1977), and pre-sentence recommendations and subsequent sentencing outcomes (Hagan, 1975; Myers, 1979; Myers and Talarico, 1987). Two additional studies (Nardulli et al., 1984; Pruitt and Wilson, 1983) apply a cross-jurisdictional approach to assess the influence of several specific court organizational characteristics on sentencing outcomes.

Nardulli et al. (1984) found that factors such as the kind of case, prosecutorial policy, and varying combinations of individual-level attributes affect sentencing outcomes in felony courts in nine counties. From their research, they argue that the influence of individual-level characteristics cannot be examined without some appreciation of contextual factors (see also Myers and Talarico, 1987). Pruitt and Wilson (1983), in their longitudinal study of sentencing in Milwaukee, report that three organizational characteristics affect not only sentencing outcomes, but also the influence of defendant race on sentencing outcomes: the composition of the judiciary (the bench), bureaucratization in the prosecutorial and defense offices, and decision rules that reduce/eliminate the influence of judicial ideology on outcomes (1983: 613).

One final set of results from this body of research, not directly related to court organizational characteristics, is of particular importance to the present study. Although most of this cross-jurisdictional research focuses on a small number of jurisdictions within a particular state, some report that the distinctions between Southern and non-Southern jurisdiction, urban versus suburban versus rural, and jurisdiction size directly influence the sentencing decisions handed down within specific court contexts (e.g., Austin, 1981; Eisenstein and Jacob, 1977; Hagan, 1977; Hindus, 1980; Myers and Talarico, 1986a; Tepperman, 1973; Weidner and Frase, 2001; Williams and Richardson, 1976). In general,

we can draw from this body of research that Southern areas, rural areas, and smaller jurisdictions are associated with more severe punishments for criminal defendants.

In summary, this research provides us with rich details about the relationships of decision makers within the courts and how these relationships and other descriptive characteristics of specific courts (e.g., size, location) might affect the processes and outcomes of the courts. But, although extremely informative regarding the particular court organizational relationships, interplay, and intricacies, this type of approach tells us very little about the broader context, the context *outside of* the court, that might influence what goes on inside, namely sentencing decisions.

Prior court organization research also suffers from some limitations. First, while these studies of specific court contexts are rich in detail and provide valuable, descriptive information on the types of courtroom workgroups relations formed and the ways in which these workgroups process caseloads and reduce backlogs, they typically focus on very small numbers of courts and jurisdictions. The generalizability of the findings from these studies is undoubtedly limited and an inherent weakness in this type of approach to examining sentencing outcomes. Additionally, these studies generally focus on a narrow range of organizational factors at the court level and are unable to address the influence of the *broader* community context on sentencing outcomes. The present research adds to what we know about the influence of social context on sentencing outcomes from these court organizational studies. However, the focus is slightly different. The present study examines the influence of the broader community context on sentencing outcomes focusing on a larger set of contextual characteristics, outside of the court itself.

So, for further empirical direction, I move on to review the most relevant and most scarce approach used in prior research to assess the influence of community context on sentencing outcomes: multilevel studies.

MULTILEVEL RESEARCH

The few multilevel studies that have examined the influence of community effects on sentencing outcomes have focused on a limited number of community conditions. Specifically, prior multilevel research has focused on the influence of economic composition, racial composition, and, to a lesser extent, crime rates (Britt, 2000; Demuth, 2000; Myers and Talarico, 1987; Steffensmeier et al., 1998, 1993; Ulmer, 1997; Ulmer and Kramer, 1996). This research provides a better understanding of how these contextual features might influence sentencing outcomes, and how they might shape the influence of defendant race on sentencing outcomes.

Most multilevel studies of sentencing have taken a state/county approach. Specifically, they have selected one state (e.g., Georgia, Pennsylvania) and then all, or some set of, counties within that state to assess, simultaneously, the influences of individual-level case and defendant characteristics and contextual characteristics on variation in sentencing decisions across these counties. Most of these multilevel studies (Britt, 2000; Demuth, 2000; Myers and Talarico, 1987; Steffensmeier et al., 1998, 1993; Ulmer, 1997; Ulmer and Kramer, 1996) have concentrated on the importance of community racial composition. Many have measured this variable as the relative proportion of minority residents within the county; some however have defined this variable as the percent of residents who are black. Although not without debate, the findings suggest that there is a positive relationship between the proportion of minority residents and the severity of sentences imposed on

criminal defendants (e.g., Myers and Talarico, 1987; but see Ulmer, 1997). That is, the greater the minority population within a given county, the more severe are the sentences imposed on criminal defendants adjudicated there.

A couple of these multilevel studies have also examined the role of unemployment rates on sentencing outcomes (e.g., Britt, 2000; Myers and Talarico, 1987). Although informative, the results of these two studies contradict one another. Britt (2000), in his multilevel study of sentencing outcomes in Pennsylvania counties, reports that unemployment rates had no significant effect on either the decision to incarcerate defendants or the length of the sentence imposed. Myers and Talarico (1987), however, found that unemployment rates had a positive relationship with decisions to incarcerate felony defendants in Georgia counties. An important difference between the two studies is that Britt (2000) used a statistical approach appropriate for assessing multilevel differences (HLM), whereas Myers and Talarico (1987) ran traditional ordinary least squares (OLS) and logistic regression models that risk mis-estimating the role of both the individual-level and contextual factors. Although limited in this regard, Myers and Talarico's (1987) research is a pioneering effort to examine the influence of community context on sentencing outcomes. Although limited to Georgia counties, their research was the first and remains the most innovative attempt to examine the importance of community characteristics on criminal sentencing outcomes.

An additional benefit of Myers and Talarico's (1987) research, unlike most multilevel studies that focus only on racial conditions (but see Britt, 2000), is their inclusion of a variety of community characteristics. In addition to racial composition and unemployment rates, Myers and Talarico (1987) examine the effects of urbanization, racial income

inequality, income standard deviation, and crime rate. The results of this exceptional study, although limited in some respects, point to several potential relationships between community factors and sentencing outcomes, as well as the conditioning nature of racial composition on defendant race and offense. Four results from their research are particularly noteworthy: 1) Defendants adjudicated in urban counties were more likely to receive an incarceration sentence, but, their sentences were shorter than those imposed on defendants in rural counties; 2) Neither indicator of inequality (racial income inequality and income standard deviation) exerted significant influences on sentencing outcomes; 3) Large populations of black or unemployed residents or did not foster more severe sanctions; 4) Crime rates had little direct bearing on sentencing decisions.

Although Myers and Talarico (1987) did not find much support for their premise that community context influences sentencing outcomes, they do observe some evidence that community conditions moderate the influence of defendant race. Specifically, they report that: 1) Black defendants were more likely to receive an incarceration sentence in communities with high crime rates; 2) White defendants received longer incarceration sentences in communities with high crime rates; 3) Urbanization neither intensified nor reduced race differences in sentencing outcomes; and 4) Black defendants were more likely to be incarcerated when adjudicated in counties with high rates of unemployment. In their discussion of the results, Myers and Talarico (1987) report that they found many inconsistencies and that the contextual effects are "neither constant across all sentencing decisions, nor consistent for each dimension of the community we considered." Thus, they advise caution when reporting and interpreting their findings. They conclude, however, that county context must play an important, although complicated, role in criminal sentencing.

In sum, prior multilevel research has produced a small, but substantial, body of literature on the direct influence of particular community characteristics on individual-level sentencing outcomes. Racial composition has been examined extensively, although the evidence on the relationship between this community characteristic and sentencing outcomes is mixed. The nature of the relationship between employment levels and sentencing outcomes, although less thoroughly examined in the literature, also is contradictory and unresolved. Only one multilevel study (Myers and Talarico, 1987) examined the influence of additional community characteristics, besides racial composition and unemployment rates, and the conclusions about these relationships also remain ambiguous.

Discussed briefly in regard to Myers and Talarico's (1987) study, some multilevel studies have included interaction effects in their analyses. That is, some of these studies (e.g., Britt, 2000; Demuth, 2000; Myers and Talarico, 1987; Steffensmeier et al., 1998, 1993) have examined the interaction between individual-level characteristics (e.g., race and sex) and others have examined the relationship between one individual-level characteristic (defendant race) and its community-level counterpart (racial composition). While the results are still ambiguous and vary depending on the study, these interaction models further underscore the importance and complexity of community effects on sentencing outcomes and how the racial composition of the community shapes the effect of defendant race on sentencing decisions. In regard to individual-level interactions, it has been found that young, black, males receive more severe sentences than other criminal defendants (Steffensmeier et al., 1998). It is also reported, although not without debate, that minority defendants receive more severe sentences when adjudicated in communities with a relatively large minority population (Myers and Talarico, 1987; but see Demuth, 2000).

Due to the small number of multilevel studies, it is extremely difficult to draw any general conclusions about the influences of community characteristics on sentencing outcomes and the conditioning nature of community context on the effects of defendant characteristics on these outcomes from prior empirical research. The results of these multilevel studies, especially Myers and Talarico's (1987), are far from conclusive and their methods less than perfect, which underscores the importance of replication, clarification, and expansion of the underlying research questions pursued in the present study.

The first, and perhaps most important, limitation of prior multilevel research is that it has focused on counties or jurisdictions in one particular state (e.g., Pennsylvania, Georgia), which of course limits the results' generalizability. That is, there may be something particular about the defendants, cases, or counties within these specific states that makes the results inapplicable to other areas. Second, many of these multilevel studies use traditional ordinary least squares (OLS) or logistic regression techniques that are inappropriate for multilevel data analyses. Thus, these analyses risk estimation errors when examining the role of contextual characteristics, individual-level characteristics, or both (Bryk and Raudenbush, 1992). Specifically, this means that many of the prior multilevel studies fail to take into account the fact that individual defendants and cases are nested within the contextual unit of analysis.

A third limitation associated with these multilevel studies is that they examine a limited number of jurisdictions (e.g., most include three or less). Additionally, many of these same studies suffer by taking what Britt (2000) has termed the "cross-jurisdictional" approach. That is, a relatively small number of contexts are examined and compared with one another by including dummy variables for each jurisdiction in the models or by running

separate models for each jurisdiction included in the analyses. While still informative, this "cross-jurisdictional" approach has two important limitations, it does not allow for broad comparisons across a number of different jurisdictions and simply comparing the jurisdictional dummy variables effects on sentencing decisions does not tell us anything about the specific features of these contexts that may be responsible for the variation in sentencing outcomes. A final limitation of the prior multilevel research on sentencing outcomes is the selection of a very few community characteristics. The majority of these multilevel studies have focused on racial conditions and only two have included measures of economic conditions as contextual variables. Myers and Talarico (1987) examined the importance of additional contextual features in their research, but they too constrain their attention to a limited number of indicators of racial, economic, and crime conditions.

LIMITATIONS OF PRIOR RESEARCH

In summary, much of the prior empirical research on sentencing outcomes has focused on the influences of individual-level defendant and case characteristics. Although extremely informative, this voluminous body of literature tells us nothing about the potential influence of community context on sentencing outcomes. The macro-level literature propels us further along in our quest for finding community factors that might influence sentencing outcomes. The results of these studies indicate that racial, economic, and crime conditions affect sentencing outcomes, at least at the aggregate level. However, these studies ignore the individual-level factors that we know affect sentencing outcomes—in some way—thus they risk producing potentially misleading results, interpretations, and conclusions by excluding these important individual-level variables. More specifically, this approach cannot control for the influence of defendant and case characteristics. It is able only to specify aggregate-

level relationships between imprisonment/incarceration rates and other aggregate-level attributes (e.g., unemployment rate, crime rate, etc.). While useful and informative, these types of studies do not take into account the nature of the individuals being incarcerated or the nature of the cases for which individuals are incarcerated. This is a serious flaw and one that prohibits a systematic examination of the influence of community conditions on individual-level sentencing outcomes.

The court organizational studies point us further in the right direction and are rich in detail about the inner workings of courts and their workgroups, but are limited to very small numbers of courts and jurisdictions and comparisons between the two. They also concentrate solely on the context within the court and tell us very little about influences *outside* of the courtroom. Prior multilevel studies provide further guidance about the types of community characteristics that may affect sentencing outcomes, and possibly more importantly, provide a starting point for examining the interactions between individual-level and contextual factors on sentencing outcomes. Even without conclusive results, we know from these studies that it is potentially very important to examine the influences of community racial, economic, and crime conditions on sentencing outcomes. Additionally, these studies stress the importance of examining whether certain community characteristics (e.g., racial composition) moderate the influence of specific defendant characteristics (e.g., race) on sentencing outcomes. And, although the methods, analytical strategies, results, and discussions of prior multilevel research are far from definitive, they provide empirical direction for the present study and future research.

While the studies reviewed above suggest that community characteristics influence individual-level sentencing outcomes and, to a lesser extent, condition the effects of

individual-level defendant characteristics on sentencing outcomes, all these studies (macro-level, court organizational, and multilevel) suffer from the limitations discussed above which restrict their ability to draw strong inferences.

THE PRESENT STUDY

The present research makes an important contribution to both the sentencing and community effects literature by using appropriate statistical methods (multilevel modeling) to assess both the main and conditioning effects of many community characteristics (focusing on racial, economic, and crime conditions as well as political and religious features) on sentencing outcomes. This study examines these important issues using a nationally-representative sample of felony defendants adjudicated in large urban counties in the United States. The present research addresses the data limitations, methodological and analytical flaws, generalizability weaknesses, and the relatively narrow range of community characteristics examined in prior macro-level, court organizational, and multilevel research on sentencing outcomes.

More specifically, the present study addresses the main limitation of macro-level research by estimating multilevel models that include individual-level defendant and case characteristics and community-level characteristics. Importantly, this type of research design, as opposed to a macro-level approach, allows for an assessment of the influences of individual- and community-level predictors both singly and in combination. The present study also addresses the generalizability and breadth concerns of the court organizational studies. In particular, I use a nationally representative random sample of defendants adjudicated in 39 large urban counties to examine the influence of a variety of community characteristics on sentencing outcomes and to examine whether these community

characteristics shape the effects of defendant age, race, and sex on sentencing decisions. Additionally, I extend the focus of prior court organizational research and include a large number of contextual characteristics, outside of the court itself. Finally, this research begins to fill some of the gaps in our understanding about how community characteristics influence sentencing by addressing some of the limitations of prior multilevel research. More specifically, similar to one of the limitations of prior court organizational research, I expand the focus in the present study by examining sentencing outcomes across 39 counties within 17 different states, as opposed to focusing on limited numbers of jurisdictions or single states. Second, I use the more appropriate multilevel approach, as opposed to traditional techniques, necessitated by the hierarchical and nested nature of the present data. And third, I extend the narrow focus of prior multilevel research and examine a much larger and more diverse array of community features.

CHAPTER THREE: THEORETICAL FRAMEWORKS AND HYPOTHESES

INTRODUCTION

As discussed in Chapter 2, one of the most significant limitations of prior research on sentencing decisions is the lack of attention given to the ways in which community characteristics may affect outcomes at this important stage of the criminal system. An even more neglected issue is how community context may shape—or condition—the influence of defendant demographic characteristics on sentencing outcomes. This chapter reviews the theoretical perspectives and the body of individual-level survey literature drawn upon to develop and test specific hypotheses about the relationship between community context and sentencing outcome. The inclusion of the individual-level survey literature, from which additional hypotheses are developed and tested, is a new and innovative contribution to the community effects and sentencing literatures. After summarizing the relevant literature, the specific hypotheses that are tested in the present study are presented.

Prior empirical research, whether macro-level, court organizational, or multilevel, typically has drawn from various conflict-oriented perspectives to form general expectations and test specific hypotheses about the relationship between certain community features (e.g., unemployment rates, racial composition, crime rates) and sentencing outcomes. However, specific guidance on the ways in which we would expect other community characteristics such as age structure, sex ratio, religious or political affiliations to affect individual-level sentencing outcomes is not well articulated in extant theoretical frameworks.

Why should we expect community context to influence individual-level sentencing outcomes? As alluded to above, prior empirical research on this research question has drawn

from two conflict-oriented perspectives to develop specific hypotheses about the relationship between community context and sentencing outcomes: economic social threat and minority group threat. Some of the testable hypotheses are drawn from the macro-level theoretical and empirical literature on economic social threat, a conflict-oriented perspective, which argues generally that contextual factors such as economic conditions and levels of crime, especially violent crime, are related to a greater and more severe use of formal sanctions (see, e.g., Chambliss and Seidman, 1971; Hawkins, 1987; Liska, 1992; Sellin, 1928).

The economic social threat and minority group threat perspectives are both considered conflict orientations, as opposed to consensus perspectives, on the use of formal social control mechanisms (e.g., police, courts, corrections). The basic argument from the conflict paradigm is that, within an area, different groups of people have different interests and that the law, and other formal social control mechanisms, is usually invoked to protect the interests of groups with the most power (e.g., Box and Hale, 1986, 1985, 1982; Bridges and Crutchfield, 1985; Chambliss and Seidman, 1971; Greenberg, 1977; Jacobs, 1979, 1978; Jankovic, 1977; Joubert et al., 1981; Liska and Chamlin, 1984; Liska et al., 1981; Wallace, 1981; Yeager, 1979). Not only are the interests of the more powerful groups protected by these mechanisms, but these formal methods also are aimed at controlling the less powerful groups (see, e.g., Chambliss and Seidman, 1971; Hagan, 1989; Hawkins, 1987; Liska, 1992; Sellin, 1928). In the case of economic social threat, this includes persons who are unemployed. Conflict theorists, in general, argue that powerful/elite groups perceive that their interests may be threatened by the interests of less powerful groups (e.g., unemployed) and may then use their superior positions to exert formal social control on those groups that they feel threaten the status quo.

The economic social threat argument suggests more punitive legal outcomes for defendants adjudicated and sentenced in areas with relatively large groups of economically "threatening" persons (e.g., the unemployed) (see Box and Hale, 1986, 1985, and 1982; Jankovic, 1977; Joubert et al., 1981; Liska, 1992; Liska and Chamlin, 1984; Liska et al., 1981; Myers and Talarico, 1987). The general argument is that a large volume of economically threatening persons (e.g., unemployed persons) or threatening crimes gives rise to higher levels of perceived threat, in turn activating a more intense formal social control reaction by those who feel threatened, *and* especially against those who are considered threatening.

The treatment of convicted felony defendants in particular geographic locations may be linked to views of perceived threat and intolerance held by large proportions of persons within these communities. These intolerant views or ideologies may be directed toward certain residents within the community (i.e., unemployed, "threatening") or foster and support a general attitude for harsh punishments for persons perceived as dissimilar, dangerous, or threatening to the community's majority group population (e.g., Chambliss and Seidman, 1971; Hagan, 1989; Hawkins, 1987; Liska, 1992; Liska et al., 1981; Sellin, 1928). These ideas likely affect not only the decisions of area residents who may hold these views and belong to the majority group, but also those public officials (i.e., judges, prosecutors) who are elected by residents with such attitudes. It may also be the case that those appointed by other local officials are receptive to the opinions of the local public. Because criminal justice officials are residents of the communities within which they serve, it is entirely possible that they respond not only to the opinions of their constituents, but adhere to similar ideologies, and that they too may perceive that economically "threatening" groups are

present, growing, and need to be controlled. The criminal justice system, and the sentencing phase in particular, may be an instrument used toward that end.

As noted above, prior empirical research that has examined expectations and hypotheses drawn from the economic social threat perspective has focused primarily on community unemployment rates and income inequality on overall levels of applied formal social control (e.g., expenditures for police, arrest rates, prison admissions, prison rates); the results are unclear as to whether the correlations observed in these studies reflect actual contextual effects or compositional differences across jurisdictions in the types of defendants or cases processed.

The multilevel data used in the present study includes several measures that have been identified in the economic social threat literature and research as indicators of the amount of economic threat that residents may perceive. These include unemployment rates and income inequality (measured as the Gini coefficient).[1] The general expectation is that criminal defendants adjudicated and sentenced in communities with high levels of economic threat will receive more severe sentences. The specific hypothesis drawn from the economic social threat literature and tested in the present study is:

> *Defendants will receive more severe sentences in communities with high rates of unemployment, net of other predictors.*

[1] Although prior studies of economic threat have used measures of income inequality in combination with, or as a substitute for, unemployment rates, this predictor is not used in the present analyses for two reasons: 1) Preliminary diagnostics reveal virtually no variation in the income inequality variable across the urban counties included in the data; and 2) Income inequality is very highly correlated with percent unemployed and thus, its inclusion introduces problematic issues of multicollinearity.

In continuing to address my first research question and examine further the influence of community context on sentencing outcomes, I turn to another conflict-oriented framework, minority group threat. As discussed earlier, the hypotheses and expectations derived from the minority group threat perspective are very similar to those drawn from the economic social threat literature. The primary difference is that the arguments pertain to a different "threatening" population: racial minority groups. The underlying premise of both perspectives is the same: Some "threatening" population within the community is controlled by the majority population through its access to, and use of, formal social control methods—the police (arrests), the courts (adjudication/conviction), and corrections (jails/prisons). This threat perspective is based simply on fear of losing dominance to a dissimilar group (see e.g., Blalock, 1967; Jackson, 1989). Central to the majority/minority group framework is the basic proposition that relates minority group size and majority group "dominance protection efforts" (Jackson, 1989: 4).

Blalock (1967) suggests that majority group protection efforts will increase as the size of the minority group increases until the minority group becomes or exceeds 50 percent of the population of the area. Typically, prior research indicates that whites are the majority group using their power and resources to control the "threatening" non-white population (Heinz et al., 1983; Jackson, 1989; Liska et al., 1981; Myers and Talarico, 1987).

From this perspective there is a general expectation that the majority population will attempt to protect their status and their own group's interests and do so by using the resources they have access to in order to exert formal social control over the minority population (see, e.g., Blalock, 1967; Jackson, 1989). As such, I expect then a relationship between minority racial composition and sentencing outcomes similar to the one between

sentencing outcomes and unemployment rates and crime rates. Specifically, the hypothesis tested in the present research, drawn from this perspective is:

> *Defendants will receive more severe sentences in communities with a relatively large population of racial minorities (blacks), net of other predictors.*

Once again though, the expectation remains that once the minority group population achieves or exceeds 50 percent of the area's total population, the protection efforts on the part of the majority diminish and the minority group has then achieved sufficient social and political power to ensure equilibratory use of the criminal justice system (Blalock, 1967). In this case, one would expect the "threat" level to decrease and thus, less severe sentences. More specifically, this perspective suggests the possibility of a curvilinear relationship between the size of the minority group and the severity of sentencing for convicted criminal defendants.

In summary, drawing from the minority threat framework, I examine the degree to which there is a significant quadratic relationship between sentencing outcomes and the relative size of the minority population within a jurisdiction. That is to say that the sentencing outcomes for convicted criminal defendants may be influenced by the relative size of the minority population. The hypothesis used to test for non-linearity is:

> *Defendants will receive more severe sentences in communities with a relatively small minority group population while defendants sentenced in*

communities with a relatively larger minority group population will receive comparably less severe sentences, net of other predictors.

As discussed briefly in Chapter one, a recent addition to the conflict-oriented paradigm of the criminal justice system and its decision making policies and practices, has been introduced into the sentencing literature by Steffensmeier (1980) and his colleagues (i.e., Kramer and Steffensmeier, 1993; Kramer and Ulmer, 2002; Steffensmeier et al., 1998, 1993; Steffensmeier and Demuth, 2001, 2000; Ulmer, 1997). As an extension of the court community perspective (see, i.e., Eisenstein et al., 1988; Flemming et al., 1992; Ulmer and Kramer, 1998, 1996), Steffensmeier and his colleagues argue that much prior research on decision making within the criminal justice system is guided primarily by three "focal concerns:" blameworthiness, protection of the community, and practical constraints and consequences.

According to this "focal concerns" argument, criminal justice decisions are based mainly on officials' (e.g., judges, prosecutors) perceptions of the defendant's character, past and future behavior, dangerousness to the community, and the practical considerations surrounding any punishment outcome (e.g., court resources, correctional resources, and the impact any custodial sanction would have on the victim(s), defendant(s), and/or the defendant's familial responsibilities) (Kramer and Ulmer, 2002). The reliance on and weight given to these three issues may vary according to the local court community culture, local politics, and/or the broader social context of a particular area (see Kramer and Ulmer, 2002). Proponents of the "focal concerns" perspective also suggest that not only do criminal justice decision makers rely on legally relevant criteria (e.g., offense severity, prior record, offender

responsibility, protection of the community), but they may also draw on "racial, ethnic, gender, or age stereotypes about defendants" (Kramer and Ulmer, 2002:904; for further discussion see Albonetti, 1997, 1991; Bridges and Steen, 1998; Wheeler et al., 1982). Similar to the weight given to legally relevant factors, the reliance on these extralegal factors during the decision making process may also vary according to the local court and social context within which these decisions are made. Noted briefly in Chapter 1, the "focal concerns" argument articulated by Steffensmeier and his colleagues is a useful extension of the general "threat" arguments (economic social and minority group) used to guide the general expectations associated with both of the research questions examined in the present study.

In addition to the economic social threat and minority group threat perspectives, the present research also draws from the empirical literature on individual-level correlates of punitiveness to derive several hypotheses about the influence of contextual characteristics on sentencing outcomes. The conflict-oriented frameworks, and the focal concerns extension, discussed above provide valuable information about the kinds of relationships expected between community-level economic, racial, and crime conditions and sentencing outcomes, but there is virtually no mention of the potential influences of other community characteristics in the literature.

This gap in the theoretical and empirical literatures leads to a brief review of individual-level survey research on punitive attitudes. From this research I discuss further expectations and derive specific hypotheses about the nature of the influence of *additional* community characteristics on individual-level sentencing outcomes. There is little systematic theoretical treatment in the literature about whether and why contextual

characteristics other than unemployment rates, income inequality, and racial composition might affect the outcomes of criminal cases, net of the influence of defendant and case characteristics. However, an extensive body of literature on punitive attitudes indicates that certain individual attributes are related to more punitive crime and punishment orientations. Research on individual-level correlates of punitive attitudes has shown that older persons, males, Republicans, and Protestants hold significantly more punitive views regarding the punishment of persons accused and convicted of criminal behaviors than others. Members of these groups are consistently more likely than their counterparts to support the death penalty and to view the courts as "not harsh enough" (see, e.g., Bohm, 1991; Flanagan and Longmire, 1996). Members of these groups are also likely to be more supportive of punitive rather than therapeutic or rehabilitative sanctions for adult offenders (see Gerber and Engelhardt-Greer, 1996). Additionally, these individuals are more likely to support mandated prison sentences and increased spending for the criminal justice system, and to express dissatisfaction with the courts' ability to protect society (Gerber and Engelhardt-Greer, 1996).

One implication of these patterns is that a large proportion of these kinds of persons in an area might give rise to a "punitive climate" or a "general climate of coerciveness" (see, e.g., Borg, 1998, 1997). Thus, areas with a relatively large proportion of older residents, a higher male-to-female sex ratio, and larger proportions of Republicans or Protestants may exhibit, in general, a higher level of punitiveness, which may in turn be translated into more severe sanctions for convicted criminal defendants during the sentencing stage of the criminal justice process. This may be because local decision makers are drawn from these populations and/or because elected and appointed official decision makers are responsive to

public sentiment in their local communities. Therefore, all else being equal, convicted felony defendants in these jurisdictions may be more likely to receive a prison sentence—versus jail confinement or some other non-custodial sentence (e.g., probation, fine)—and more likely to receive a longer sentence (either prison, jail, or probation) than their counterparts adjudicated and sentenced in jurisdictions not heavily populated by punitive-oriented residents and public officials.

Prior literature also suggests more punitive legal outcomes in areas with higher levels of crime, especially violence. This is supportive of the economic social threat view, as outlined above. Two relevant arguments have appeared in the literature. First, the "instrumental" or "pragmatic" perspective suggests that residents in high crime areas exhibit higher levels of fear, which increases their desire for severe punishment for persons accused and convicted of engaging in criminal behavior (Stinchcombe et al., 1980; Taylor et al., 1979; Thomas and Foster, 1975; Tyler and Weber, 1982; Vidmar and Ellsworth, 1974). This situation may lead to a higher propensity to elect or appoint more harsh "law and order" type officials, resulting in overall increases in the severity of punishments for convicted criminal defendants. Second, some researchers have argued that exposure to high levels of crime and violence gives rise to a general climate of punitiveness (Borg, 1998, 1997; Gelles and Straus, 1975), which in turn may influence legal decision making directly in the case of jury decisions, and indirectly through its impact on prosecutors and judges. Thus, the general expectation is that defendants adjudicated in communities with relatively high rates of crime, especially violent crime, will receive more severe sentences.

Drawn from prior research and the individual-level survey research on punitive attitudes, the following specific hypotheses are tested in the present research:

Defendants will receive more severe sentences in communities with relatively high rates of violent crime.

Defendants will receive more severe sentences in communities with a relatively high male-to-female sex ratio, net of other predictors.

Defendants will receive more severe sentences in communities with a relatively large proportion of older persons, net of other predictors.

Defendants will receive more severe sentences in communities with a relatively large proportion of Republicans, net of other predictors.

Defendants will receive more severe sentences in communities with a relatively large proportion of Protestants, net of other predictors.

An additional expectation in the present analyses, drawn from prior research (e.g., Borg, 1998, 1997; Carroll and Doubet, 1983; Chiricos and Crawford, 1995; Galster and Scaturo, 1985; Hagan, 1977; Michalowski and Pearson, 1990; Snell, 2000) is that sentencing outcomes will be influenced by the region in which the decision takes place. A strong relationship between the Southern region of the country and imprisonment is widely documented (see Chiricos and Crawford, 1995). Given the South's greater use of the death penalty (Snell, 2000), it is plausible that this region exhibits a more "punitive climate" than other regions. Although macro-level research has emphasized the importance of Southern

effects on prison use (Carroll and Doubet, 1983; Galster and Scaturo, 1985; Hagan, 1977; Michalowski and Pearson, 1990), the type data used prior multilevel studies has precluded researchers from testing this "southern subculture of punitiveness" argument (see Borg, 1997). As noted above, prior multilevel studies are based on data from a very small number of jurisdictions or on multiple jurisdictions within single state which prohibits the inclusion of a regional effect. I test the "Southern subculture of punitiveness" thesis with the following hypothesis:

> *Defendants will receive more severe sentences in Southern communities, net of other predictors.*

The final main hypothesis tested in the present study is not derived from any specific theoretical framework or the body of individual-level research on punitive attitudes. However, findings from prior macro-level research and the relatively recent implementation of various sentencing structures lead to an expectation of an association between sentencing outcomes and type of sentencing structure. Although lacking theoretical guidance, it seems likely that the type of sentencing structure should influence sentencing outcomes.

Sentencing structures have been developed and implemented in states across the country in order to promote and enhance the equity of sentencing decisions (see Spohn, 2000). Typically, these policies have been put into place to guide or restrict judicial decisions—aimed at reducing and eventually eliminating the discretion that may lead to disparate, discriminatory, or unfair treatment of criminal defendants. Most of these sentencing policies fall under "determinate sentencing structures" (Spohn, 2000) and include

mandatory minimum guidelines, flat-time sentencing, "grid" sentencing, habitual offender statutes, three strikes laws, and truth-in-sentencing statutes. By requiring judges to rely on legal and case criteria during the sentencing phase, these guidelines are supposed to make it more difficult for judges to give weight to extralegal factors such as the race, age, and sex of the defendant. Whether the creation and use of these sentencing policies has achieved this worthy goal is the subject of much debate (see Spohn, 2000). The present research includes an indicator of the type of sentencing structure for each jurisdiction in the analyses. It is expected that convicted defendants sanctioned in jurisdictions with more restrictive guidelines (e.g., three strikes, truth-in-sentencing, mandatory minimums, and habitual offender legislation) will be treated less harshly than defendants sentenced in jurisdictions with more flexible sentencing guidelines (e.g., voluntary, presumptive, and advisory sentencing guidelines) (see U.S. Department of Justice, 1998). Although seemingly counterintuitive, this expectation is grounded in the research and literature on discretionary judicial decision making (see, for example, Albonetti, 1989, 1987, 1986). Presumably, in jurisdictions where a substantial amount of discretion remains, decision makers have more leeway in which to consider extralegal factors and less accountability for making decisions based solely on legal proscriptions, guidelines, and case criteria. Thus, I propose the final main hypothesis tested in the present study:

> *Defendants will receive more severe sentences in communities with flexible/less stringent sentencing structures due to the discretion that remains with official decision makers, net of other predictors.*

In sum then, although the overall relationship between community context and sentencing outcomes is not well-developed in either the theoretical or the empirical literature, both the macro-level frameworks and individual-level research literature discussed in this chapter suggest that several community characteristics influence sentencing outcomes for criminal defendants. I have presented the theoretical and empirical origins of and derived several specific hypotheses. Figure 3.1 summarizes the precise mechanisms through which these all of these hypothesized relationships may be linked. As shown, a substantial number of the contextual variables, almost all of those drawn from the individual-level punitive literature, may influence the nature and severity of sentencing decisions through two different mechanisms: creation/support of a punitive climate and an increased fear of crime within the jurisdiction.

Three additional underlying processes are suggested in this figure. First, the racial composition of a community may influence the severity of sentencing outcomes via the two mechanisms discussed above and by way of a perceived minority group threat and the "focal concerns" extension. Thus, the figure implies that communities with relatively large proportions of minority residents may give rise to a punitive climate, an increased level of fear of crime, and an increased level of perceived racial threat, which may then result in more severe legal outcomes for all convicted felony defendants processed within these types of communities (especially since a substantial proportion of those individuals who come into contact with the criminal justice system are minorities and perceived as part of the "threatening" group). Second, the economic condition of a community may affect the severity of legal outcomes through its effect on: (1) the creation of a punitive climate; (2) an increased fear of crime; and (3) perceived economic social threat. This section of figure 3.1

implies that areas with a relatively large proportion of unemployed residents and high rates of violent crime may give rise to a punitive climate, an increased level of fear of crime, and an increased level of perceived economic threat, which may then result in harsher criminal justice outcomes for criminal defendants adjudicated within these jurisdictions (again, especially since a substantial proportion of individuals who come into contact with the criminal justice system are part of this economically disadvantaged and "threatening" group). Finally, the last section of figure 3.1 suggests that criminal justice decision makers in communities in states with flexible and/or lenient sentencing structures should hand down harsher sentencing decisions for convicted felony defendants—due to the amount of discretion that remains with the decision makers.

Although figure 3.1 provides a broad theoretical explication of the underlying mechanisms through which contextual characteristics may influence sentencing outcomes, the present data do not allow me to incorporate direct measures of these processes. Thus, in the present research, I must estimate models without indicators for punitive climate and levels of fear. Additionally, the measures used for both minority group threat and economic social threat indicators, admittedly, are proxies. The limitations of the present data set preclude me from measuring directly these underlying factors. However, an important first step in moving towards research that does so is to evaluate whether the proscribed relationships do, in fact, exist.

All of the theoretical discussion in this chapter has focused on my first research question: Does community context influence individual-level sentencing outcomes? But what about the second question? Why should community context condition or shape the influence of defendant race, sex, or age on sentencing outcomes? What is the theoretical or

empirical direction for this question? Disappointingly, there is very little guidance in the literature and, once again, the theoretical and prior empirical focus is primarily on race. So, using the minority group threat perspective and recent empirical research on sentencing outcomes (e.g., Steffensmeier et al., 1998), I discuss the expectations associated with my second research question. Which community characteristics might moderate the effects of defendant race, sex, and age on sentencing outcomes?

The minority group threat framework provides some basic guidance with regard to the possibility that community racial composition may shape the effect of defendant race on sentencing outcomes. Specifically, there is an expectation that the size of a community's minority population may influence sentencing outcomes in such a way that it puts minority defendants at a disadvantage (Blalock, 1967; Jackson, 1989; for evidence that this is the case see Myers and Talarico, 1987). The specific hypothesis examined in the present research is:

> *As the size of the minority (black) population increases, the effect of defendant race (black) on sentencing outcomes increases, putting black defendants at a disadvantage.*

It is important to note that the conditioning influence of racial composition on the effect of defendant race on sentencing outcomes may be non-linear, as was the case for the direct influence of racial composition on sentencing (e.g., Blalock, 1967; Jackson, 1989; Myers and Talarico, 1987). That is, the nature and direction of this conditioning relationship may depend on the relative size of the minority population. To the extent that this is the case, a small but significant minority population (perceived as "threatening" to the elite

population) would increase the severity of the sentences imposed on minority defendants. On the other hand, a substantially large minority population—with power and access to resources, including the criminal justice system—might lessen the severity of sentences imposed on these minority defendants. So, a non-linear relationship is derived from the literature and the following specific hypothesis tested:

> *Black defendants will receive more severe sentences in communities with a relatively small minority group population, while black defendants sentenced in communities with a relatively larger minority group population will receive comparably less severe sentences, net of other predictors.*

The expectations associated with both the main and conditioning influences of racial composition on sentencing outcomes are complex and sometimes contradictory. However, in the present research, I am interested in examining all of the possible ways that racial composition may affect sentencing outcomes. This means that not only do I examine its main and conditioning effects, but also the linear and non-linear possibilities, so that the present analysis identifies, examines, and presents various ways in which community racial composition may affect individual-level sentencing outcomes.

Theoretical guidance is extremely limited with regard to expectations concerning the conditioning nature of community characteristics on the effects of defendant sex and age on sentencing outcomes. There is little direction in the literature to guide the development of specific hypotheses about the ways in which particular community characteristics might condition the effects of defendant sex or age on sentencing outcomes. However, according to

limited literature, sex ratios might affect a number of issues including: sexual practices, marriage customs, family, social stability, and power (e.g., Guttentag and Secord, 1983). Among other things, this work suggests that the number of males per females might affect familial, social, political, and work-related attitudes and behaviors. I extend this argument to include legal outcomes, with the present emphasis on sentencing.

While not an issue dealt with directly in prior research, it seems reasonable that if sex ratios affect other social and political behaviors and outcomes, it might also influence how the different sexes are treated within the criminal justice system. The hypothesis regarding the main influence of sex ratios on sentencing outcomes is derived from the individual-level survey literature on punitive attitudes and the expectation for the conditioning nature of this community characteristic draws from that same literature as well as the sex ratio research (e.g., Guttentag and Secord, 1983) and more recent sentencing research (e.g., Steffensmeier et al., 1998). More specifically, the expectation is that the higher the male-to-female sex ratio the greater the disadvantage for male defendants, who already seem to be at a disadvantage. The punitive literature indicates that males have more punitive views, than females, on punishments and thus, drawing from this literature and the sex ratio argument, it may be that a relatively higher proportion of males leads to greater punishments for male defendants who represent a surplus in available opposite-sex partners. Specifically, the expectation is that male defendants are at a greater disadvantage in communities with a relatively high ratio of punitive-oriented males to less available females and from this expectation, I test the following hypothesis:

Male defendants will receive more severe sentences in communities with a relatively higher male-to-female sex ratio, net of controls.

While there is limited theoretical direction with regard to the conditioning nature of sex ratios on the influence of defendant sex on sentencing outcomes, there is virtually no theoretical foundation from which to derive expectations concerning the conditioning effect of age structure on the influence of age on sentencing decisions. Without specific theoretical guidance, I rely on relatively recent sentencing research (Spohn and Holleran, 2000; Steffensmeier et al., 1998) to develop specific hypotheses about the conditioning nature of community age structure on the effects of defendant age on sentencing outcomes.

Steffensmeier et al.'s (1998) recent study on sentencing outcomes in Pennsylvania reports that young, black males are at an extreme disadvantage during the sentencing phase of criminal case processing. Specifically, they report that criminal defendants who are male, black, and between 18 and 29 years of age are "the defendant subgroup most at risk to receive the harshest penalty" (Steffensmeier et al., 1998:789; for additional support see Spohn and Holleran, 2000). Additionally, they report significant effects of each of these defendant demographic characteristics independently, and in combination with one another, on sentencing outcomes. Specifically, they report that males are more likely than females to receive severe sentences, blacks more likely than whites, and younger as opposed to older defendants are more likely to receive harsh punishments. I use the results of this important empirical study, as well as the body of individual-level research on punitive attitudes, which suggests that older persons have more punitive outlooks than younger persons, to develop the

following hypothesis regarding how age structure might condition the effects of defendant age on sentencing outcomes:

> *Younger defendants will receive more severe sentences in communities with larger proportions of older residents.*

To review, following theoretical direction and prior empirical research (Spohn and Holleran, 2000; Steffensmeier et al., 1998), I examine the conditioning influence of several community features (racial composition, sex ratio, and age structure) on the effects of three demographic characteristics of criminal defendants on sentencing outcomes. Specifically, I estimate separate models in order to assess whether, and to what extent, the racial composition, sex ratio, and age structure of various communities affect the influence of defendant race, sex, and age on sentencing outcomes. In general, it is expected that the effects of the individual-level variables will be conditioned by their corresponding community-level variables. The precise relationships expected between the individual-level defendant characteristics and their community-level counterparts are presented in figure 3.2.

In summary, the present research addresses two general empirical questions: 1) Does community context influence individual-level sentencing outcomes for criminal defendants?; and 2) Do community characteristics such as racial composition, sex ratio, and age structure condition the effects of defendant race, sex, and age on sentencing outcomes? In this chapter I have reviewed the theoretical frameworks and empirical research from which I develop general expectations and speculate about the relationship between community context and sentencing outcomes. I have presented the specific hypotheses, derived from these

literatures, tested in the present study (see figures 3.1 and 3.2 for illustrations). Overall, I expect that economic conditions (unemployment and crime rates), racial conditions (size of minority population), region, sentencing structures, and the relative size of punitive-oriented populations (males, older persons, Republicans, and Protestants) will influence sentencing outcomes for criminal defendants. A positive relationship is expected between each of these community characteristics and the sentencing outcomes considered in the study.

The expectations associated with the moderating hypotheses are much more complex than those expectations the main hypotheses (see figure 3.2 for illustration). However, drawing from the minority group threat perspective and the punitive literature as well as recent empirical research (Steffensmeier et al., 1998), I have presented the specific moderating hypotheses tested in the present study. In general, I expect that racial composition will condition the effect of defendant race on sentencing outcomes, sex ratio will condition the effect of defendant sex on sentencing outcomes, and age structure will condition the effect of defendant age on sentencing outcomes. The nature and direction of these conditional relationships is unknown and the present study contributes to both the theoretical and empirical literatures by systematically assessing the ways in which community characteristics influence sentencing outcomes, and the ways in which community characteristics shape the effects of defendant race, sex, and age on sentencing outcomes. In the next chapter I describe the data, methods, and analytical strategy used to test the hypotheses presented in this chapter.

Figure 3.1 Expectations of Main Effects in the Present Research.

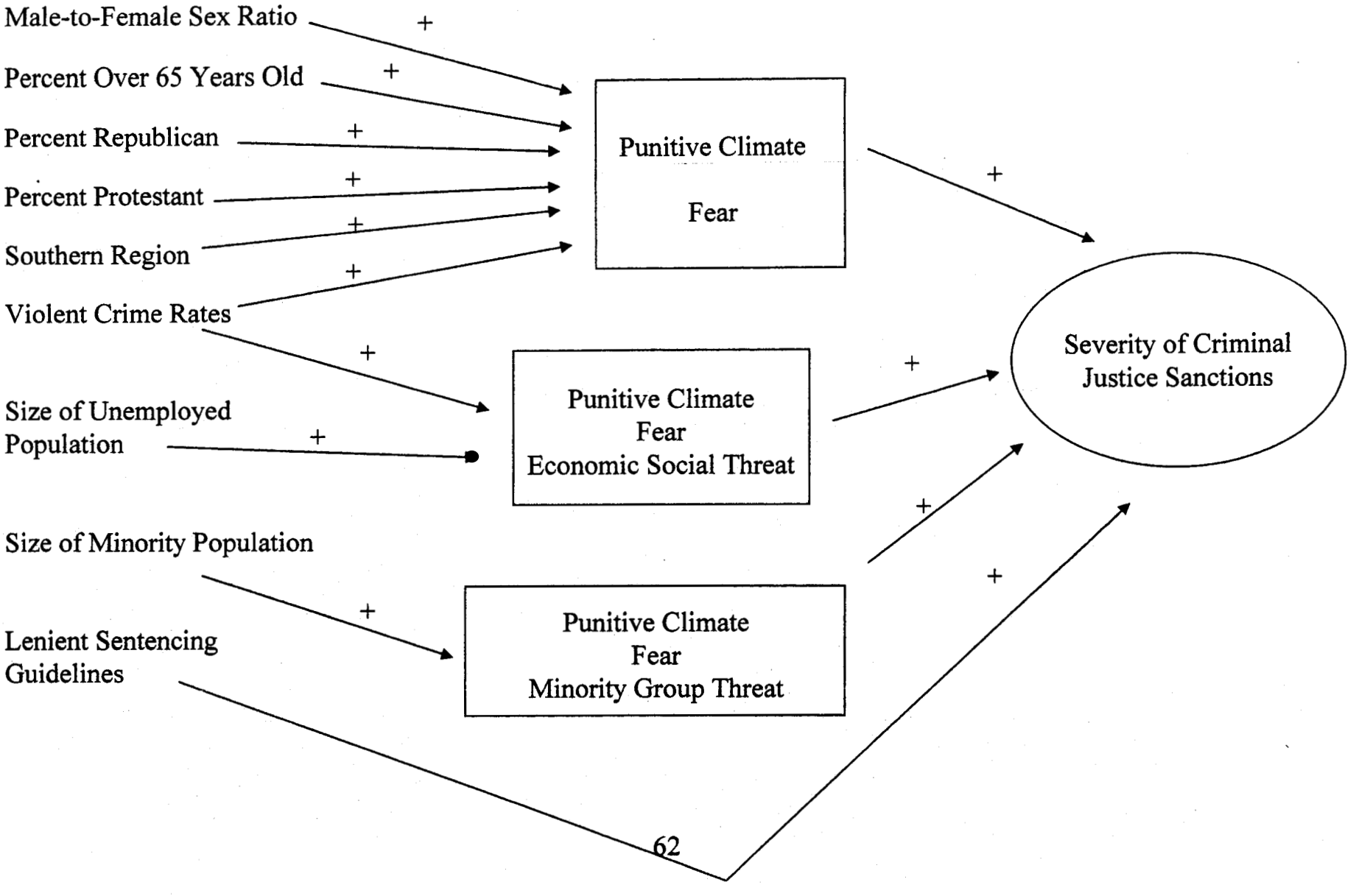
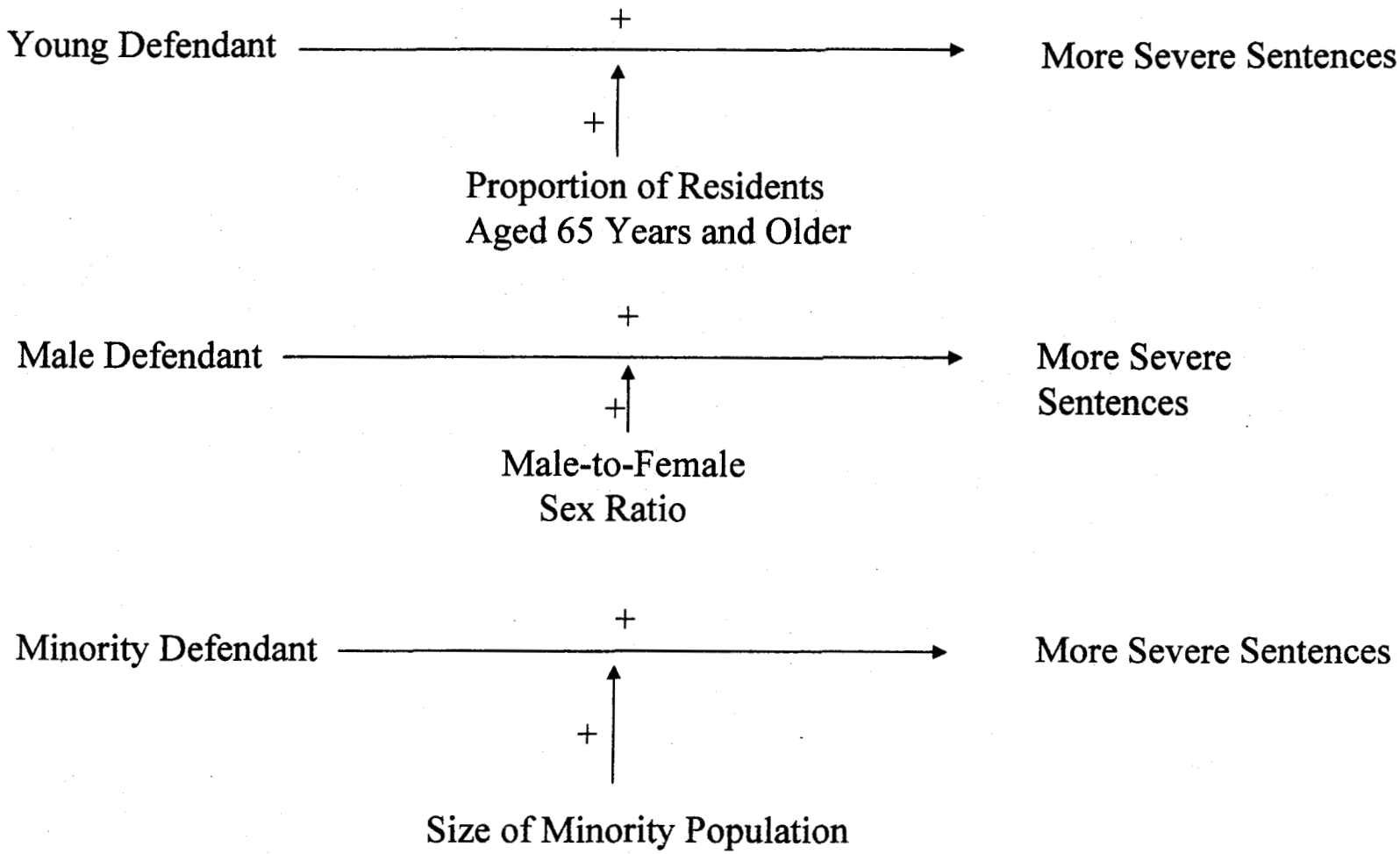


Figure 3.2 Conditioning Relationships Expected in the Present Research.



CHAPTER FOUR: DATA, METHODS, AND ANALYTIC STRATEGY

DATA

The various hypotheses addressed in the research are evaluated with the same data sources: the 1998 State Court Processing Statistics (SCPS) and a county-level demographic data set. This chapter presents a description of these data. The chapter also discusses the measurement of the dependent, explanatory, and control variables included in each substantive chapter (Chapters 5 and 6), the samples examined, and the analytical strategies used to answer the two general research questions outlined in previous chapters.

The primary data source used for this study—the 1998 State Court Processing Statistics (SCPS)—is a biennial program of data collected by the Bureau of Justice Statistics (BJS). This program collects demographic, criminal history, pretrial processing, adjudication, and sentencing information on felony defendants processed in state courts in a sample of the 75 most populous counties in the United States (U.S. Department of Justice, 2000). These counties represent more than one-third of the Nation's population and approximately one-half of all reported crimes (Bureau of Justice Statistics, 2000).

The sampling procedure for SCPS data collection was designed and approved by the U.S. Bureau of the Census. It is a two-stage stratified sampling strategy with 40 of the 75 most populous counties selected at the first stage and then a systematic sample of felony filings (defendants/cases) within each county selected at the second stage.[2] In the first sampling stage, the 75 most populous counties in the United States are divided into four first-

[2] Data collection problems caused Fulton County, Georgia, which had been selected for placement in the third stratum of the 1998 SCPS sample to be dropped from the study. This occurred at a date too late too allow for a substitution, and thus, the total number of counties included in the 1998 sample is 39 as opposed to the original expectation of 40 (see Bureau of Justice Statistics, 2000 or U.S. Department of Justice, 2000).

stage strata based on court filing information obtained through a telephone survey. For each year of the data collection, approximately 13 counties are included in the sample with certainty because of their large number of court filings. (In the 1998 data collection process, only 12 counties were included in the sample with certainty due to the large amount of felony filings.) The remaining counties are allocated to the three noncertainty strata based on the variance of felony court dispositions.[3] The second-stage sampling (felony filings) is designed to represent all defendants for whom felony cases are filed with the court during the month of May. The participating counties provided information for every felony case filed on selected days during the month of May. Depending on its placement during the first-stage of sampling (e.g., one of the four strata), each county provided information for 1, 2, or 4 weeks of randomly selected felony filings in May 1998.

Data from counties that were not required to report a full month of filings (e.g., 1 or 2 weeks of filings) are adjusted to represent the full month of filings in that particular county. That is, counties only required to provide 1 week worth of filings were assigned a weight of 4.0, counties providing 2 weeks worth of information were assigned a weight of 2.0, and counties providing all 4 weeks worth of felony filings were given a weight of 1.0. All of the felony case filings included in the SCPS two-stage stratified sample are then tracked through the criminal justice system for one year following the arrest date. In total, the final sample represents the estimated population of felony cases filed in the 75 most populous counties in the United States during the month of May in 1998.

The 1998 SCPS sample used in the present study provides detailed information on 15,909 sample felony case filings that were collected from the 39 sampled counties. The resulting sample is representative of 56,606 weighted felony cases that were filed during May

[3] See Table 4.1 for a list of counties included in the 1998 SCPS data collection and the present analyses.

1998 in the 75 most populous U.S. counties (Bureau of Justice Statistics, 2000). Although the average number of felony case filings across these 39 counties is approximately 408, the number of filings per county ranged from a low of 73 in Jefferson County, Kentucky to a high of 1,230 in Los Angeles County, California. In addition, the original felony charges ranged in seriousness from public-order offenses (e.g., driving-related, weapons, drug trafficking) to first degree murder.

To evaluate the role of county context on criminal sentencing, county-level economic, racial, political, religious, and demographic information was collected from a variety of data sources, and the resulting county-level data set was then merged with the individual-level SCPS data set. The county-level data file provides information on the explanatory variables of focus in the present study. Specifically, county-level indicators of unemployment rates, racial composition, age structure, sex ratio, and geographic location were collected from the County and City Data books (2000), and Census Bureau Summary Tape Files (2000). County-level crime rates were taken from the Federal Bureau of Investigation's Uniform Crime Reports (UCR) for the year preceding the felony case filings (1997). Information on religious group affiliation at the county level was taken from the U.S. Census of Churches (1997). County-level indicators of political orientation were obtained from the American National Election Study (1996). And finally, indicators of type of sentencing structure/guidelines, at the county level, were taken from the National Survey of State Sentencing Structures (U.S. Department of Justice, 1998). This survey, administered by the Bureau for Justice Assistance (BJA), provides detailed information on the types of sentencing structures and guidelines in place, in 1998, for all 50 states and the District of Columbia.

This county-level data set provides contemporary economic, racial, political, religious, and demographic information for the 39 counties included in the individual-level SCPS data set. Merging the two data sets was accomplished by linking county identifiers—Federal Information Processing Standards (FIPS) codes—that are available in each of the data files. Each of the 50 states (and the District of Columbia) has its own two digit FIPS code and each county within a state is assigned a unique 3 digit FIPS code. Using these identifiers to merge the individual- and county-level files results in a single comprehensive, multilevel data set that provides individual-level defendant, case, processing, and sentencing information as well as contextual characteristics of the counties in which these cases were adjudicated.

MEASURES

Dependent Variables

Table 4.2 summarizes the measurement of all dependent, explanatory, and control variables included in the present analyses and discussed below. I examine the main and conditioning influences of community context on several sentencing outcomes. Typically, there are two general types of decisions that judges make at the sentencing stage: the type of sanction and the length of punishment. The type of sanction decision concerns whether to impose an incarcerative or non-incarcerative punishment on convicted defendants. In the present study, this decision is measured in two ways. Consistent with prior research, the first version of this dependent variable is a dichotomy, coded 1 if an incarceration sentence was imposed and 0 otherwise. This version of the dependent variable represents the standard "in/out" sentencing examined in prior sentencing studies.

The second version of this incarceration decision outcome is a trichotomous variable that contrasts prison incarceration, jail confinement, and probation sentences or monetary fines (see Demuth, 2000; Steffensmeier et al, 1993 for additional discussion of these sentencing outcomes). The inclusion of this variable allows for comparisons across three groups of sentenced defendants: those sent to prison, those sent to jail, and those not incarcerated. Although the rationale for comparing these sentencing outcomes is not well-developed in the literature, prior research (Steffensmeier et al., 1993) suggests that a distinction between type of incarceration (e.g., prison, jail) is important in analyses of sentencing outcomes. More specifically, prison sentences are typically viewed as more stigmatizing than other types of custodial sentences (e.g., jail) and as such, there is the possibility that the effects of individual- and community-level characteristics may depend on the type of incarcerative sentence considered (Demuth, 2000; Kramer and Scirica, 1986; see Steffensmeier et al., 1993 for evidence that this is the case, at least in Pennsylvania).

For defendants who receive incarceration sentences, the judge must then impose a sentence length to be served in jail or prison. Typically, this outcome is a continuous measure, in months, for all defendants who receive an incarceration sanction. In the present analyses, because of the skewed nature of this variable, I use the natural log of the sentence length received in months. This measure captures the length of all incarceration sentences (e.g., prison and jail) imposed on defendants in the SCPS data.

Explanatory Variables

Prior sentencing research has estimated the effects of several contextual characteristics, typically focusing on racial, economic, and crime conditions. Following this research and the expectations drawn from the threat perspectives, I include as explanatory

variables county-level measures of economic composition, racial composition, and official rates of violent crime.

The measure used in this study to capture community economic composition is the percentage of residents aged 16 years and older in the civilian labor force in 2000 that are unemployed. The data for this explanatory variable are taken from the United States Bureau of the Census County and City Data Books. The measures used to capture community racial composition were also obtained from the County and City Data Books. The first version of this variable is measured as the percent of black residents within the community. As suggested in the literature (e.g., Blalock, 1967; Jackson, 1989; Jackson and Carroll, 1981; Myers and Talarico, 1987), the effect of racial composition on sentencing outcomes may be curvilinear. To test for this possibility, I computed a squared version of the percent black variable. This measure will be used in those models that examine whether there is a non-linear relationship between racial composition and sentencing outcomes, as implied in the prior literature (Blalock, 1967; Jackson, 1989; Myers and Talarico, 1987).

The crime rate measure used in this study is obtained from the FBI's Uniform Crime Reports (UCR) for 1997, the year preceding the filings of the felony cases. Consistent with prior research, I include as a contextual predictor the violent crime rate per 100,000 county residents. Following prior research (e.g., Carroll and Doubet, 1983; Chiricos and Crawford, 1995; Galster and Scaturo, 1985; Hagan, 1977; Michalowski and Pearson, 1990; Snell, 2000) and Borg's (1997) assertion about the Southern subculture of punitiveness, I include as an explanatory variable a dichotomous indicator of region. More specifically, counties within Southern states, designated as such by the U.S. Bureau of the Census, are given a value of one, whereas others are given a value of zero.

Relying on individual-level survey analyses of punitive attitudes, I include four additional explanatory variables that have been neglected in extant theory and research on community effects and sentencing outcomes. The first of these, taken from the 2000 County and City Data Books, is an indicator of the male-to-female sex ratio. Specifically, this explanatory variable is measured as the number of males per 100 females within the county. The next explanatory variable, also taken from the 2000 County and City Data Books, is an indicator of the age structure within the SCPS counties. Specifically, this is measured as the percentage of residents aged 65 years and older. The third variable is an indicator of political orientation obtained from the American National Election Study. Specifically, this variable is measured as the percentage of county residents who voted Republican in the 1996 national election. The final explanatory variable drawn from the punitive literature is an indicator of religious orientation. The county-level information for this variable was taken from the U.S. Census of Churches, 1997. The specific measurement of this variable is the county percentage of Protestant-affiliated residents as defined by individual church reports of their membership.

The last explanatory variable included in the present study is a dichotomous indicator of the type of sentencing structure/guidelines within the community. This variable is defined as those counties, within states, that have stringent sentencing structures and/or guidelines to which they are required to conform when making sentencing decisions. Counties within a state with stringent guidelines (e.g., three strikes laws, truth-in-sentencing, mandatory minimums, and habitual offender legislation) are assigned codes of "1" and counties within states with more flexible/lenient guidelines (e.g., voluntary, advisory, and presumptive guidelines) receive a "0" value.

Control Variables

To isolate the degree to which these county-level explanatory variables affect the sentencing outcome measures, several control variables will be included in the analyses. Following prior research, the present study includes as control variables indicators of the seriousness of the offense, defendant demographic characteristics, defendant criminal history, and other characteristics of the case (e.g., type of adjudication, type of conviction) (e.g., Albonetti, 1991; Myers and Talarico, 1987; Sampson and Lauritsen, 1997; Spohn, 2000, 1994; Spohn and Holleran, 2000; Spohn and Spears, 1996; Steffensmeier et al., 1998, 1993; Ulmer, 1997; Ulmer and Kramer, 1998, 1996; Williams, 1976). The control variables are measured consistently with prior research.

Defendant Characteristics

Information on several defendant characteristics are provided in the 1998 SCPS individual-level data file and included in the present analyses. These characteristics include race, sex, age, and criminal history. Defendant race is defined as black (coded 1) versus non-black (coded 0). Defendant sex is a dichotomous variable coded 1 for male and 0 for female. Drawing from prior research (e.g., Steffensmeier et al., 1998) defendant age is represented by 6 dummy-coded categories. Specifically, these categories include: juvenile defendant (less than 18 years of age, coded 1 for yes and 0 for no), youthful defendant (between 18 and 20 years old, 1= yes, 0= no), young defendant (between 21 and 29 years of age, 1= yes, 0= no), defendant 30 to 39 years old (1= yes, 0= no), defendant 40 to 49 years old (1= yes, 0= no), and defendant 50 years and older (1= yes, 0= no). Defendant criminal history is a dichotomous variable coded 1 for yes and 0 for a known prior record. Criminal history information provided in the SCPS is limited, however, defendants are assigned codes of "1"

(yes) on this dummy variable if there is evidence of any prior felony arrests, any prior convictions (felony or misdemeanor), or any prior incarcerations (prison or jail).

Case/Offense Characteristics

The 1998 SCPS data file also provides information on several case/offense characteristics included in the present analyses. These characteristics include seriousness of offense, type of adjudication/type of conviction, pretrial detention status, and time to arrest. Two dichotomous measures that capture offense seriousness are included the analyses. The first is a dummy-coded variable distinguishing between defendants adjudicated for a violent offense (coded 1) and those adjudicated for a non-violent offense (coded 0). The second is a dummy-coded variable that distinguishes between defendants adjudicated for a drug offense (coded 1) and those adjudicated for a non-drug offense (coded 0). The three dummy-coded variables used as indicators of the type of adjudication and conviction method include jury trial (1= yes, 0= no), bench trial (1= yes, 0= no), and guilty plea (1= yes, 0= no). Pretrial detention status is measured as a dichotomy coded 1 for defendants who were detained prior to adjudication and 0 otherwise. Finally, the amount of time between offense and arrest is measured as those defendants arrested within one day of the offense, coded 1 for yes and 0 otherwise.

ANALYTIC SAMPLES

To construct the analytic samples used in the present study, I restrict the original SCPS data sample in several important ways. Because the primary emphasis of my research is on the influence of community characteristics on sentencing outcomes and on the conditioning nature of these characteristics on the influence of defendant race, sex, and age on sentencing outcomes, I include only those cases eligible for sentencing. More

specifically, cases that were missing information on key adjudication, conviction, or sentencing outcomes at the time of data collection are excluded from the analyses since those defendants are ineligible for any of the sentencing options discussed above.[4]

The two samples used in the analyses conform to the two general decisions made during the sentencing phase. First, for both measures of the incarceration decision (i.e., in/out, type of sentence), the analyses are based on 6,921 cases that met the criteria outlined above. For the second decision, sentence length, I place two additional restrictions on the sample. Naturally, the sample used for analyses that focus on the sentence length outcome is restricted to only those defendants who receive an incarcerative sentence (N= 4,613). This sample is restricted further to include only those defendants with complete information on the incarceration term. This results in a sample of 4,554 defendants who received a prison or jail sentence and for whom the length of the sentence is known.[5]

ANALYTIC STRATEGY

The role of community context in shaping individual-level sentencing outcomes is examined using a multilevel modeling approach. Multilevel, or hierarchical, regression models have become the standard method used for estimating the effects of community characteristics on individual-level attitudes and behaviors, especially when the data used for such studies contain a substantial amount of respondent clustering within communities, as is the case in the present study (Bryk and Raudenbush, 1992; Hox and Kreft, 1994). Unlike more traditional regression approaches to estimating community effects (e.g., contextual

[4] The following types of cases were excluded from the present analyses: dismissed/acquitted (N= 4,549), deferred (N= 362), diverted (N= 223), *nolle prosequi* (withdrawn by the state) (N= 1,751), transferred to juvenile court (N=13), transferred to a special court proceeding (i.e., drug court) (N= 48), still pending (N= 1,574), awaiting sentencing (N= 276), and those with unknown/missing sentencing outcomes (N= 21).

[5] Fifty-seven cases were excluded due to missing information on confinement term for jail sentences and only 2 cases were excluded due to missing information on incarceration term for prison sentences.

analyses), multilevel regression models explicitly partition the variance to be explained into within- and between-community components. The main conceptual benefit of this feature is that these models provide a direct and efficient means of describing the degree to which given outcomes, such as the likelihood of incarceration or the sentence length, vary across the counties represented in the data.

An important methodological benefit is that multilevel models formally adjust for non-independence of sample members who reside in the same community. Failure to model this type of non-independence can result in estimated standard errors that are biased downward, which may in turn produce misleading conclusions about the statistical and substantive importance of community variables. This approach takes into account that the data is hierarchical and is essentially a multistage sample, as is the case for the data in the present study (Hox, 1995). More specifically, in stage one of the sampling procedure, communities are sampled for information on felony case filings and in stage two, felony case filings are sampled for inclusion in the 1998 SCPS data. Thus, all defendants sampled from the same communities "generally are not completely independent" (Hox, 1995: 6). This means that defendants from the same community tend to be similar to one another because of a particular community's selection process and because of the common history they share by residing in the same community. As a result of this non-independence, the average correlation between variables measured on defendants from the same community will be higher than the average correlation between variables measured on defendants from different communities. Since most traditional statistical tests rely heavily on the assumption of independent observations, they are inappropriate for the present data. Estimating traditional models using the present data set violates the assumption of non-independence and produces

standard errors that are too small, which results in many spuriously significant results (Hox, 1995; Raudenbush et al., 2001). Due to the hierarchical nature of the data, the non-independence of sampled defendants, and the emphasis on the influence of both community-level and individual-level characteristics on individual-level sentencing, a multilevel modeling technique is appropriate.

To address the research questions posed, a series of hierarchical linear and generalized linear models (HLMs and HGLMs) will be estimated. For the lone continuous dependent variable, sentence length, the appropriate model is the standard linear hierarchical regression model (see Bryk and Raudenbush, 1992). HGLMs are more appropriate for outcome variables that are highly skewed, as is the case with the dichotomous and trichotomous dependent variables used in the present research to capture the incarceration decision (for detailed descriptions of these models, see Bryk et al., 1996; Wong and Mason, 1985). Since the focus of the first research question is on the effects of the community-level variables on three distinct measures of sentencing, three types of models are estimated. Each type of model estimated responds to the nature of the dependent variable examined, and the results of these models are reported in Chapter 5.

Because both measures of the incarceration decision violate the assumption of normality, the use of standard linear hierarchical regression models is inappropriate. In the present analyses, the incarceration outcomes are restricted to either one of two values, as is the case for the "in/out" decision, or one of three values, as is the case for the trichotomous variable. Because of these value restrictions for the dependent variables, the assumption of normal distribution is not realistic and "no transformation can make it so" (Raudenbush et al., 2001: 111). More specifically, the first dependent variable, incarceration decision, may only

take on two values (0, 1) and, because of this restriction, cannot be normally distributed. Similarly, the second incarceration decision, prison versus jail versus probation/fine, may take on only three values (1, 2, 3) and also violates the normality assumption. Thus, two types of HGLMs are used to examine the influence of community context on both of the incarceration decision measures: Bernoulli and multinomial. These generalized models are appropriate for the incarceration decision outcomes examined in the present analyses because they relax the assumption of normality and take into account that the values on a given outcome are restricted to one of two values, as is the case for the dichotomous measure, or one of three values, as is the case for the trichotomous measure.

First, Bernoulli models are used to assess the influence of community conditions on the dichotomous sentencing outcome ("in/out"). These models allow for a direct assessment of whether the community-level variables considered are associated with the variance of the incarceration decision across counties. This is the appropriate type of multilevel strategy when each case at the individual-level corresponds to one respondent (e.g., defendant) and there is a single binary outcome per case (e.g., incarceration versus non-incarceration) that may take on either a value of "1" or a value of "0", as is the case for the "in/out" decision examined in the present study.

Second, multilevel multinomial models are used to examine the influence of community conditions on the second version of the incarceration decision: prison incarceration versus jail confinement versus probation/fine. This is the appropriate multilevel approach when each case at the individual-level corresponds to one respondent, but there is a multi-category outcome, as is the case for the trichotomous measure of incarceration sentence examined in the present research. More specifically, multinomial

models allow for an assessment of whether different explanatory or individual-level control variables predict prison incarceration, predict jail confinement, or predict a sentence of probation (or fine). These models relax the assumption of normality, similar to the Bernoulli models, and enable the effects of particular explanatory variables (and other predictors) to affect the three outcome categories in differing ways. More specifically, multilevel models allow for an assessment of how the predictors affect each of the possible outcome categories. It may be that variables that significantly influence the likelihood of prison incarceration do not affect the likelihood of jail confinement or a probation sentence (or fine). It may also be that the predictors are the same for each of the possible outcome categories, except the size or the direction of their influence may depend on the outcome itself (e.g., prison, jail, probation/fine). Because the focus of this study is on the various ways in which community characteristics may affect sentencing outcomes, the multinomial models are the appropriate technique estimating the effects of the explanatory and control variables on the trichotomous measure of sentencing (Bryk and Raudenbush, 1992; Raudenbush et al., 2001).

Third, in response to the continuous nature of the third dependent variable measure, sentence length, I estimate standard linear hierarchical regression models. This is the appropriate technique when each case at the individual-level corresponds to one respondent and the individual-level outcome is continuous and linear in nature. Generalized models are not required in analyses of sentence length since the values for this variable are not restricted to dichotomies or categories, but instead, are continuous, positive integers. However, preliminary analysis of this sentence length variable reveals that it is extremely skewed and transformations are needed in order to conform to the assumption of normality and use the standard linear approach (Raudenbush et al., 2001). Thus, I compute the natural log for the

sentenced length variable and it meets all criteria needed for analysis using the standard hierarchical linear modeling approach. The natural log measure is the dependent variable used in all models that examine community-level and individual-level predictors of sentence length.

The focus of the second research question is on how the community-level variables condition the effects of defendant race, sex, and age on the dichotomous, trichotomous, and continuous measures of sentencing discussed above. Once again, the type of multilevel approach needed to address this question corresponds precisely to the nature of the dependent measure included in the analyses; however, there is an important difference between the series of models used to address the first research question (Chapter 5) the series used to address the second research question (Chapter 6). The first question emphasizes variation in the sentencing outcomes, and as such, I estimate a series of random-intercept models for Chapter 5. The main purpose of the random-intercept models is to evaluate the degree to which the mean value (i.e., the intercept) of a given dependent variable varies across communities and, if so, to examine whether a specified set of explanatory variables helps to account for that variation (Bryk and Raudenbush, 1992; Hox, 1995). Specifically, for the sentencing decision measured as "in/out," I estimate a series of random-intercept Bernoulli models; for the sentencing decision measured as prison incarceration versus jail confinement versus probation/fine, I estimate a series of random-intercept multinomial models; and for the sentence length decision, I estimate a series of random-intercept linear models.

In Chapter 6, I report the results for a series of models that address my second question. Since the focus shifts to the conditioning effect of community characteristics on the influence of defendant race, age, and sex, I estimate random-slope models. Random-

slope models are particularly well-suited for examining cross-level interactions, such as whether the effect (i.e., the slope) of a specified individual-level explanatory variable varies across communities. The models in Chapter 6 specify the slope parameters for defendant race, sex, and age to vary across the counties represented in the data and allow for an assessment of whether the community characteristics considered are associated with the variance of these defendant characteristics (see Rountree et al, 1994; Sampson and Bartusch, 1998; Sampson et al., 1997). Specifically, Chapter 6 reports the results for random-slope Bernoulli models, random-slope multinomial models, and random-slope linear models that examine the extent to which defendant race, sex, and age vary across communities. If there is significant variation in these effects across counties, community racial composition, male-to-female sex ratio, and age structure are then included in these random-slope models to assess whether, and the degree to which, these community characteristics shape the influence of defendant race, sex, and age on the "in/out," prison versus jail versus probation/fine, and sentence length outcomes.

Since the analytic design of the present research entails the examination of various decisions made at the sentencing stage, which is just one of many stages in the criminal justice process, all of the statistical models estimated in the present study incorporate standard correction terms for sample selection bias (see Berk, 1983). Sample selection bias is potentially troublesome in studies such as this that focus on outcomes or decisions made at one stage in a relatively long process. More specifically, this bias occurs when analyzing a sub-sample of the population from which some respondents have been excluded in a systematic manner (e.g., only those eligible for an incarceration sentence or those eligible for inclusion in the analysis of sentence length) (e.g., Berk, 1983; Berk and Ray, 1982; Peterson

and Hagan, 1984). The basic argument is that it may be something different about the sub-sample that results in their placement in the stage being examined. The extent of this bias varies by sample and can be completely corrected for only by modeling accurately all of the previous selection decisions (e.g., Berk, 1983; Peterson and Hagan, 1984).

The most common problem with sample selection bias is that it may indicate systematic under-representation of certain cases (e.g., Berk, 1983). Essentially this means that there might be some particular characteristic associated with cases from the population that are not included in the sub-sample. This systematic under-representation produces a specification error and generalizations from the analysis of the sub-sample onto the population as a whole are then misleading and undermine external validity (Berk, 1983). Jeopardizing internal validity is also a potential problem in analyzing non-random sub-samples that cannot be dismissed, even by claiming interest only in the non-random subset of cases included in the analysis. More specifically, this means that the effects of a given explanatory variable and the difference between its predicted and actual effects on a given outcome are confounded. The causal effects attributed to the explanatory variable are actually a product of random perturbations between the predicted and actual effects (Berk, 1983).

Based on prior research, (Berk, 1983; Heckman, 1979, 1976: but see also Beaulieu and Messner, 1999; Stolzenberg and Relles, 1997 for conflicting evidence), the most common strategy for dealing with the issue of sample selection bias is to use a two-step procedure and estimate "hazard rates" or correction factors that demonstrate the predicted probability of exclusion from the sample and then include this variable as a control in the analytical equations. Since the 1998 SCPS provides extensive information on prior stages in

the criminal justice process (e.g., pretrial, adjudication, conviction), I compute two correction factors that allows me to control for the predicted probability that the defendants in my samples would have been excluded from either sample (i.e., not convicted or not incarcerated). For each case, the computation produces the predicted probability of being excluded from the sub-sample. The first correction factor, the predicted probability of being excluded from the convicted sample, is then included in all models that examine versions of the incarceration outcome to control for the effects of sample selection bias, or nonrandom selection. The second correction factor, the probability of being excluded from the incarcerated sample, is then included in all models that examine sentence length to control for the effects of nonrandom selection.

The inclusion of this correction factor in statistical models is not without criticism, however (Beaulieu and Messner, 1999; Hartman, 1991; Steffensmeier et al., 1993; Stolzenberg and Relles, 1997, 1985), and all precautions are taken in the present analyses to produce reliable and accurate estimations of the main and conditioning effects of community characteristics on individual-level sentencing outcomes. Specifically, Stolzenberg and Relles (1997:496) argue that including these correction factors may, in some cases, produce "estimates that are farther from true parameter values than estimates obtained by uncorrected [models]." This may occur for several reasons.

First, as discussed above, correction factors are included in statistical models to prevent the potential problems associated with the systematic under-representation of certain types of cases. The coefficient estimate for any given independent variable is increasingly affected by including the correction factor (because of the correlation between the two and because the bias occurs if the correction factor is omitted). The random error of the

coefficient estimate also increases when the correction factor in included in the model. This is problematic because as the random error of the coefficient estimate increases, the corrected estimate "can become unstable enough to have a chance of being farther from the true population value" than the original value it was intended to correct (Stolzenberg and Relles, 1997:497). Additionally, the high level of correlation between the correction factor and the independent variable may produce problems similar to ones that result from multicollinearity, or near multicollinearity, among regression variables in virtually any model. Evidence that this is the case is illustrated by the "substantively ridiculous" values produced for the "corrected" coefficient estimates (p. 497). The problems associated with sample selection bias, and those associated with the most common method used to correct for this potential bias (Heckman's two-step procedure), are critical methodological issues to take into account this research. Since both the arguments for and the arguments against use of a correction factor are compelling, I perform all of the analyses twice in the present study: once with the correction factor and once without it. Any differences between the two series of estimated models will be discussed in the appropriate results sections of Chapters 5 and 6.

In summary, the key explanatory variables in this study are measured at the county level and include: unemployment rates, racial composition, violent crime rates, geographic location, sex ratio, age structure, political orientation, religious affiliation, and sentencing structure. Additional individual-level predictors of sentencing outcomes drawn from prior research are included as control variables. The research questions are addressed using a merged data set that includes individual-level defendant, case, and offense information from the 1998 State Court Processing Statistics (SCPS) program along with a county-level file that includes information on the communities within which these cases were adjudicated. More

specifically, the analyses presented in Chapters 5 and 6 explore whether community context affects individual-level sentencing outcomes and whether this community context conditions the role of defendant race, sex, and age on sentencing outcomes.

STRENGTHS AND LIMITATIONS

It is important to preface the presentation of the empirical results of this study with a discussion of the strengths and limitations associated with the methodology of the research. Because the methodological strengths lay the foundation for any analytical plan, I discuss those first. Following this discussion is a description of the study's methodological limitations.

By far, the most important methodological strength of the present study is that the data includes a wide range of information for a large number of criminal defendants from 39 different counties and 17 states. It includes information on demographic characteristics, pretrial decisions, adjudication/conviction, sentencing details, and conditions of the communities in which the sentencing occurs. The hierarchical structure of this data (e.g., variables at both the individual- and community-levels) necessitates a multilevel modeling. Although this approach is not new to criminological research, the available multilevel research is not so widespread that it would not benefit from another example of empirical multilevel research. This research addresses whether community conditions affect sentencing and whether they condition the effect of defendant race, sex, and age on sentencing outcomes.

Another strength of the present analytical strategy concerns the various measures of sentencing examined. Extant sentencing research focuses on one or two sentencing outcomes. Most of the older studies examined either the decision to incarcerate ("in/out") or

the length of the sentence. Recent studies have emphasized the importance of examining both of these outcomes as separate decisions and have begun to include both of these decisions. Rarely, however, do studies examine further specifications of the sentences outcomes. The present study examines not only the "in/out" decision and the sentence length, but also analyzes whether different types of sentences (prison, jail, probation/fine) are influenced by various community- and individual-level characteristics.

A final strength of the present analytical strategy concerns the breadth of community conditions included in the research. While there are a few multilevel sentencing studies that have included indicators of community context, none of these extends beyond inclusion of racial, economic, and official crime indicators. Thus, although we are beginning to understand how these three community conditions may affect sentencing outcomes and even condition the effects of other predictors on sentencing, we are still uncertain about the precise nature of these effects and are completely unaware of whether *additional* characteristics of communities might affect sentencing and condition the effects of other predictors. The present study includes community-level indicators of racial, economic, and crime conditions as well as other community-level conditions neglected thus far in the theoretical and empirical literatures.

All of the methodological limitations concern the data and measures used in the present analyses. The data used to address the questions posed in the present research is, in some regards, limited. First, although the 1998 SCPS data provides a wealth of demographic information on the defendant, case processing, and sentencing outcomes, it provides no information on the victims of these cases. And since prior research suggests that several victim characteristics significantly influence the type of sentencing given to defendants, this

is a serious limitation to a comprehensive examination of sentencing outcomes. This will undermine the conclusions drawn about community effects only if the unmeasured victim attributes are correlated with the community factors in question. Although it is difficult to bring data to bear on this issue, the conclusions drawn from this study will be sensitive to it.

Another limitation of the present data is that it contains no court context or court organizational characteristics that have been found in prior research to influence sentencing outcomes. Although this is not ideal, the focus of this study is on assessing how conditions *outside* the court affect sentencing decisions made within, and thus, is not a fatal exclusion. Yet, it is possible that any observed community effects may actually reflect these organizational features. Also, the lack of such court organizational data may lead to an underestimation of the effects of the contextual features in the analyses. Thus, all conclusions drawn from the analyses will be tempered by this consideration.

A final limitation of the data used in the present research concerns the original coding of the SCPS data by its collectors. More specifically, the nature of sentencing data precludes the creation of a straightforward sentence length variable for all of the defendants given incarceration sentences. The data is such that for some cases (N= 148) defendants are given values for two variables that measure the length of the prison sentence. More specifically, these defendants have valid data for two different categories of sentence length (e.g., a minimum and a maximum sentence length) and both values are different. It is unclear whether defendants are actually given two separate sentences or a sentence range.[6] Thus, to err on the side of caution, for defendants with values on both the minimum and maximum

[6] Several telephone calls to and discussions with the Bureau of Justice Statistics (BJS) representative who is responsible for the data collection, as well as others who have used various versions of the SCPS data (Demuth, Steffensmeier) did not clarify the nature of these sentence length variables and what exactly they measured. All persons who worked with various forms of this data collection reported using only the maximum sentence length measure because it had the least amount of missing information.

sentence length variables, I created three versions of the sentence length outcome used in the present study. All versions include defendants who receive either jail or prison sentences.[7] For those defendants who receive a singular incarcerative sentence (i.e., have a valid value for only one of the possible incarceration sanctions), I use that sentence length, in months, for each version of the sentence length outcome variable (N= 4,406). Thus, for most of the cases in the sentence length sample (97%), the sentence length value remains the same regardless of the outcome version used.

However, for those cases that have both a minimum and a maximum sentence length I employ the following strategy. First, I use a sentence length variable that captures only the minimum sentence length, in months, for the defendants given multiple scores. Next, I compute a sentence length variable that captures only the maximum sentence length, in months, for defendants who have multiple sentence length scores. And third, I use a sentence length variable that averages, by taking the median, the minimum and maximum sentence lengths, in months, imposed on defendants who received both.

I would be remiss if I did not note that there is really no theoretical or empirical direction for creating three versions of this outcome variable. That is, I do not do this in order to test any assumption or to replicate prior research; but rather, the ambiguity of what it is these sentence length variables actually measure is troublesome and neglecting some or all of these important variables is not an efficient way of proceeding with the analyses. Thus, I included these three versions of the sentence length variable on the basic statistical models to make certain that nothing important is excluded from the analyses. Since the results of these preliminary analyses indicate that all versions of sentence length variable produce virtually identical results, following prior research (e.g., Bureau of Justice Statistics, 2000; Demuth,

[7] None of the defendants received both a jail and prison term.

2000), I report the results for the sentence length models that use the maximum sentence length, when available. Finally, it is important to note that due to the skewed distribution of the final sentence length variable (and all other versions), this variable is naturally logged and only the logged version is used in the multilevel regression models presented in Chapters 5 and 6.

There are two additional limitations that need to be discussed before the presentation of the findings. Both of these limitations concern the measurement of the variables included in the present analyses. First, the variable used as to indicate whether the defendant has a prior record is somewhat less than ideal. This variable is measured as a dichotomy (1= yes, 0= no) that does not specify the nature of the defendants' criminal history, only whether there is evidence that a defendant had a previous arrest record, conviction record, or incarceration record. It may be that some defendants had only one previous misdemeanor arrest or 30 prior felony convictions/incarcerations but the information needed to make these types of distinctions is unavailable. More specifically, I use this measure of defendant prior record because of the extremely large amount of missing information on other possible measures of prior record (e.g., prior felony arrests, prior misdemeanor/felony convictions, prior jail/prison incarcerations). At least 50% of the sample had missing information on these variables. However, the indicator of prior record used in this study does represent an adequate, if weak, control for whether a defendant had prior contact, in any way, with the criminal justice system. Again, this means that conclusions about significant community effects will be tempered somewhat because such effects could reflect measurement error associated with the measure of prior record.

A final limitation associated with the measures used in the present study concerns the measurement of some of the community characteristics. Although the timing of the measurement of all the explanatory variables does not correspond precisely with the data on felony cases, most of these variables refer to conditions prior to the sentencing outcomes, and for those that do not (e.g., 2000 census data) there is likely to be considerable stability in these characteristics in the short-run, and thus this minor discrepancy is not likely to introduce serious bias.

In sum, although the present analysis is somewhat limited with regard to the lack of information on victim demographics and court organizational characteristics as well as the relatively weak measure of prior record, the focus of this study is on the influence of the community characteristics; and thus, these are not fatal issues. However, all conclusions drawn from this analysis will be sensitive to these limitations. Moreover, examining the influence of a wide range of community characteristics on a variety of sentencing outcomes, using a comprehensive data set and multilevel approach, as in the present study, is critical to broadening our understanding of both community effects and sentencing outcomes. Regardless of the limitations discussed above, this study goes beyond prior research by assessing the effects on sentencing decisions of a number of community characteristics neglected in extant theoretical and empirical literature.

Chapter 5 presents the results of multilevel models (hierarchical generalized linear models) estimated to address my first research question, Does community context affect individual-level sentencing outcomes, net of other predictors? Chapter 6 reports the results of the hierarchical linear models estimated in order to address my second research question, Does community context condition the influence of defendant race, sex, and age on

sentencing outcomes? Finally, because the research questions in the present study pertain to different concerns and because the samples and models used to examine these questions vary slightly across the dependent variables, Chapters 5 and 6 present and discuss the following: 1) variables included; 2) descriptive statistics; 3) specific models estimated; 4) empirical results; 5) interpretation of results. Chapter 7 closes the study by summarizing the empirical findings, discussing the study's limitations, and highlighting the contribution of the research.

Table 4.1. List of Counties included in the Present Analyses.

Jefferson, Alabama
Maricopa, Arizona
Pima, Arizona
Alameda, California
Los Angeles, California
Orange, California
Sacramento, California
San Bernardino, California
San Francisco, California
Santa Clara, California
Ventura, California
Broward, Florida
Hillsborough, Florida
Miami-Dade, Florida
Orange, Florida
Cook, Illinois
DuPage, Illinois
Marion, Indiana
Jefferson, Kentucky
Montgomery, Maryland
Baltimore City, Maryland
Wayne, Michigan
Jackson, Missouri
St. Louis, Missouri
Bronx, New York
Erie, New York
Kings, New York
Monroe, New York
New York, New York
Queens, New York
Suffolk, New York
Hamilton, Ohio
Allegheny, Pennsylvania
Philadelphia, Pennsylvania
Shelby, Tennessee
Dallas, Texas
Harris, Texas
King, Washington
Milwaukee, Wisconsin

Table 4.2. Description of the Measurement of the Dependent, Explanatory, and Control Variables Included in the Analyses of Community Context on Sentencing.

DEPENDENT VARIABLE MEASURES	
In/Out	Dummy variable that identifies whether the defendant received an incarceration sentence (1= yes, prison or jail term; 0= no, probation or fine).
Sentence Category	Trichotomous variable that identifies the general type of sentence for the defendant (1= prison incarceration, 2= jail confinement, 3= probation or fine).
Sentence Length	Naturally logged, continuous measure of the length of incarcerative sanctions, in months.
EXPLANATORY VARIABLE MEASURES	
Unemployment Rate	Percentage of residents aged 16 years and older who are unemployed.
Racial Composition	Percentage of black residents, naturally logged. And, percentage of black residents, naturally logged and squared, used only in models that examine the non-linear nature of the effect the size of the black population.
Violent Crime Rate[1]	The number of violent crimes per 100,000 residents, as reported by the FBI's Uniform Crime Reports.
South	Dummy variable that identifies whether the defendant was sentenced in a Southern county (1= South, 0= Non-South).
Sex Ratio	The number of males per 100 females.
Age Structure	Percentage of residents aged 65 years and older.
Political Orientation	Percentage of residents who voted Republican in the 1996 national election.
Religious Affiliation	Percentage of residents affiliated with the Protestant Church.

[1]This category includes the following offenses: murder, manslaughter, robbery, rape, and aggravated assault.

Table 4.2. (Continued).

Sentencing Structure	Dummy variable that identifies the nature of the sentencing guidelines within the jurisdiction (1= stringent, 0= lenient).
CONTROL VARIABLE MEASURES	
Age	Dummy coded categories: Less than 18 years, 18 to 20 years, 21 to 29 years, 30 to 39 years, 40 to 49 years, and 50 years and older.
Race	Defendant's race. (1= Black; 0= Non-Black).
Sex	Defendant's sex (1= Male; 0= Female).
Criminal History	Defendant's criminal history status (1= prior record; 0= unknown/no prior record).
Violent Offense	Dummy variable that identifies whether the defendant is adjudicated for a violent offense (1= yes; 0= no).
Drug Offense	Dummy variable that identifies whether the defendant is adjudicated for a drug offense (1= yes; 0= no).
Other Offense	Dummy variable that identifies whether the defendant is adjudicated for some other felony offense (e.g., property, public order).
Bench Trial	Dummy variable that identifies whether the defendant received a jury trial (1= yes; 0= no).
Jury Trial	Dummy variable that identifies whether the defendant received a bench trial (1= yes; 0= no).
No Trial	Dummy variable that identifies whether the defendant pled guilty (1= yes; 0= no).
Quick Arrest	Dummy variable that identifies whether the defendant was arrested quickly (1= yes, within a day; 0= otherwise).
Detained	Dummy variable that identifies whether the defendant was detained prior to adjudication (1= yes; 0= no).

CHAPTER FIVE: MAIN EFFECTS OF COMMUNITY CONTEXT ON SENTENCING

INTRODUCTION

This chapter reports the results of analyses of the effects of several community characteristics on sentencing outcomes. The presentation of the results is organized according to the three dependent variables examined. In the first section, I present results of hierarchical logistic models that examine the degree to which community conditions influence the decision to incarcerate defendants. In the second section, I present results of the hierarchical multinomial models that examine the degree to which community conditions influence specific sentencing outcomes: prison incarceration, jail confinement, and probation/fines. The third and final section of the chapter presents results of the hierarchical linear regression models that examine the degree to which community context influences the length of sentences imposed on incarcerated defendants.

All of the results presented in this chapter are based on models estimated to address the first general question posed in the present research: Does community context influence sentencing outcomes?

DESCRIPTIVE RESULTS

Table 5.1 reports the descriptive statistics for all variables included in the models that examine both the "in/out" incarceration decision and the trichotomous (prison, jail, probation/fine) incarceration decision (N= 6,921).[8] The results show that approximately two-thirds (66%) of the sample received some type of incarceration sentence, and slightly more

[8] The descriptive results as well as all other results are based on the unweighted data. Preliminary diagnostic tests revealed that the use of weighted versus unweighted data does not change the substantive findings.

were sentenced to jail (36%) than to prison (30%). The remaining 34 percent of the sample were either assigned probation or required to pay a fine. Typical defendants were males in their 20s or 30s. A little over half (54%) of the defendants were black and over three-quarters had a prior record. Only 13 percent of the defendants eligible for an incarceration sentence were adjudicated for a violent offense, while almost one-third (32%) were adjudicated for a drug charge. Approximately 60 percent of the defendants were arrested within one day of the offense and over 40 percent were detained prior to adjudication. Ninety-three percent of the sample pled guilty while only 5 percent had a bench trial and 2 percent received a trial by jury.

With regard to the description of the communities in which these defendants were adjudicated, the results indicate that, on average: the unemployment rate was about 6.5%, blacks accounted for about 20 percent of the total population, residents 65 years or older made up roughly 12 percent of the population, 17 percent of the residents were Protestant, about one-third were Republican, almost half of the communities had a stringent sentencing structure in place, less than one-third (28%) were located in the South, the mean violent crime rate was almost 1,000 per 100,000 residents, and males made up a smaller proportion of the population than females (94:100) (N= 39).[9]

"IN/OUT" INCARCERATION DECISION

Table 5.2 presents the results for the first series of models estimated in order to assess whether community conditions affect the "in/out" incarceration decision. This table reports the results for the bivariate relationships between each of the explanatory variables and the "in/out" decision. Before addressing the question of whether community characteristics help

[9] Some of the explanatory variables are slightly skewed and I tried various transformations to correct for this skewness, however, the results were virtually identical so I retain the original coding of the variables.

to explain variation in the decision to incarcerate, it is instructive to evaluate the degree to which this decision actually varies across the counties included in the research. I evaluate this formally in model 1 of Table 5.2. This model presents results from a logistic regression model that includes an intercept parameter that describes the mean log odds of incarceration for defendants in the SCPS data and a variance component that describes whether there is significant variation in incarceration outcomes across the counties represented in the data. The estimated intercept corresponds (within rounding) to the mean incarceration outcome across all 39 counties included in data (.66=exp(.648)/1+exp(.648)). More importantly for the purposes of the present research, the random effects variance component and test statistic shown for this model indicate that there is significant variation in incarceration outcomes across these counties. Figure 5.1 displays a histogram that summarizes the degree of variation across the counties included in the data. This figure illustrates that incarceration sentences vary from less than 40 percent (with 22.9% of defendants incarcerated in Jackson, Missouri) in some counties to almost 100 percent (99.3% incarcerated in Marion, Indiana) in others.[10] Indeed, there is substantial variation across these counties in the decision to incarcerate convicted defendants. The remaining bivariate models presented in Table 5.2 (models 2-11) represent the first step to assess whether the county-level explanatory variables affect the likelihood of an incarceration outcome and whether they help to explain the variation in incarceration reported in the intercept-only model and in figure 5.1.

In general, there are a couple of noteworthy findings in models 2-11 in Table 5.2. First, only the county-level indicator of age structure exerts a statistically significant effect on the likelihood of an incarceration sentence. As discussed in Chapter 3, I hypothesized that

[10] The mean sample size for eligible defendants, within the counties, is approximately 177. However, the number of eligible cases ranges from a low of 50 cases in Erie, New York to a high of 502 cases in Los Angeles, California. Thus, the amount of variation is not merely due to small samples at either extreme.

defendants adjudicated in counties with a relatively large older population would be more likely to receive incarcerative sentences. The bivariate relationship between age structure and the likelihood of incarceration presented in Table 5.2 does not support that expectation. In fact, the results indicate that defendants adjudicated in counties with a larger proportion of residents 65 years and older are significantly *less* likely to receive a custodial sentence. Even more interesting is that none of the other explanatory variables exerts a statistically significant effect on the likelihood of incarceration for convicted defendants. Although some of the coefficients are in the expected direction (e.g., sex ratio, percent Republican, violent crime rate, south, sentencing structure), they fail to achieve statistical significance. A final pattern that emerges from this table is that these explanatory variables do not account for variation in the "in/out" incarceration outcome across counties. The amount of "in/out" variation accounted for by the one statistically significant county-level variable, age structure, is small (approximately 12%). Even more importantly, the significant effect found for the age structure variable may be a function of the types of defendants or types of cases adjudicated within communities with a relatively larger proportion of older persons. To assess the degree to which this is the case, I move on to report a parallel series of analyses that examine, more systematically, the effects of community characteristics on the "in/out" incarceration decision.

Table 5.3 reports the results of four hierarchical logistic models.[11] The first model reiterates the intercept only model shown in Table 5.2 and provides a point of reference for

[11] Because of the potential for sample selection bias, all statistical models in the present study are estimated twice, once with the appropriate correction factor and once without. Comparisons of the two sets of results were virtually identical. However, diagnostic tests indicate that the correction factor is highly correlated with other predictors of empirical interest (e.g., violent offense, prior record). Because of the problems associated with multicollinearity between the correction factor and other predictors, and other potential dangers of including correction factors, as discussed in Chapter 4, I present the results for all estimated models without the correction factor.

determining the impact of the control and explanatory variables on between-county variation in the likelihood of incarceration. Subsequent models show the effects of the control variables on the likelihood of incarceration (model 2), the effects of the explanatory variables, as a group, on the likelihood of incarceration (model 3), and the effects of the explanatory and control variables, simultaneously, on the likelihood of incarceration (model 4).

Model 2 shows that defendants in their 20s, 30s, and 40s, black defendants, male defendants, defendants with prior records, defendants adjudicated for either a violent offense or a drug offense, defendants who were detained, and defendants who had a jury trial are significantly more likely to receive incarceration sentences.

More directly relevant to the main research questions considered and generally consistent with the bivariate results presented in Table 5.2, the results shown in Table 5.3 (model 3) indicate that the explanatory variables do not affect the "in/out" decision.[12] In fact, when all explanatory variables are included in the model (3), age structure no longer has a significant effect on this outcome. Model 4 includes all of the explanatory variables, along with the control variables, in a more complete examination of the likelihood of an incarceration sentence. Again, none of the explanatory variables exerts a statistically significant effect on this "in/out" incarceration outcome. The statistically significant effects presented in model 2, for the control variables, remain virtually unchanged when the explanatory variables are included in the same model (4).

[12] Multicollinearity among the explanatory variables is a concern; however, all models were estimated with the explanatory variables entered singly to ensure that the results are not unduly affected. The results of these models indicate that *multicollinearity is not* a serious concern and does not substantially alter any of the findings or subsequent conclusions drawn from the analyses. For further information on the correlations between the explanatory variables see the correlation matrix in Appendix A.

Consistent with Table 5.2, the variance component and test statistic shown for each of the models in Table 5.3 indicates that neither the control variables nor the explanatory variables help to explain the significant amount of variation in the "in/out" incarceration outcome across counties. Interestingly, these random effects results suggest that not only do the models (2-4) fail to account for any of the variation associated with the "in/out" decision, but that the amount of variation in the outcome actually increases when the control variables (model 2), explanatory variables (model 3), or both sets of variables (model 4) are included in the statistical model. Although this is uncommon, it may indicate a suppression effect (e.g., Snijders and Bosker, 1999). More specifically, estimating the effects of the explanatory and individual-level variables appears to increase the amount of variation in the "in/out" incarceration outcome across counties.

Table 5.4 reports the results for the series of models estimated to assess the possibility of a non-linear effect of racial composition on the "in/out" incarceration outcome. Once again, model 1 shows the results for the intercept-only model that demonstrates the amount of variation in this outcome across the counties included in the analyses. Model 2 includes all of the explanatory variables, along with the squared percent black variable to test for non-linearity. Model 3 reports the results for all of the explanatory variables, the squared percent black variable, and the control variables on the likelihood of an incarceration sentence. In general, two main findings are observed. First, none of the explanatory variables, including the squared percent black variable, is statistically significant. More specifically, the results presented in these models are consistent with those presented in Table 5.3 and indicate that none of the explanatory variables significantly affects the "in/out" decision. Also consistent is the statistical significance of the effects of those same individual-level defendant and case

characteristics presented in Table 5.3. Finally, an examination of the variance component and test statistic for these models results in the same conclusion drawn from Table 5.3: The inclusion of the explanatory variables, the control variables, a squared term for racial composition, or all of these variables entered simultaneously fails to account for any of the variation in the "in/out" incarceration decision across the counties in the analyses.

In summary, it is important to reiterate that the general conclusion drawn from the series of models that examine the "in/out" incarceration outcome is that none of the explanatory variables exert a statistically significant effect. Although one community effect (age structure) is statistically significant in the bivariate analyses, and approached statistical significance, these relatively small effects are reduced to non-significance once additional explanatory or control variables are included in the models. This finding underscores the importance of multilevel, as opposed to macro-level, research that enables researchers to control for individual-level case and defendant characteristics, which have been shown in prior research, and are shown in the present analyses, to exert statistically significant effects on the "in/out" decision. A final note of some importance is the general consistency of results presented throughout the series of models estimated. Specifically, the effects of the explanatory and the control variables, whether statistically significant or not, remain generally consistent with regard to size and direction. It is also important to acknowledge that the control variables are not substantially altered after considering the county effects.

TRICHOTOMOUS INCARCERATION DECISION

Table 5.5 reports the results for the initial series of hierarchical multinomial logistic models estimated to assess whether community characteristics affect the type of sentencing outcome (prison incarceration versus jail confinement versus probation/fine) imposed on

convicted defendants. Specifically, this table presents the bivariate results for each of the community characteristics on the categorical incarceration outcome and is organized into three panels. Panel A reports the model results that contrast the likelihood of a prison sentence versus an assignment to probation or a fine. Panel B reports the model results that contrast the likelihood of a jail sentence versus an assignment to probation or a fine. And, Panel C reports the model results that compare the likelihood of a prison sentence versus a jail sentence. Consistent with the presentation of the "in/out" analyses, the first series of models estimated for the trichotomous incarceration outcome, and presented in Table 5.5, are the bivariate effects of the community characteristics. Again it is important to evaluate the extent to which there is variation in the odds of receiving one of these sentences versus another. In order to do this I estimated models that include the intercept only for each of the three comparisons. Model 1, in Panel A, reports the results for the intercept-only model that contrasts the likelihood that a defendant is sentenced to prison versus probation/fine. Models 1 in Panels B and C report parallel results that compare the likelihood that a defendant is sentenced to jail versus probation/fine, and the likelihood that a defendant is sentenced to prison versus jail, respectively.

The estimated intercepts shown in these models correspond (within rounding) to the mean log odds of one type of sentence in comparison to another across all 39 counties included in data. More importantly for the purposes of the present research, the random effects variance components and test statistics shown for these contrasts indicate that there is significant variation in the likelihood of prison versus probation/fine, jail versus probation/fine, and prison versus jail across these counties (see Model 1, Panels A-C). The remaining bivariate models (2-11) presented in Panels A, B, and C of Table 5.5 assess

whether the explanatory variables affect the type of sentencing outcome defendants receive, and whether the inclusion of these variables helps to explain the sentence type variation observed in the intercept-only models.

Three general observations regarding the multinomial bivariate results presented in Table 5.5 deserve discussion. First, consistent with the results from the "in/out" bivariate analyses, the age structure variable exerts a statistically significant, negative effect on the likelihood of jail versus probation/fine (Panel B, Model 5). Specifically, defendants adjudicated in counties with a relatively large older population are *less* likely to be sentenced to jail than assigned to probation or required to pay a fine. This result underscores the importance of examining the effects of predictors on sentence measures beyond the basic "in/out" dichotomy. It appears that when considered alongside the results for age structure for the other two contrasts (prison versus probation/fine, prison versus jail), the significant negative effect exerted by the age structure variable on the "in/out" decision is primarily a function of lesser odds of jail confinement in comparison to probation/fine for defendants adjudicated in communities with a larger proportion of older persons. Age structure does not significantly affect the likelihood of prison relative to either jail or probation/fine. Additionally, comparing the variance components and test statistics for the intercept-only and the age structure models in Panel B indicate that including this community characteristic explains about 11% of the amount of variation in the likelihood of jail versus probation/fine for convicted defendants (.108=(2.062-1.839)/2.062).

Second, percent Protestant exerts a statistically significant positive effect on the likelihood that a defendant is sentenced to prison versus jail (Panel C). Specifically, defendants adjudicated in counties with a relatively large Protestant population are more

likely to be sentenced to prison versus jail. Interestingly, the effects of percent Protestant on the other two category comparisons are non-significant and in the opposite directions (one positive and one negative). These multinomial results indicate that the non-significant effect of percent Protestant on the basic "in/out" incarceration outcome actually masks a statistically significant preference, in counties with larger proportions of Protestant residents, for prison incarceration versus jail confinement. Additionally, comparing the variance components and test statistics for the intercept-only and the percent Protestant models in Panel C indicate that including this community characteristic explains about 21% of the variation in the likelihood of prison versus jail for convicted defendants (.208=(2.003-1.586)/2.003).

A third important observation drawn from these bivariate analyses of the trichotomous outcome is that none of the other explanatory variables exerts a statistically significant on any of the contrasts between types of sentences. Specifically, although age structure negatively affects the likelihood of jail sentences versus assignments to probation or fines and percent Protestant positively affects the odds of prison versus jail sentences, none of the bivariate effects for the other explanatory variables are significant. Although some of the coefficients are in the expected direction they fail to achieve statistical significance.

A final comment on the bivariate presented in this table is that, for the most part, these explanatory variables do not account for the amount of variation in the type of sentence outcome across counties. The amount of variation accounted for by the explanatory variables is relatively small and significant variation remains in the odds of prison versus probation/fine, jail versus probation/fine, and prison versus jail. Even more importantly, the statistically significant effects found for age structure and percent Protestant may be a

function of the types of defendants or types of cases adjudicated within communities with a relatively larger proportion of older persons or a large Protestant population. To assess the degree to which this is the case, I move on to report a parallel series of analyses that examine the multivariate effects of community characteristics on the trichotomous sentence type outcome, net of the dependent and case control variables.

Table 5.6 reports the results for a series of hierarchical multinomial models for the 3 contrasts considered. In each case the first model is the intercept only model, the second model show the effects of the control variables on the type of sentence outcome, the third model shows the effects of the explanatory variables, as a group, on the type of sentence outcome, and a fourth model displays the effects of the explanatory and control variables, simultaneously, on the type of sentence outcome. Consistent with the bivariate results reported in Table 5.5, Panel A reports the effects of the predictors on the likelihood of prison incarceration versus probation/fine, Panel B reports the effects of the predictors on the likelihood of jail confinement versus probation/fine, and Panel C reports the effects of the predictors on the likelihood of prison incarceration versus jail confinement.

In Panel A of Table 5.6, model 2 report the results for the effects of the control variables on the likelihood of prison versus probation/fine. The results indicate that defendants who are male, who are black, who are 18 to 49 years old, who have a prior record, who are adjudicated for a violent or drug offense, who are detained prior to adjudication, and who have a jury trial are more likely to receive sentences of prison incarceration relative to probation/fine. On the other hand, defendants who have a bench trial are significantly *less* likely to receive a prison sentence relative to probation/fine.

In Panel B of Table 5.6, model 2 reports the results for the effects of the control variables on the likelihood of jail versus probation/fine. The results indicate that defendants who are male, who are black, who have a prior record, who are arrested within one day of the offense, who are adjudicated for a drug offense, who are detained prior to adjudication, and who have a bench trial are more likely to receive sentences of prison incarceration relative to probation/fine. These results differ somewhat from those reported for Panel A. Specifically, none of the age categories are statistically significant and neither are the effects of violent offense adjudication or jury trial. However, if the defendant was arrested quickly, he/she is more likely to receive a jail sentence rather than probation/fine; this variable exerts no statistically significant effect on the likelihood of prison versus probation/fine, as reported in Panel A.

Two additional observations in model 2 of Panel C deserve attention. First, all but one of the control variables exert a statistically significant effect on the likelihood of prison versus jail (model 2). These results indicate a greater likelihood of prison versus jail for defendants 18 to 49 years old, male defendants, defendants with prior records, defendants adjudicated for a violent or drug offense, defendants detained prior to adjudication, and defendants who receive a jury trial. However, these results also indicate a *lesser* likelihood of prison versus jail for defendants arrested quickly and defendants who receive a bench trial.

Most importantly for the present study and generally consistent with the bivariate results presented in Table 5.5, the results shown in models 3 and 4 of all panels indicate that, in general, the explanatory variables do not affect the odds of prison versus probation/fine, jail versus probation/fine, or prison versus jail for eligible defendants. However, there are two exceptions that deserve attention. First, the results for models 3 and 4 in Panel C reveal

a large, positive effect for percent Protestant on the likelihood of prison versus jail. This finding is consistent with the bivariate results reported in Table 5.5. Specifically, defendants adjudicated in counties with a relatively large Protestant population are more likely to be sentenced to prison versus jail even when all other explanatory variables and the control variables are included in the model (4). Also similar to the bivariate results is that the effects of this explanatory variable on the other two category comparisons are non-significant and in the opposite directions (one positive and one negative). These multinomial results offer further evidence that the non-significant effect of percent Protestant on the basic "in/out" incarceration outcome actually masks a statistically significant preference, in counties with a large Protestant population, for prison incarceration versus jail confinement, even when all other predictors are included in the model. The results of this full model (4) reveal that percent Protestant remains a statistically significant, positive predictor of the likelihood of prison versus jail sentences for defendants. Specifically, defendants adjudicated in counties with a relatively large Protestant population are more likely to be sentenced to prison versus jail even when all explanatory and control variables are included in the model (4).

The other exception is the negative, statistically significant effect of South on the likelihood of prison versus jail (model 3). First, it is important to note that the bivariate analyses did not exhibit the same result. This is the first model estimated in which South exerts a statistically significant effect of any kind, on any outcome measure. The results presented here indicate that defendants adjudicated in Southern counties are *less* likely to receive a prison sentence in comparison to a jail sentence. It is also important to note that this effect is found only for this comparison group when the explanatory variables are included together (Panel C, model 3) and when the effects of the explanatory and control

variables are estimated, simultaneously (Panel C, model 4). Another interesting observation of this significant South effect is that it seems to be in the opposite direction from earlier expectations. Specifically, the hypothesis stated that defendants adjudicated in Southern counties would receive more severe sentences. If this is supported by the finding, the results would suggest that, at least in the South, jail confinement is more severe than prison incarceration. More likely however, is that the hypothesis is not supported, at least in this series of models.

Several other observations from Table 5.6 warrant discussion. First, none of the explanatory variables exerts a statistically significant effect on the likelihood of prison incarceration versus probation/fine or on the likelihood of jail incarceration versus probation/fine. This point underscores the need for analyses that use more detailed measures of sentencing as opposed to the standard "in/out" indicator used in most prior research. Also, the effects of the control variables are virtually identical regardless of whether the explanatory variables are included in the model.

Second, examination of the random effects variance components and test statistics for each of the contrasts indicates further differences. In Panel A, none of the estimated models account for the amount of variation, across counties, in the likelihood of prison versus probation/fine. Interestingly, these random effects results suggest that not only do the models (2-4) fail to account for any of the variation, but that the amount of variation in the likelihood of prison versus probation/fine actually increases when the control variables (model 2), explanatory variables (model 3), or both sets of predictors (model 4) are included in the analyses. Again, although this is uncommon, it may or may not indicate a suppression effect of some kind. More specifically, it shows that estimating the effects of the explanatory

and individual-level variables actually increases the overall amount of variation in the likelihood of prison versus probation/fine across counties.

Table 5.7 reports the results for the series of multinomial models estimated to assess the possibility of a non-linear racial composition effect on the trichotomous type of sentence outcome. Once again, due to the number of contrasts within this variable, I organize this table into three panels: Panel A reports the effects of the predictors, including the squared percent black term, on the likelihood of prison incarceration versus probation/fine, Panel B reports the effects of the predictors, including the squared percent black term, on the likelihood of jail confinement versus probation/fine, and Panel C reports the effects of the predictors, with the squared percent black term, on the likelihood of prison incarceration versus jail confinement. To remain consistent, I again report the results for the intercept-only model (1) that reports the total amount of variation in the trichotomous type of sentence outcome across counties.

In all panels, model 2 includes all of the explanatory variables, along with the squared percent black variable to test for non-linearity. Model 3 reports the results for all of the explanatory variables, the squared percent black variable, and the control variables on the trichotomous outcome categories. For Panels A, B, and C the overall conclusion from the results of these models is similar. None of the explanatory variables, including the squared percent black variable, is statistically significant in Panels A and B (i.e., the contrasts for prison versus probation/fine and jail versus probation/fine) and only percent Protestant and South exert significant effects in Panel C, the contrast of prison incarceration versus jail confinement.

In summary, it is important to review the general conclusions drawn from the series of multinomial models that examine the trichotomous incarceration outcome. The general conclusions about the prison versus probation/fine contrast are: 1) Regardless of the variables included in the various models, none of the explanatory variables exert statistically significant effects; 2) The effects of the control variables remain consistent regardless of whether explanatory variables are included in the models; and 3) None of the models that examine this contrast help to explain, and some actually increase slightly, the overall variation in the likelihood of prison incarceration versus an assignment to probation or a fine.

Similarly, the general conclusions drawn from the analyses of jail versus probation/fine contrast are: 1) None of the explanatory variables exert statistically significant effects past the bivariate analyses, regardless of the variables included in the various models; and 2) The random effects variance components and test statistics reveal that, in general, none of the models estimated help to explain the overall amount of variation in the likelihood of jail confinement versus an assignment to probation or a fine.

In contrast to the general conclusions drawn above, the conclusions drawn from the models that compare the likelihood of prison versus jail include: 1) Percent Protestant exerts a strong, positive effect net of the defendant and case characteristics control variables, as well as the other explanatory variables; 2) South exerts a negative effect, but only in the multivariate models; 3) The effects of the control variables remain consistent regardless of whether explanatory variables are included in the model; and 4) Evaluation of the random effects variance components and test statistics reveal that the estimated models help to explain some portion of the total variation in the likelihood of prison versus jail, across

counties. This explained portion of variance ranged from 0 to approximately 26% of the overall variation.

A final comment on the observed effects of the explanatory variables is warranted. Regardless of statistical significance, the effects of the explanatory variables on all 3 of the sentence type contrasts remained generally consistent with regard to size and direction, although some of these were opposite to the original expectations. I now present the results for the models estimated to assess the influence of community characteristics on sentence length.

SENTENCE LENGTH DECISION

Table 5.8 reports the descriptive statistics for all variables included in the models that examine the influence of community characteristics on sentence length. The results of this table differ somewhat from the descriptive results presented in Table 5.1 because only those convicted defendants who received an incarceration sentence are eligible for analyses that examine variation in sentence length (N= 4,554). The results show that the mean sentence length imposed on defendants is slightly less than 3 years (32.65 months). The descriptives for the explanatory variables are identical to those presented for the incarcerated sample reported above (See Table 5.1). Descriptives for the control variables are also quite similar. Typical defendants are males between 21 and 39 years of age. More than one-half (56%) of the defendants are black and over 80% have a prior record. Only 15 percent of the defendants given an incarceration sentence were adjudicated for a violent offense, while over one-third (34%) were adjudicated for a drug charge. Almost two-thirds (62%) of the defendants were arrested within one day of the offense and over one-half (54%) were

detained prior to adjudication. Ninety-four percent of the sample pled guilty while only 4 percent had a bench trial and 2 percent received a trial by jury.

Table 5.9 presents the results for the first series of hierarchical linear regression models estimated in order to assess whether community conditions affect the length of the incarceration term imposed on defendants. This table reports the results for the bivariate effects of the explanatory variables on sentence length. Again, before addressing the question of whether community characteristics help to explain the variation in sentence length, it is instructive to evaluate the degree to which this outcome actually varies across the counties included in the research. I evaluate this formally in the first model in Table 5.9. This section of the table presents results from a linear regression model that includes an intercept parameter that describes the mean sentence length for defendants in the SCPS data and a variance component that describes whether there is significant variation in sentence length across the counties represented in the data. The estimated intercept corresponds (within rounding) to the mean sentence length across all 39 counties included in data (2.43=exp(2.314)/1+exp(2.314)). More importantly for the purposes of the present research, the random effects variance component and test statistic shown for this model indicate that there is significant variation in mean sentence length across these counties. Figure 5.2 displays a histogram that summarizes the degree of variation in sentence length in its original metric across the counties included in the data. This figure illustrates that the average length of incarceration terms vary from less than one year in some counties (with the smallest mean sentence length of 1.02 months in Kings County, New York) to over 5 years in others (with the largest mean sentence length of 9 years in Jefferson, Alabama). Indeed, there is

substantial variation across counties in the average length of incarceration terms imposed on convicted defendants.

The remaining bivariate models presented in Table 5.9 represent the initial series of models estimated to assess whether the county-level explanatory variables affect sentence length and help to explain the amount of variation reported in the intercept-only model and illustrated in figure 5.2. There are several interesting bivariate effects reported in these models. First, consistent with previously reported models, percent Protestant exerts a large, positive, statistically significant effect on sentence length. Defendants adjudicated in counties with a relatively large Protestant population are more likely to receive longer terms of incarceration. As discussed in Chapter 3, this is consistent with the hypothesis of harsher sentencing outcomes for counties with relatively large proportions of punitive-oriented groups, including Protestants. Another item of interest is the statistically significant, positive effect of the squared percent black variable. This variable is included test to for a possible non-linear racial composition effect. The results of the bivariate model indicate that there is a positive, non-linear effect of percent of the population that is black. More specifically, as the percent of the black population increases, the sentence lengths imposed on defendants increase. This is unexpected, yet interesting. Just as interesting is the fact that none of the other explanatory variables exert statistically significant effects on the sentence length handed down to convicted defendants. Although some of the coefficients are in the expected direction (e.g., age structure, percent Republican, south, sentencing structure), they fail to achieve statistical significance. Additionally, percent unemployed, sex ratio, and violent crime effects, while not significant, are in the opposite direction as expected.

A final pattern that emerges from this table is that explanatory variables, on average, do not explain a large portion of the variation across counties in sentence length. The amount of variation in sentence length accounted for by the two statistically significant county-level variables ranges from approximately 9% for the non-linear specification of percent black to 31% for percent Protestant. Even more importantly, the significant effects of these variables and the amount of explained variation associated with these significant effects may indeed be a function of the types of defendants or types of cases adjudicated within communities with larger proportions of Protestants or blacks. To assess the degree to which this is the case, I move on to report a parallel series of multivariate analyses that examine the effects of community characteristics on the sentence length outcome.

Table 5.10 reports the results for a series of hierarchical standard linear regression models that estimate the effects of the explanatory and control variables on sentence length. Model 1 shows the results for the intercept only results for the statistically significant variation across counties in the sentence length outcome (model 1), the effects of the control variables on the sentence length outcome (model 2), the effects of the explanatory variables, as a group, on the sentence length outcome (model 3), and the effects of the explanatory and control variables, simultaneously, on the sentence length outcome (model 4).

With regard to the nature of the effects of the control variables, model 2 shows that all defendants less than 50 years old, black defendants, male defendants, defendants with prior records, defendants adjudicated for either a violent offense or a drug offense, defendants who were detained, and defendants who had a jury trial are significantly more likely to receive longer sentences of incarceration. On the other hand, defendants who were

arrested quickly and those who had a bench trial were significantly *less* likely to receive lengthy incarceration terms.

Generally consistent with the bivariate results presented in Table 5.9, the results shown in model 3 of Table 5.10 indicate that only percent Protestant significantly affects the sentence length decision. In fact, when all explanatory variables are included (model 3), percent black no longer exerts a significant non-linear effect on sentence length. Model 4 includes all of the explanatory variables, along with the control variables, in a more complete analysis of sentence length. Again, with the exception of the consistent and positive percent Protestant effect, none of the explanatory variables exerts a statistically significant effect on sentence length. The statistically significant effects of the control variables, presented in model 2, remain virtually unchanged when the explanatory variables are included (model 4).

The random effects variance component and test statistic shown for each of the models in Table 5.10 indicates that a reasonable amount of the variation in sentence length is explained as control variables and then explanatory variables are included in the model. Specifically, the inclusion of the control variables only (model 2) explains approximately 7% of the total variation in sentence length, across counties (.071=(.924-.858)/.924). The inclusion of the explanatory variables only (model 3) explains approximately 19% of the total variation in sentence length, across counties (.192=(.924-.746)/.924). Finally, the inclusion of all explanatory and control variables (model 4) explains approximately 30% of the total variation in sentence length, across counties (.298=(.924-.648)/.924). Although these models reveal reasonable amounts of explanatory power, 70% of the variation in sentence length, across counties, remains.

Table 5.11 reports the results for the final series of models estimated to assess the possibility of a non-linear effect of racial composition on the sentence length outcome. Once again, model 1 shows the results for the intercept-only model that demonstrates the amount of variation in this outcome across the counties included in the analyses. Model 2 includes all of the explanatory variables, along with the percent black variable to test for non-linearity. Model 3 reports the results for all of the explanatory variables, the squared percent black variable, and the control variables on sentence length. In general, one general conclusion emerges. The results presented in this table are virtually identical to those reported in Table 5.10; there is no statistically significant non-linear racial composition effect once the other explanatory and control variables are included in the models. More specifically, with the exception of the positive effect for percent Protestant, none of the other explanatory variables exerts a significant effect on sentence length. Additionally, all of the significant effects observed for the control variables in Table 5.10 are mirrored in the present table. An evaluation of the random effects variance component and test statistic for these models results in the essentially the same conclusion drawn from those presented in Table 5.10. The substantial amount of variation in sentence length, across counties, remains. However, models 2 and 3 help to explain approximately 18% and 29%, respectively, of the overall variation in sentence length, across counties.

In summary, it is important to review the general conclusions drawn from the series of models that examine the sentence length outcome. With the exception of percent Protestant, none of the explanatory variables exerts a statistically significant effect on sentence length. Although two community effects (percent Protestant and percent black) are statistically significant in the bivariate analyses, the non-linear effect of percent black is

reduced to non-significance once additional explanatory or control variables are included in the models. Once again, this finding underscores the importance of multilevel research, as opposed to macro-level research, that enables researchers to control for individual-level case and defendant characteristics, which have been shown in prior research, and are shown in the present analyses, to exert statistically significant effects on the several measures of sentencing. A final note of some importance is the general consistency of results presented throughout the series of models estimated. Specifically, the effects of the explanatory and the control variables, whether statistically significant or not, remained generally consistent with regard to size and direction. In general, this holds true for all of the analyses conducted and reported in this chapter.

Table 5.1. Descriptive Statistics for Variables Included in the Analyses of Community Context on Incarceration Outcomes (N= 6,921).

VARIABLES	Mean	S.D.
Dependent Variables		
Dichotomous Sentencing Outcome		
Incarcerated	.66	.47
Not Incarcerated	.34	.47
Trichotomous Sentencing Outcome		
Prison Incarceration	.30	.80
Jail Confinement	.36	.80
Probation/Fine	.34	.80
Explanatory Variables (N= 39)		
Percent Unemployed	6.38	2.39
Percent Black	20.31	14.29
Sex Ratio	94.35	4.35
Percent 65 Years and Older	11.90	2.21
Percent Republican	33.60	9.33
Percent Protestant	17.00	10.00
Violent Crime Rate[1]	927.30	533.27
Southern Location (1= yes)	.28	.46
Sentencing Structure (1=stringent; 0= lenient)	.49	.51
Defendant and Case Control Variables		
Dummy-Coded Defendant Age Categories		
17 Years and Younger	.03	.17
Between 18 and 20 Years Old	.15	.35
Between 21 and 29 Years Old	.30	.46
Between 30 and 39 Years Old	.32	.47
Between 40 and 49 Years Old	.16	.37
50 Years and Older[2]	.04	.20
Defendant Male (1= yes)	.81	.39
Defendant Black (1= yes)	.54	.50
Defendant Prior Record (1= yes)	.76	.43
Violent Adjudication Charge (1=yes)	.13	.34
Drug Adjudication Charge (1= yes)	.32	.47
Other Adjudication Charge (1= yes)[2]	.55	.50
Defendant Arrested Quickly (1= yes)	.59	.49
Defendant Detained Prior to Adjudication (1= yes)	.42	.49
Bench Trial	.05	.22
Jury Trial	.02	.14
No Trial[2]	.93	.26

[1]Rate per 100,000 residents, based on 1997 Uniform Crime Reports.
[2]In the analyses, these variables are not included in the models, but serve as reference categories.

Table 5.2. Bivariate Coefficients for Hierarchical Logistic Models of the Influence of Community Characteristics on the In/Out Incarceration Decision (N= 6,921).

	FIXED EFFECTS		RANDOM EFFECTS	
(Model)/Variable	Intercept	Bivariate Effect	Variance Component	Chi-Square
(1) Intercept Only	.648**	---	1.370	1077.289***
	(.191)	---		
(2) Percent Unemployed	.861	-.033	1.404	1088.459***
	(.559)	(.082)		
(3) Percent Black	.252	-.209	1.372	1020.960***
	(.460)	(.221)		
(4) Male-to-Female Sex Ratio	-4.760	.057	1.340	1002.808***
	(4.146)	(.044)		
(5) Percent 65 Years Plus	2.953**	-.194*	1.211	907.257***
	(.992)	(.082)		
(6) Percent Republican	.367	.008	1.405	1081.290***
	(.730)	(.021)		
(7) Percent Protestant	.718	-.406	1.409	1065.532***
	(.398)	(2.049)		
(8) Violent Crime Rate	.642	.00001	1.411	1077.055***
	(.393)	(.0004)		
(9) South	.617**	.113	1.408	1085.680***
	(.228)	(.430)		
(10) Sentencing Structure	.478	.347	1.374	1040.446***
	(.268)	(.382)		
(11) Percent Black	.033	-.138	1.348	902.491***
	(.490)	(.227)		
Squared Percent Black		-1.426		
		(-1.156)		

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .05$; *$p \leq .01$ (two-tailed tests).

Figure 5.1. Percent of Defendants Incarcerated in 1998 SCPS, Across Counties

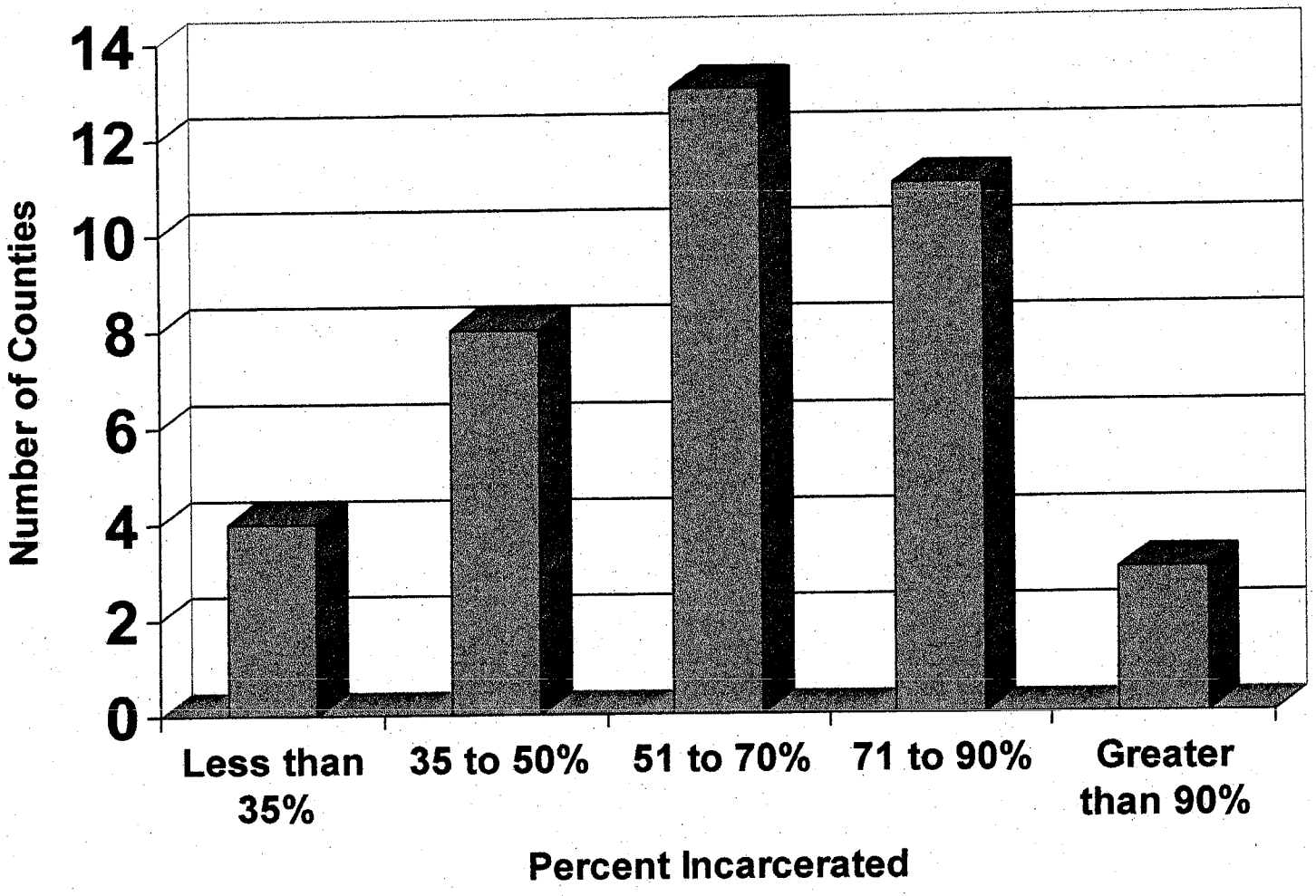


Table 5.3. Hierarchical Logistic Models of the Influence of Community Characteristics on the In/Out Incarceration Decision (N= 6,921).

FIXED EFFECTS	(1)	(2)	(3)	(4)
Intercept	.648**	-1.527***	8.718	10.570
	(.191)	(.257)	(11.901)	(12.102)
CONTROL VARIABLES				
Defendant 17 and Younger		.072		.074
		(.224)		(.225)
Defendant 18 to 20 Years		.249		.251
		(.162)		(.162)
Defendant 21 to 29 Years		.433**		.434**
		(.152)		(.152)
Defendant 30 to 39 Years		.523***		.525***
		(.151)		(.152)
Defendant 40 to 49 Years		.400*		.401*
		(.160)		(.161)
Defendant Black		.217***		.221***
		(.066)		(.066)
Defendant Male		.501***		.504***
		(.079)		(.079)
Prior Record		.737***		.739***
		(.071)		(.072)
Violent Offense		.548***		.550***
		(.101)		(.101)
Drug Offense		.402***		.400***
		(.072)		(.072)
Quick Arrest		.098		.103
		(.078)		(.078)
Detained		1.410***		1.411***
		(.069)		(.069)
Bench Trial		-.097		-.092
		(.167)		(.168)
Jury Trial		.910***		.914***
		(.260)		(.260)
EXPLANATORY VARIABLES				
Percent Unemployed			-.051	-.089
			(.178)	(.181)
Percent Black			-.280	-.448
			(.500)	(.508)
Sex Ratio			-.059	-.100
			(.110)	(.112)
Age Structure			-.221	-.244
			(.127)	(.129)

Table 5.3. (Continued).

FIXED EFFECTS	(1)	(2)	(3)	(4)
Percent Republican			-.008	-.006
			(.034)	(.035)
Percent Protestant			-.620	-.259
			(3.475)	(3.532)
Violent Crime Rate			.0001	.0002
			(.001)	(.001)
South			.238	.037
			(.642)	(.652)
Sentencing Structure			.112	-.053
			(.597)	(.607)
RANDOM EFFECTS				
Intercept				
Variance Component	1.370	1.409	1.548	1.593
Chi-Square	1077.289***	928.321***	884.116***	785.515***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table 5.4. Hierarchical Logistic Models of the Influence of Community Characteristics on the In/Out Incarceration Decision, with Non-Linear Racial Composition Variable (N= 6,921).

FIXED EFFECTS	(1)	(2)	(3)
Intercept	.648**	9.662	11.477
	(.191)	(12.216)	(12.428)
EXPLANATORY VARIABLES			
Percent Unemployed		-.079	-.116
		(.189)	(.192)
Sex Ratio		-.076	-.116
		(.117)	(.119)
Age Structure		-.196	-.220
		(.138)	(.141)
Percent Republican		.003	.004
		(.040)	(.041)
Percent Protestant		-.783	-.417
		(3.539)	(3.599)
Violent Crime Rate		.0002	.0002
		(.001)	(.001)
South		.225	.025
		(.651)	(.662)
Sentencing Structure		.070	-.093
		(.611)	(.621)
Percent Black		-.258	-.426
		(.509)	(.517)
Squared Percent Black		-.996	-.961
		(2.019)	(2.053)
CONTROL VARIABLES			
Defendant 17 and Younger			.075
			(.225)
Defendant 18 to 20 Years			.251
			(.162)
Defendant 21 to 29 Years			.434**
			(.152)
Defendant 30 to 39 Years			.525***
			(.152)
Defendant 40 to 49 Years			.401*
			(.161)
Defendant Black			.221***
			(.066)
Defendant Male			.504***
			(.079)
Prior Record			.739***
			(.072)

Table 5.4. (Continued).

FIXED EFFECTS	(1)	(2)	(3)
Violent Offense			.550***
			(.101)
Drug Offense			.401***
			(.072)
Quick Arrest			.103
			(.079)
Detained			1.411***
			(.069)
Bench Trial			-.091
			(.168)
Jury Trial			.914***
			(.260)
RANDOM EFFECTS			
Intercept			
Variance Component	1.370	1.593	1.641
Chi-Square	1077.289***	851.937***	763.670***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table 5.5. Bivariate Coefficients for Hierarchical Multinomial Models of the Influence of Community Characteristics on the Trichotomous Incarceration Decision (N= 6,921).

Panel A — ***Prison versus Probation/Fine***

	FIXED EFFECTS		RANDOM EFFECTS	
(Model)/Variable	Intercept	Bivariate Effect	Variance Component	Chi-Square
(1) Intercept Only	-.455	---	2.396	928.555***
	(.254)	---		
(2) Percent Unemployed	.608	-.169	2.412	1111.695***
	(.754)	(.113)		
(3) Percent Black	-.917	-.242	2.428	944.443***
	(.616)	(.294)		
(4) Male-to-Female Sex Ratio	-7.882	.079	2.374	947.233***
	(5.589)	(.059)		
(5) Percent 65 Years Plus	1.498	-.164	2.332	813.318***
	(1.379)	(.114)		
(6) Percent Republican	-1.855	.041	2.390	1023.256***
	(.974)	(.028)		
(7) Percent Protestant	-1.105*	3.810	2.350	1041.456***
	(.523)	(2.667)		
(8) Violent Crime Rate	-.380	-.0001	2.465	933.984***
	(.518)	(.0005)		
(9) South	-.540**	.289	2.474	962.402***
	(.305)	(.572)		
(10) Sentencing Structure	-.831*	.746	2.371	902.496***
	(.359)	(.506)		
(11) Percent Black	-.890	-.269	2.552	983.685***
	(.673)	(.314)		
Squared Percent Black		.349		
		(1.613)		

Table 5.5. (Continued).

Panel B ***Jail versus Probation/Fine***

	FIXED EFFECTS		RANDOM EFFECTS	
(Model)/Variable	Intercept	Bivariate Effect	Variance Component	Chi-Square
(1) Intercept Only	-.041	---	2.062	912.325***
	(.234)	---		
(2) Percent Unemployed	.245	-.045	2.115	917.810***
	(.684)	(.100)		
(3) Percent Black	-.808	-.404	1.994	849.147***
	(.556)	(.267)		
(4) Male-to-Female Sex Ratio	-8.689	.092	1.952	804.398***
	(5.001)	(.053)		
(5) Percent 65 Years Plus	2.715*	-.232*	1.839	759.629***
	(1.220)	(.101)		
(6) Percent Republican	-.134	.003	2.120	913.519***
	(.898)	(.026)		
(7) Percent Protestant	.546	-3.468	2.011	868.672***
	(.479)	(2.478)		
(8) Violent Crime Rate	.300	-.0004	2.094	921.003***
	(.479)	(.0005)		
(9) South	-.078	.129	2.123	919.794***
	(.280)	(.528)		
(10) Sentencing Structure	-.184	.290	2.095	878.186***
	(.331)	(.472)		
(11) Percent Black	-1.111	-.300	1.930	772.360***
	(.587)	(.272)		
Squared Percent Black		-2.011		
		(1.381)		

Table 5.5. (Continued).

Panel C ***Prison versus Jail***

	FIXED EFFECTS		RANDOM EFFECTS	
(Model)/Variable	Intercept	Bivariate Effect	Variance Component	Chi-Square
(1) Intercept Only	-.413	---	2.003	645.626***
	(.234)	---		
(2) Percent Unemployed	.363	-.124	2.083	799.067***
	(.705)	(.106)		
(3) Percent Black	-.109	.162	2.064	601.914***
	(.571)	(.272)		
(4) Male-to-Female Sex Ratio	.808	-.013	2.102	622.593***
	(5.278)	(.056)		
(5) Percent 65 Years Plus	-1.217	.067	2.043	661.548***
	(1.294)	(.107)		
(6) Percent Republican	-1.721	.039	2.003	762.029***
	(.900)	(.026)		
(7) Percent Protestant	-1.651***	7.278**	1.586	712.123***
	(.440)	(2.257)		
(8) Violent Crime Rate	-.679	.0003	2.055	608.313***
	(.474)	(.0004)		
(9) South	-.462	.160	2.084	650.281***
	(.282)	(.527)		
(10) Sentencing Structure	-.646	.456	2.065	709.236***
	(.337)	(.474)		
(11) Percent Black	.222	.031	2.016	792.698***
	(.601)	(.280)		
Squared Percent Black		2.360		
		(1.446)		

NOTE: Standard errors are in parentheses. ***$p \leq .001$; **$p \leq .01$; *$p \leq .05$ (two-tailed tests).

Table 5.6. Hierarchical Multinomial Models of the Influence of Community Characteristics on the Trichotomous Incarceration Decision (N= 6,921).

Panel A	*Prison versus Probation/Fine*			
FIXED EFFECTS	(1)	(2)	(3)	(4)
Intercept	-.455	-3.963***	5.879	8.267
	(.254)	(.354)	(15.900)	(16.319)
CONTROL VARIABLES				
Defendant 17 and Younger		.532		.540
		(.296)		(.296)
Defendant 18 to 20 Years		.617**		.619**
		(.216)		(.216)
Defendant 21 to 29 Years		.829***		.829***
		(.204)		(.204)
Defendant 30 to 39 Years		.993***		.994***
		(.203)		(.204)
Defendant 40 to 49 Years		.793***		.793***
		(.213)		(.214)
Defendant Black		.255**		.259**
		(.081)		(.081)
Defendant Male		.722***		.725***
		(.100)		(.100)
Prior Record		1.009***		1.012***
		(.097)		(.097)
Violent Offense		1.116***		1.118***
		(.117)		(.117)
Drug Offense		.743***		.742***
		(.087)		(.087)
Quick Arrest		-.041		-.036
		(.095)		(.096)
Detained		2.026***		2.030***
		(.083)		(.084)
Bench Trial		-.829***		-.824***
		(.213)		(.213)
Jury Trial		1.437***		1.442***
		(.287)		(.288)
EXPLANATORY VARIABLES				
Percent Unemployed			-.165	-.206
			(.242)	(.248)
Percent Black			-.124	-.390
			(.664)	(.681)
Sex Ratio			-.056	-.125
			(.147)	(.151)

Table 5.6. (Continued).

Panel A	*Prison versus Probation/Fine*			
FIXED EFFECTS	(1)	(2)	(3)	(4)
Age Structure			-.143	-.156
			(.171)	(.175)
Percent Republican			-.002	.005
			(.046)	(.047)
Percent Protestant			4.985	6.197
			(4.647)	(4.767)
Violent Crime Rate			.0004	.001
			(.001)	(.001)
South			-.461	-.820
			(.852)	(.874)
Sentencing Structure			.833	.659
			(.797)	(.818)
RANDOM EFFECTS				
Intercept				
Variance Component	2.396	2.607	2.737	2.866
Chi-Square	928.555***	10071.833***	1003.682***	9685.767***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$

Table 5.6. (Continued).

Panel B	***Jail versus Probation/Fine***			
FIXED EFFECTS	(1)	(2)	(3)	(4)
Intercept	-.041	-1.581***	2.734	4.175
	(.234)	(.293)	(13.651)	(13.668)
CONTROL VARIABLES				
Defendant 17 and Younger		-.136		-.135
		(.246)		(.247)
Defendant 18 to 20 Years		.099		.101
		(.171)		(.171)
Defendant 21 to 29 Years		.250		.251
		(.159)		(.160)
Defendant 30 to 39 Years		.310		.312*
		(.159)		(.159)
Defendant 40 to 49 Years		.222		.222
		(.169)		(.169)
Defendant Black		.184**		.190**
		(.071)		(.071)
Defendant Male		.380***		.383***
		(.084)		(.085)
Prior Record		.602***		.604***
		(.078)		(.078)
Violent Offense		.112		.111
		(.113)		(.113)
Drug Offense		.195*		.192*
		(.078)		(.078)
Quick Arrest		.193*		.197*
		(.083)		(.084)
Detained		1.007***		1.005***
		(.075)		(.075)
Bench Trial		.414*		.413*
		(.186)		(.186)
Jury Trial		.343		.343
		(.303)		(.303)
EXPLANATORY VARIABLES				
Percent Unemployed			.037	.008
			(.206)	(.206)
Percent Black			-.262	-.349
			(.572)	(.573)
Sex Ratio			-.009	-.020
			(.127)	(.127)

Table 5.6. (Continued).

Panel B	***Jail versus Probation/Fine***			
FIXED EFFECTS	(1)	(2)	(3)	(4)
Age Structure			-.227	-.250
			(.145)	(.146)
Percent Republican			-.008	-.008
			(.039)	(.039)
Percent Protestant			-5.584	-4.699
			(4.043)	(4.045)
Violent Crime Rate			-.0006	-.001
			(.001)	(.001)
South			1.165	.895
			(.740)	(.741)
Sentencing Structure			-.368	-.419
			(.684)	(.685)
RANDOM EFFECTS				
Intercept				
Variance Component	2.062	2.025	2.033	2.030
Chi-Square	912.325***	2792.070***	668.140***	2409.176***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$

Table 5.6. (Continued).

Panel C		***Prison versus Jail***		
FIXED EFFECTS	(1)	(2)	(3)	(4)
Intercept	-.413	-2.381***	3.146	4.091
	(.234)	(.328)	(11.892)	(11.998)
CONTROL VARIABLES				
Defendant 17 and Younger		.667*		.575*
		(.291)		(.292)
Defendant 18 to 20 Years		.518**		.517**
		(.201)		(.201)
Defendant 21 to 29 Years		.579**		.577**
		(.189)		(.189)
Defendant 30 to 39 Years		.683***		.682***
		(.188)		(.188)
Defendant 40 to 49 Years		.570**		.571**
		(.196)		(.196)
Defendant Black		.071		.069
		(.073)		(.073)
Defendant Male		.343***		.342***
		(.092)		(.092)
Prior Record		.408***		.408***
		(.096)		(.096)
Violent Offense		1.004***		1.006***
		(.102)		(.102)
Drug Offense		.549***		.550***
		(.077)		(.077)
Quick Arrest		-.234**		-.233**
		(.083)		(.083)
Detained		1.019***		1.025***
		(.073)		(.073)
Bench Trial		-1.243***		-1.236***
		(.196)		(.196)
Jury Trial		1.094***		1.099***
		(.250)		(.251)
EXPLANATORY VARIABLES				
Percent Unemployed			-.203	-.214
			(.185)	(.186)
Percent Black			.138	-.041
			(.493)	(.497)
Sex Ratio			-.065	-.104
			(.110)	(.111)

Table 5.6. (Continued).

Panel C		***Prison versus Jail***		
FIXED EFFECTS	(1)	(2)	(3)	(4)
Age Structure			.084	.094
			(.128)	(.129)
Percent Republican			.006	.013
			(.034)	(.034)
Percent Protestant			10.568**	10.896**
			(3.551)	(3.580)
Violent Crime Rate			.001	.001
			(.001)	(.001)
South			-1.627*	-1.715*
			(.639)	(.644)
Sentencing Structure			1.201	1.078
			(.595)	(.599)
RANDOM EFFECTS				
Intercept				
Variance Component	2.003	2.176	1.483	1.498
Chi-Square	645.626***	5132.836***	770.436***	5208.529***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$

Table 5.7. Hierarchical Multinomial Models of the Influence of Community Characteristics on the Trichotomous Incarceration Decision, with Non-Linear Racial Composition Variable (N= 6,921).

Panel A	*Prison versus Probation/Fine*		
FIXED EFFECTS	(1)	(2)	(3)
Intercept	-.455	5.319	7.619
	(.254)	(16.535)	(16.956)
EXPLANATORY VARIABLES			
Percent Unemployed		-.153	-.192
		(.260)	(.266)
Sex Ratio		-.047	-.114
		(.158)	(.162)
Age Structure		-.155	-.168
		(.188)	(.193)
Percent Republican		-.008	-.002
		(.055)	(.057)
Percent Protestant		5.194	6.424
		(4.809)	(4.931)
Violent Crime Rate		.0004	.001
		(.001)	(.001)
South		-.454	-.813
		(.876)	(.898)
Sentencing Structure		.874	.703
		(.830)	(.850)
Percent Black		-.135	-.401
		(.685)	(.702)
Squared Percent Black		.520	.580
		(2.757)	(2.826)
CONTROL VARIABLES			
Defendant 17 and Younger			.541
			(.296)
Defendant 18 to 20 Years			.619**
			(.216)
Defendant 21 to 29 Years			.829***
			(.204)
Defendant 30 to 39 Years			.994***
			(.204)
Defendant 40 to 49 Years			.794***
			(.214)
Defendant Black			.259**
			(.081)
Defendant Male			.725***
			(.100)

Table 5.7. (Continued).

Panel A	***Prison versus Probation/Fine***		
FIXED EFFECTS	(1)	(2)	(3)
Prior Record			1.012***
			(.097)
Violent Offense			1.117***
			(.117)
Drug Offense			.742***
			(.087)
Quick Arrest			-.035
			(.096)
Detained			2.030***
			(.084)
Bench Trial			-.825***
			(.213)
Jury Trial			1.443***
			(.288)
RANDOM EFFECTS			
Intercept			
Variance Component	2.396	2.892	3.025
Chi-Square	928.555***	1033.373***	9713.083***

Table 5.7. (Continued).

Panel B	***Jail versus Probation/Fine***		
FIXED EFFECTS	(1)	(2)	(3)
Intercept	-.041	3.792	5.142
	(.234)	(14.027)	(14.050)
EXPLANATORY VARIABLES			
Percent Unemployed		.007	-.021
		(.218)	(.218)
Sex Ratio		-.011	-.039
		(.134)	(.135)
Age Structure		-.196	-.220
		(.159)	(.159)
Percent Republican		.004	.004
		(.047)	(.047)
Percent Protestant		-5.760	-4.865
		(4.120)	(4.125)
Violent Crime Rate		-.001	-.001
		(.001)	(.001)
South		1.158	.889
		(.752)	(.754)
Sentencing Structure		-.417	-.466
		(.701)	(.702)
Percent Black		-.235	-.322
		(.584)	(.584)
Squared Percent Black		-1.190	-1.136
		(2.323)	(2.326)
CONTROL VARIABLES			
Defendant 17 and Younger			-.135
			(.247)
Defendant 18 to 20 Years			.101
			(.171)
Defendant 21 to 29 Years			.251
			(.160)
Defendant 30 to 39 Years			.312*
			(.159)
Defendant 40 to 49 Years			.222
			(.169)
Defendant Black			.190**
			(.071)
Defendant Male			.383***
			(.085)

Table 5.7. (Continued).

Panel B	***Jail versus Probation/Fine***		
FIXED EFFECTS	(1)	(2)	(3)
Prior Record			.604***
			(.078)
Violent Offense			.111
			(.113)
Drug Offense			.193*
			(.078)
Quick Arrest			.196*
			(.084)
Detained			1.005***
			(.075)
Bench Trial			.414*
			(.086)
Jury Trial			.343
			(.303)
RANDOM EFFECTS			
Intercept			
Variance Component	2.062	2.099	2.100
Chi-Square	912.325***	662.714***	2426.842***

Table 5.7. (Continued).

Panel C		***Prison versus Jail***	
FIXED EFFECTS	(1)	(2)	(3)
Intercept	-.413	1.523	2.482
	(.234)	(12.258)	(12.368)
EXPLANATORY VARIABLES			
Percent Unemployed		-.160	-.172
		(.196)	(.198)
Sex Ratio		-.036	-.075
		(.117)	(.118)
Age Structure		.042	.052
		(.141)	(.142)
Percent Republican		-.012	-.006
		(.041)	(.042)
Percent Protestant		10.954**	11.289**
		(3.648)	(3.681)
Violent Crime Rate		.001	.001
		(.001)	(.001)
South		-1.613*	-1.702*
		(.651)	(.657)
Sentencing Structure		1.291*	1.170
		(.616)	(.620)
Percent Black		.100	-.079
		(.505)	(.509)
Squared Percent Black		1.710	1.716
		(2.063)	(2.082)
CONTROL VARIABLES			
Defendant 17 and Younger			.676*
			(.292)
Defendant 18 to 20 Years			.517**
			(.201)
Defendant 21 to 29 Years			.578**
			(.189)
Defendant 30 to 39 Years			.682***
			(.188)
Defendant 40 to 49 Years			.571**
			(.196)
Defendant Black			.069
			(.073)
Defendant Male			.342***
			(.092)

Table 5.7. (Continued).

Panel C	***Prison versus Jail***		
FIXED EFFECTS	(1)	(2)	(3)
Prior Record			.408***
			(.096)
Violent Offense			1.006***
			(.102)
Drug Offense			.549***
			(.077)
Quick Arrest			-.231**
			(.083)
Detained			1.025***
			(.073)
Bench Trial			-1.239***
			(.197)
Jury Trial			1.100***
			(.251)
RANDOM EFFECTS			
Intercept			
Variance Component	2.003	1.542	1.559
Chi-Square	645.626***	822.736***	5281.370***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table 5.8. Descriptive Statistics for Variables Included in the Analyses of Community Context on the Incarceration Sentence Length Outcome (N= 4,554).

VARIABLES	Mean	S.D.
Dependent Variable		
Sentence Length (in months, logged)	2.43	1.51
Sentence Length (in months, not logged)	32.65	99.11
Explanatory Variables		
Percent Unemployed	6.38	2.39
Percent Black	20.31	14.29
Sex Ratio	94.35	4.35
Percent 65 Years and Older	11.90	2.21
Percent Republican	33.60	9.33
Percent Protestant	17.00	10.00
Violent Crime Rate[1]	927.30	533.27
Southern Location (1= yes)	.28	.46
Sentencing Structure (1=stringent; 0= lenient)	.49	.51
Defendant and Case Control Variables		
Defendant Age Categories		
17 Years and Younger	.02	.15
Between 18 and 20 Years Old	.13	.34
Between 21 and 29 Years Old	.31	.46
Between 30 and 39 Years Old	.34	.47
Between 40 and 49 Years Old	.16	.37
50 Years and Older[2]	.04	.19
Defendant Male (1= yes)	.84	.37
Defendant Black (1= yes)	.56	.50
Defendant Prior Record (1= yes)	.83	.37
Violent Adjudication Charge (1=yes)	.15	.36
Drug Adjudication Charge (1= yes)	.34	.47
Other Adjudication Charge (1= yes)[2]	.51	.50
Defendant Arrested Quickly (1= yes)	.62	.49
Defendant Detained Prior to Adjudication (1= yes)	.54	.50
Bench Trial	.04	.20
Jury Trial	.02	.15
No Trial[2]	.94	.25

[1]Rate per 100,000 residents, based on 1997 Uniform Crime Reports.
[2]In the analyses, these variables are not included in the models, but serve as reference categories.

Table 5.9. Bivariate Coefficients for Hierarchical Linear Models of the Influence of Community Characteristics on the Incarceration Sentence Length Decision (N= 4,554).

	FIXED EFFECTS		RANDOM EFFECTS	
(Model)/Variable	Intercept	Bivariate Effect	Variance Component	Chi-Square
(1) Intercept Only	2.314***	---	.924	2342.385***
	(.155)	---		
(2) Percent Unemployed	3.104***	-.124	.863	2690.588***
	(.434)	(.064)		
(3) Percent Black	2.562***	.131	.936	2155.298***
	(.375)	(.180)		
(4) Male-to-Female Sex Ratio	3.657	-.014	.946	2258.337***
	(3.449)	(.037)		
(5) Percent 65 Years Plus	1.548	.064	.929	2368.214***
	(.861)	(.071)		
(6) Percent Republican	1.385*	.028	.883	2525.569***
	(.574)	(.016)		
(7) Percent Protestant	1.334***	5.774***	.639	1965.713***
	(.268)	(1.378)		
(8) Violent Crime Rate	2.371***	-.0001	.949	2398.508***
	(.318)	(.0003)		
(9) South	2.163***	.538	.889	2356.646***
	(.180)	(.339)		
(10) Sentencing Structure	2.403***	-.181	.941	2202.854***
	(.220)	(.313)		
(11) Percent Black	2.882***	.024	.838	2555.658***
	(.381)	(.177)		
Squared Percent Black		2.099*		
		(.907)		

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .05$; *$p \leq .01$ (two-tailed tests).

Figure 5.2. Average Length of Sentence for Incarcerated Defendants in 1998 SCPS, Across Counties

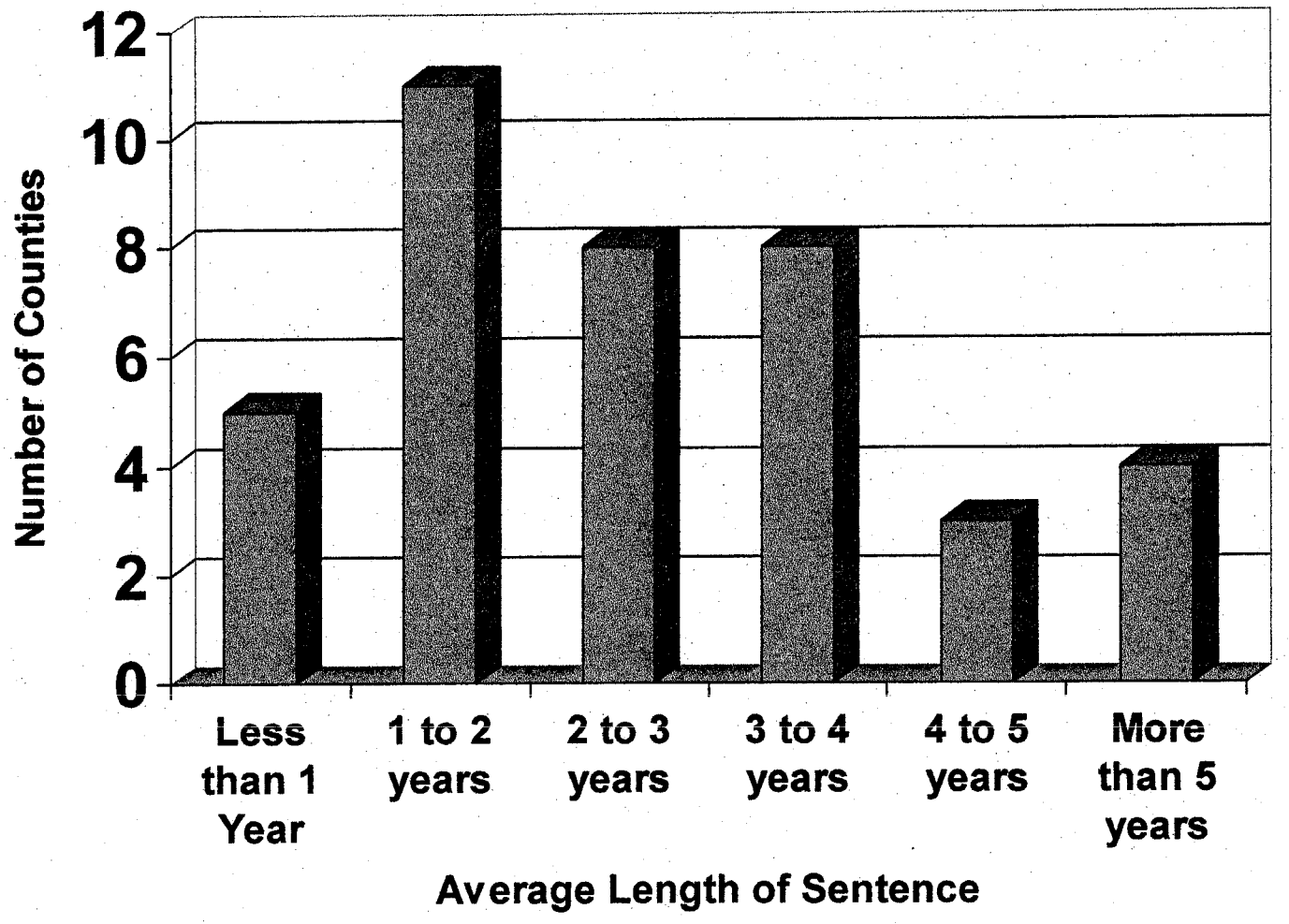


Table 5.10. Hierarchical Linear Regression Models of the Influence of Community Characteristics on the Incarceration Sentence Length Decision (N= 4,554).

FIXED EFFECTS	(1)	(2)	(3)	(4)
Intercept	2.314***	.916***	2.335	2.933
	(.155)	(.177)	(8.202)	(7.656)
CONTROL VARIABLES				
Defendant 17 and Younger		.416**		.417**
		(.129)		(.129)
Defendant 18 to 20 Years		.244**		.243**
		(.088)		(.088)
Defendant 21 to 29 Years		.281***		.280***
		(.082)		(.082)
Defendant 30 to 39 Years		.338***		.337***
		(.082)		(.082)
Defendant 40 to 49 Years		.266**		.266**
		(.086)		(.086)
Defendant Black		.096**		.095**
		(.033)		(.033)
Defendant Male		.282***		.282***
		(.042)		(.042)
Prior Record		.276***		.276***
		(.042)		(.042)
Violent Offense		.846***		.846***
		(.046)		(.046)
Drug Offense		.363***		.364***
		(.035)		(.035)
Quick Arrest		-.086*		-.085*
		(.037)		(.037)
Detained		.756***		.758***
		(.032)		(.032)
Bench Trial		-.484***		-.484***
		(.083)		(.083)
Jury Trial		1.132***		1.129***
		(.097)		(.097)
EXPLANATORY VARIABLES				
Percent Unemployed			-.112	-.126
			(.123)	(.115)
Percent Black			-.004	-.153
			(.344)	(.321)
Sex Ratio			-.012	-.037
			(.076)	(.071)
Age Structure			.067	.067
			(.088)	(.082)

Table 5.10. (Continued).

FIXED EFFECTS	(1)	(2)	(3)	(4)
Percent Republican			-.006	-.001
			(.024)	(.022)
Percent Protestant			5.843*	5.588*
			(2.407)	(2.247)
Violent Crime Rate			.0003	.0004
			(.0005)	(.0005)
South			-.235	-.268
			(.440)	(.411)
Sentencing Structure			.087	-.026
			(.413)	(.385)
RANDOM EFFECTS				
Intercept				
Variance Component	.924	.858	.746	.648
Chi-Square	2342.385***	2393.883***	2011.901***	1749.751***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table 5.11. Hierarchical Linear Regression Models of the Influence of Community Characteristics on the Incarceration Sentence Length Decision, with Non-Linear Racial Composition Variable (N= 4,554).

FIXED EFFECTS	(1)	(2)	(3)
Intercept	2.314**	1.262	1.984
	(.155)	(8.350)	(7.805)
EXPLANATORY VARIABLES			
Percent Unemployed		-.081	-.098
		(.129)	(.121)
Sex Ratio		.008	-.020
		(.080)	(.075)
Age Structure		.038	.041
		(.095)	(.089)
Percent Republican		-.018	-.011
		(.028)	(.026)
Percent Protestant		6.032*	5.757*
		(2.432)	(2.274)
Violent Crime Rate		.0002	.0004
		(.0005)	(.0005)
South		-.222	-.256
		(.443)	(.414)
Sentencing Structure		.135	.017
		(.419)	(.392)
Percent Black		-.031	-.176
		(.347)	(.325)
Squared Percent Black		1.165	1.034
		(1.385)	(1.294)
CONTROL VARIABLES			
Defendant 17 and Younger			.417**
			(.129)
Defendant 18 to 20 Years			.243**
			(.088)
Defendant 21 to 29 Years			.280***
			(.082)
Defendant 30 to 39 Years			.337***
			(.082)
Defendant 40 to 49 Years			.266**
			(.086)
Defendant Black			.095**
			(.033)
Defendant Male			.282***
			(.042)
Prior Record			.276***
			(.042)

Table 5.11. (Continued).

FIXED EFFECTS	(1)	(2)	(3)
Violent Offense			.846***
			(.046)
Drug Offense			.363***
			(.035)
Quick Arrest			-.085*
			(.037)
Detained			.758***
			(.032)
Bench Trial			-.485***
			(.083)
Jury Trial			1.129***
			(.100)
RANDOM EFFECTS			
Intercept			
Variance Component	.924	.756	.658
Chi-Square	2342.385***	2144.437***	1851.184***

NOTE: Standard errors are in parentheses.
***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

CHAPTER SIX: INTERACTION EFFECTS OF INDIVIDUAL-LEVEL VARIABLES AND EXPLANATORY VARIABLES ON SENTENCING

INTRODUCTION

In this chapter, I report the results for several models that address the second research question posed in this study: Do community characteristics condition the influence of defendant age, race, and sex on sentencing outcomes? While the results presented in Chapter 5 focus on the influence of community characteristics on sentencing outcomes, the models examined in the present chapter focus on how the effects of defendant age, race, and sex might vary across the communities included in the analyses. If indeed the effects of age, race, and sex do vary, the following question is empirically examined: Do community characteristics help to explain any of this variation?

Following prior research (e.g., Steffensmeier et al., 1998), the defendant age, race, and sex characteristics examined in the models and presented in this chapter are measured as follows: 18 to 29 years old, black, and male. Although the age variable is slightly different than the age categories used in the models presented in the previous chapter, extant research (e.g., Steffensmeier et al., 1998) suggests that this age group is at the greatest disadvantage during the sentencing phase. The dichotomous indicators of defendant race and sex are consistent with prior research and are identical to the measures used in the analyses reported in Chapter 5.

Consistent with the presentation of the main results in Chapter 5, this chapter is organized according to the sentencing outcome examined in the models. First, I report the results from a model that estimates fixed and random effects of defendant age, race, and sex

on the in/out incarceration decision. If variation exists in the effects of any of these characteristics, I then add the corresponding county-level variable(s) (e.g., sex ratio, age structure, racial composition) to the model to assess whether the individual-level variation is explained by the community-level factor(s). Next, I report the results from a model that estimates both fixed and random effects for the three-way interaction between these defendant demographic characteristics. This interaction captures the main expectations assessed by the models that are presented in this chapter. Specifically, that young black males are more likely to be incarcerated, are more likely to be incarcerated in prison (versus jail or probation/fine) and are more likely to be given lengthy incarcerative terms (e.g., Spohn, 1994; Spohn and Spears, 1996; Steffensmeier et al., 1998). Additionally, if variation exists in the effect of this three-way interaction, I then add the appropriate county-level variables to the model to assess whether that variation is explained by the community-level attribute(s).

Before presenting the results for this series of analyses, it is important to reiterate that once again all models are estimated with and without the correction factor. As reported in the previous chapter, the results are virtually identical whether or not the correction factor is included in the models. Due to the potential problems associated with including the correction factor and the high correlation between the correction factor and other substantive predictors, I report the results for the models estimated without the correction factor.

IN/OUT INCARCERATION DECISION

Table 6.1 reports the results for a hierarchical logistic model of the effects of three defendant characteristics—age, race, sex—on the in/out decision.[13] Both the coefficients and

[13] The models presented in this chapter include all the control variables, but I present in tabular form only the effects for the defendant characteristics of interest: age, race, and sex.

a variance component and test statistic are shown for each variable. In each case the coefficients represent the estimated slope for the variables, averaged across all counties included in the analysis. The variance component and corresponding test statistic reveal whether there is significant variation across counties in the estimated slope. As shown in the table, only defendant race and sex exert statistically significant effects on the in/out decision. More specifically, black and male defendants are significantly more likely than their white and female counterparts to be incarcerated. In contrast, although the effect reported for young defendants (ages 18 to 29 years) is not statistically significant, its negative sign indicates that defendants ages 18 to 29 years are less likely to be incarcerated than either younger or older defendants.

More importantly for the present study, the random effects portion of this table shows that the effects of defendant age, race, and sex do not vary significantly across counties. Importantly, the variance components for each of the effects (age, race, and sex) reveal that there is variation in these effects across counties, however, not a statistically significant amount. Apparently, the disadvantage that blacks and males experience at sentencing, at least for the in/out decision, is relatively stable across urban counties. Because of the non-significant amount of variation in the effects of defendant 18-29 years, defendant black, and defendant male on the in/out incarceration decision, there is no need to estimate additional models that would include community characteristics to help explain this variation.

Before presenting the results from the age/race/sex interaction model, it is important to give a little background on the importance of this three-way interaction and how it is distributed in the present analyses. There is much speculation and some empirical evidence (e.g., Spohn, 1994; Spohn and Spears, 1996; Steffensmeier et al., 1998) that young black

males receive harsher treatment from the criminal justice system than other offenders, but most of the evidence is based on samples from a single jurisdiction or state. The data used in the present study allows me to assess this issue for a more comprehensive sample. Young black males represent about 21% (N= 1,452) of defendants eligible for a sentencing outcome and about 22% (N= 1,017) of incarcerated defendants eligible for a sentence length decision in the SCPS.

Table 6.2 reports the fixed and random effects for the age/race/sex interaction on the in/out incarceration decision. Contrary to past research (e.g., Steffensmeier et al., 1998), the fixed effects portion of this table shows that young black males are *not* significantly more likely to receive incarcerative sentences than other types of defendants. The effect of this three-way interaction is in the expected direction but does not achieve statistical significance. Thus, the results indicate that being young, black, and male does not significantly increase the likelihood of an incarceration sanction versus some other kind of punishment.

The random effects portion of this table shows that the positive effect of being young, black, and male on the in/out decision does not vary significantly across the counties included in the analyses. Consistent with the main effects of defendant age, race, and sex on the in/out decision, there is *some* variation (.084) in the slope for young black males, but it is not statistically significant. This suggests that young black males are at a slight (albeit statistically non-significant) disadvantage at the sentencing stage overall, and that this pattern does not vary significantly across the urban counties in the analysis.[14]

TRICHOTOMOUS INCARCERATION DECISION

[14] Although not the focus of the present research and not shown in tabular form, the model includes fixed and random effects for the appropriate two-way interactions (i.e., young males, black males, and young blacks). It is important to note that none of these two-way interactions exerts a statistically significant effect on the in/out incarceration outcome, nor do these two-way interaction effects vary across the counties included in the analysis.

Table 6.3 reports the results for a hierarchical multinomial model estimated to assess the fixed and random effects of defendant age, race, and sex on the trichotomous incarceration outcome. Although there are some noteworthy effects, the general pattern that emerges from this table is that for all comparisons males are at a relative disadvantage to females. Specifically, the fixed effects results for Panels A, B, and C show that males are significantly more likely than females to receive a prison sentence relative to a probation assignment, a fine, or a jail term. Sex is the only defendant characteristic that exerts a consistent, positive, statistically significant effect on all of the possible contrasts (e.g., prison versus probation/fine, jail versus probation/fine, prison versus jail).

The fixed effects portions for this table also show that the defendant age variable exerts no statistically significant influence on any of the contrasts. Being young does not increase the relative likelihood of a prison sentence versus probation, fines, or jail. Nor does this defendant attribute significantly affect the likelihood of a jail term relative to probation or a fine.

While the sex effect is statistically significant and consistent across all three sentence type comparisons and the age effect is non-significant for all three category contrasts, the race effect is not as straightforward. The results suggest that black defendants are significantly more likely to receive a prison sentence relative to a probation assignment or fine, but they are not significantly more likely to receive a prison versus jail sentence, or a jail sentence versus probation/fine. The results seem to suggest that black defendants are particularly more likely to receive an incarceration term in the form of prison.

The results for the random effects portions of this table are similar to those reported for the effects of defendant age, race, and sex on the in/out decision. The random effects, for

all three contrasts, show that the effects of defendant age, race, and sex do not vary significantly across counties. Again, this is not to say that the effects of these defendant characteristics do not vary at all, but that the Chi-square test indicates that there is not a statistically significant amount of variation for the age, race, and sex effects, across the counties included in the analyses. Because of the non-significant amount of variation in the effects of defendant 18-29 years, defendant black, and defendant male on all of the contrasts of the trichotomous incarceration decision, there is no justification to estimate additional models that would include community characteristics to help explain this variation.

Table 6.4 reports the results for the multinomial model estimated to assess the fixed and random effects for the age/race/sex interaction on the trichotomous incarceration decision. The fixed effects portions for Panels A, B, and C of this table show that the effects of this three-way interaction on the three sentence type contrasts are in the expected direction but they are not statistically significant. Thus, the results indicate that being young, black, and male increases the likelihood of prison incarceration relative to either probation/fine or jail confinement and also increases the likelihood of prison sentences relative to jail sentences, but not by a significant amount.

The random effects portion of this table shows that the positive effects of being young, black, and male on all of the sentencing contrasts do not vary significantly across the counties included in the analyses. Consistent with the main effects of defendant age, race, and sex on the contrasts between prison and probation/fine, jail and probation/fine, and prison relative to jail, there is *some* variation in the effect evident across counties, but the Chi-square test statistics suggest that it is not statistically significant.[15]

[15] Although not shown in tabular form, the model includes fixed and random effects for the appropriate two-way interactions (i.e., young males, black males, and young blacks). For the contrasts between prison versus

SENTENCE LENGTH DECISION

Table 6.5 reports the results for a hierarchical linear model estimated to assess the fixed and random effects of defendant age, race, and sex on the sentence length decision. As shown in the table, only two of the variables, defendant race and defendant sex, exert statistically significant effects on the sentence length decision. Black and male defendants receive longer sentences than their white and female counterparts, the effect reported for young defendants (ages 18 to 29 years) is not statistically significant. In general, being black and male is significantly related to longer periods of incarceration, while being relatively young (18 to 29 years old) is not.

The random effects portion of this table shows that the effects of defendant age and race vary significantly across counties; in contrast, the sex effect, although significant, does not vary across counties. The lack of variation in this positive sex effect suggests that males receive longer incarceration sentences than females and that this effect is relatively consistent across the counties included in the analyses. Importantly, the Chi-square tests of the variance components for the effects of age and race reveal that there is significant variation in these effects across the counties included in the present analyses. This indicates that although black defendants are significantly more likely to receive lengthy incarceration terms, this effect varies across counties so that the estimated gap between blacks and whites in sentences received may be substantially smaller in some counties than in other counties. A similar observation can be made about the variation in the age effect. In particular, even though the

---

probation/fine and jail versus probation/fine, the young black and black male interactions are statistically significant. In both sentencing contrasts, the young black effect is negative while the black male effect is positive. Importantly, the young male effect on prison versus probation/fine, while not statistically significant, varies significantly across the counties included in the analysis. However, supplementary analyses indicate that none of the county variables help to explain this variation. None of the other two-way interactions on prison versus probation/fine or jail versus probation/fine varies significantly across county. Moreover, none of the two-way interactions significantly affects the prison versus jail contrast, nor do they vary significantly across counties.

negative effect of age on sentence length is statistically non-significant, the Chi-square statistic indicates that this effect varies across counties so that in some counties defendants 18-29 years old may receive relatively shorter periods of incarceration compared to other defendants while in other counties this may not hold true.

Due to the significant variation reported for the age and race effects, additional models are estimated to assess whether, and the degree to which, particular community characteristics help to explain that variation. Table 6.6 reports the results of a hierarchical linear model that assesses whether community characteristics help to explain some of the variation reported for the effects of defendant age and race on sentence length. Panel A in the table reports the results for the influence of age structure (percent 65 years and older) on the effect of defendant age (18-29). The fixed effects show that the percent of persons age 65 years and older significantly moderates the individual age effect. This indicates that 18-29 year old defendants adjudicated in communities with a relatively larger proportion of residents aged 65 years and older receive longer terms of incarceration than young persons adjudicated in other areas. Thus, as the proportion of older residents increase, the negative age effect on sentence length decreases.

It is important to note that after controlling for the community age structure (percent 65 years and older), the individual age effect becomes much larger and statistically significant (from -.030 to -.568). Hox (1995) suggests that the cross-level interaction coefficient (-.568) actually is an estimate of the regression in the case that the defendant age variable (1= 18 to 29 years, 0= other) is equal to zero, although if a zero value is impossible for either of the two variables in the interaction (as is the case for the community age structure variable), the change in the defendant age coefficient does not have substantive

meaning. It may, however, indicate that the individual- and community-level age variables are highly correlated although in the present analysis these two variables are not significantly correlated with one another. The change in the defendant age coefficient and the observed statistical significance might also reflect the redistribution of the variance in the age structure variable. More specifically, the effect of defendant age on sentence length is not actually statistically significant, but reflects the substantial variation, across counties, in the distribution of the community age structure variable (percent 65 years and older).

The random effects portion indicates that even after adding the age structure variable (percent 65 years and older) in model, there remains a significant amount of variation in the effect of the age variable on sentence length, across the counties included in the analyses. However, evaluation of the difference between the variance component from the model without the county-level age structure (Table 6.5) and the variance component from the model with the community age structure measure (percent 65 years and older) (see Panel A, Table 6.6) indicates that the addition of this community characteristic explains approximately 27% of the variation in the effect of defendant age on sentence length, across counties (.266=(.030-.022)/.030).

Panels B and C in Table 6.6 report the results for a model estimated to assess whether either of the county racial composition indicators (percent black and squared percent black) help to explain the variation in defendant race on sentence length, across counties. The fixed effects portions of these models indicate that neither the percent black nor the squared percent black variable significantly influence the effect of defendant race on sentence length. It is important to note that once the community racial composition measures (percent black and the non-linear specification of percent black) are included in the model, the individual

race effect is no longer statistically significant. This means that once the racial composition of the community is taken into account (i.e., held constant), black defendants are no more likely than their white counterparts to receive lengthy terms of incarceration. This may be because in communities with a relatively large proportion of black residents, black defendants account for a relatively larger proportion of the defendant pool.

The random effects sections for each of these race models in Table 6.6 show that neither of the racial composition variables helps to explain the significant amount of variation, across counties, in the effect of defendant race (black) on sentence length. In particular, an evaluation of the variance components for each of the models (defendant race only, defendant race plus percent black, and defendant race plus percent black and squared percent black) reveals that the racial composition measures do not account for the variation found for the influence of defendant race on sentence length, across the counties included in the analyses. However, it is important to reiterate that once the racial composition of the community is included, there is no longer a statistically significant individual race effect on the sentence length outcome. But, there remains a statistically significant amount of variation in the influence of defendant race on the sentence length outcome, across counties, regardless of the county-level racial composition measures included in the analyses.

It is important to make one final point about the results presented in Table 6.6. Due to the statistically significant variation in the effects of defendant age and race on sentence length and the observation that neither county age structure (percent 65 years and older) nor racial composition (percent black and squared percent black) explains a substantial proportion of this variation, several additional models were estimated to assess whether different community characteristics might help to explain the variation found for defendant

age and race effects. Each of the community characteristics included in this study were included in a model (separately and simultaneously) to evaluate whether, and the extent to which, any of these variables help to explain the remaining variation in the effects of defendant age and race on sentence length. There are reasons to expect, for example, that community characteristics such as sentencing structure, region, unemployment levels, violent crime rates, etc. might condition the influence of defendant age and race on sentence lengths.

In particular, it may be that in communities with high rates of violent crime young or black defendants are perceived as the most common perpetrators of these types of crimes, and thus, are sentenced more severely. It is also possible that young persons and black persons are sentenced more severely under the following conditions: 1) in communities that are located in the south due to the "Southern subculture of punitiveness"; 2) in communities with relatively higher unemployment levels due to the perception that these individuals are "threatening"; or 3) in communities with more flexible sentencing guidelines due to the relatively large amount of discretion that remains with the decision makers within these communities. With the exception of the age structure variable (percent 65 years and older), none of the other community characteristics affects the slopes for defendant age, race, and sex and none accounts for any of the variation found for these effects, across the counties included in the analyses.

Table 6.7 reports the results for a hierarchical linear model estimated to assess the fixed and random effects for the age/race/sex interaction on the sentence length decision. Although not statistically significant at conventional levels, the fixed effects portion of this model indicates that young black males receive slightly longer incarceration sentences than other types of defendants. This non-significant three-way interaction effect is in the expected

direction. In particular, because the coefficient for this interaction is positive, the results indicate that being young, black, and male increases the length of incarceration term imposed on felony defendants, though not by an amount that is statistically significant.

Importantly, the random effects portion of this table shows that the effect of being young, black, and male on sentence length does vary significantly across the counties included in the analyses. Thus, an additional model is estimated to assess whether, and the degree to which, community characteristics help to explain the variation in the effect of this age/race/sex interaction on sentence length across counties. Table 6.8 reports the results for a hierarchical linear model relevant to this issue. Panel A in this table reports the results for the influence of county-level sex ratio (number of males per 100 females), age structure (percent 65 years and older), and racial composition (percent black) on the three-way interaction effect. Panel B shows the results for a similar model but also includes the non-linear racial composition measure (squared percent black) to test for a possible curvilinear effect of racial composition.

The fixed effects portions of these models show that none of the community characteristics exerts a statistically significant influence on the slope for the young black male interaction on sentence length. Although some of the community effects are in the expected direction, they are not statistically significant at conventional levels. Moreover, the random effects results presented in Table 6.8 show that a statistically significant amount of variation remains, across counties, for the three-way interaction effect on sentence length after controlling for community age structure, racial composition, and sex ratio.[16]

---

[16] Similar to the in/out and trichotomous sentencing outcome models and not shown in tabular form, this model includes, fixed and random effects for the appropriate two-way interactions (i.e., young males, black males, and young blacks). The black male interaction exerts a positive statistically significant effect on sentence length while the young black interaction exerts a negative statistically significant effect. Additionally, both of these

Several additional models were estimated to assess whether other community characteristics besides age structure, racial composition, and sex ratio help to explain the variation found for the young black male effect on sentence length. Similar to the previous sentence length models, each of the community characteristics included in the study were included in a model (separately and simultaneously) to evaluate whether, and the extent to which, any of these other county-level variables help to explain the remaining variation in the three-way interaction effect on sentence length. None of these other community characteristics account for any of the variation found for the young black male effect on sentence length, across the counties included in the analyses.

In sum, the analyses reported in Chapter 6 address the second general research question posed in the present study: Do community characteristics condition the effects of defendant age, race, and sex on sentencing outcomes? The most basic answer, given the results presented herein, is generally no. However, several important observations warrant attention. First, for the two incarceration outcomes—in/out and prison versus jail versus probation/fine—there is no significant variation in the effects of these defendant characteristics or the three-way age, race, and sex interaction. The effects found for young defendants, male defendants, and black defendants and the young black male interaction seem to be consistent across the counties included in the present analyses. Although some of these characteristics (i.e., defendant race and sex) exert statistically significant effects on the in/out decision and some of the trichotomous comparisons (i.e., prison versus probation/fine, prison versus jail), the results show that these effects are largely invariant across counties. Between-county variation was observed for defendant age and race on sentence length;

---

two-way interaction effects vary significantly across the counties included in the analyses. However, supplementary analyses indicate that none of the county variables helps to explain this variation.

however, in general none of the county attributes available in the data used for this research explained that variation. The lone exception in this regard was the effect of defendant age on sentence length. About one-fourth of the between-community variation in the effect of being 18 to 29 can be attributed to county differences in age structure.

Table 6.1. Hierarchical Logistic Model of the Influences of Defendant Age, Race, and Sex on the In/Out Incarceration Outcome, with Random Effects (N= 6,921).

	18-29 Years	Black	Male
FIXED EFFECTS			
	-.031	.185*	.446***
	(.066)	(.070)	(.089)
RANDOM EFFECTS			
Variance Components	.017	.017	.060
Chi-Square	39.684	33.257	42.694

NOTE: Standard Errors are in parentheses. The model shown also includes all control variables.

***$p \leq .001$; *$p \leq .05$.

Table 6.2. Hierarchical Logistic Model of the Influence of the Age/Race/Sex Interaction on the In/Out Incarceration Decision (N= 6,921).

FIXED EFFECTS VARIABLE	COEFFICIENT	STANDARD ERROR
Young Black Male	.326	(.225)
RANDOM EFFECTS		
Young Black Male Variance Component	.084	
Chi-Square	27.330	

NOTE: The model shown also includes all control variables and the relevant two-way interaction terms.

Table 6.3. Hierarchical Multinomial Model of the Influences of Defendant Age, Race, and Sex on the Trichotomous Incarceration Outcome, with Random Effects (N= 6,921).

Panel A	***Prison versus Probation/Fine***		
FIXED EFFECTS			
	18-29 Years	Black	Male
	-.011	.204*	.749***
	(.098)	(.095)	(.117)
RANDOM EFFECTS			
Variance Components	.115	.075	.127
Chi-Square	52.612	51.583	34.471

Panel B	***Jail versus Probation/Fine***		
FIXED EFFECTS			
	18-29 Years	Black	Male
	-.043	.125	.363***
	(.076)	(.077)	(.094)
RANDOM EFFECTS			
Variance Components	.040	.031	.061
Chi-Square	35.752	25.821	49.300

Panel C	***Prison versus Jail***		
FIXED EFFECTS			
	18-29 Years	Black	Male
	.031	.080	.377***
	(.090)	(.086)	(.098)
RANDOM EFFECTS			
Variance Components	.043	.034	.062
Chi-Square	35.779	25.821	49.427

NOTE: Standard Errors are in parentheses. The model shown also includes all control variables.

***$p \leq .001$; *$p \leq .05$.

Table 6.4. Hierarchical Multinomial Model of the Influence of the Age/Race/Sex Interaction on the Trichotomous Incarceration Outcome (N= 6,921).

Fixed Effects	Prison versus Probation/Fine	Jail versus Probation/Fine	Prison versus Jail
Young Black Male	.353	.257	.099
	(.344)	(.246)	(.356)
Random Effects			
Variance Component	1.199	.071	1.520
Chi-Square	29.317	27.580	29.991

NOTE: Standard errors are in parentheses. The model shown also includes all control variables and the relevant two-way interaction terms.

Table 6.5. Hierarchical Linear Model of the Influences of Defendant Age, Race, and Sex on the Incarceration Sentence Length Outcome, with Random Effects (N= 4,554).

FIXED EFFECTS	18-29 Years	Black	Male
	-.030	.097*	.286***
	(.044)	(.042)	(.046)
RANDOM EFFECTS			
Variance Components	.030	.019	.010
Chi-Square	61.521**	53.242*	42.659

NOTE: Standard Errors are in parentheses. The model shown also includes all control variables.

***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table 6.6. Hierarchical Linear Models of the Influences of Community Age Structure and Racial Composition on the Effects of Defendant Age and Race on Sentence Length (N= 4,554).

Panel A

FIXED EFFECTS VARIABLE	COEFFICIENT	STANDARD ERROR
Defendant 18-29		
Base	-.568**	(.201)
Percent 65 Years and Older	.047**	(.017)
RANDOM EFFECTS		
Defendant 18-29 Variance Component	.022	
Chi-Square	51.939*	

Panel B

FIXED EFFECTS VARIABLE	COEFFICIENT	STANDARD ERROR
Defendant Black		
Base	.122	(.102)
Percent Black	.009	(.048)
RANDOM EFFECTS		
Defendant Black Variance Component	.021	
Chi-Square	53.514*	

Panel C

FIXED EFFECTS VARIABLE	COEFFICIENT	STANDARD ERROR
Defendant Black		
Base	.284	(.163)
Percent Black	-.004	(.052)
Squared Percent Black	.098	(.086)
RANDOM EFFECTS		
Defendant Black Variance Component	.025	
Chi-Square	56.407*	

NOTE: The models shown also include all control variables.
**$p \leq .01$; *$p \leq .05$.

Table 6.7. Hierarchical Linear Model of the Influence of the Age/Race/Sex Interaction on the Incarceration Sentence Length Decision (N= 4,554).

FIXED EFFECTS VARIABLE	COEFFICIENT	STANDARD ERROR
Young Black Male	.203	(.164)
RANDOM EFFECTS		
Young Black Male Variance Component	.397	
Chi-Square	51.242**	

NOTE: The model shown also includes all control variables and the relevant two-way interaction terms.
**$p \leq .01$.

Table 6.8. Hierarchical Linear Models of the Influences of Community Age Structure, Sex Ratio, and Racial Composition on the Effect of the Defendant Age\Race\Sex Interaction on the Sentence Length Decision (N= 4,554).

Panel A

FIXED EFFECTS VARIABLE	COEFFICIENT	STANDARD ERROR
Young Black Male	2.296	(1.929)
Sex Ratio	-.024	(.019)
Percent 65 Years and Older	.002	(.026)
Percent Black	-.067	(.087)
RANDOM EFFECTS		
Young Black Male Variance Component	.433	
Chi-Square	51.602**	

Panel B

FIXED EFFECTS VARIABLE	COEFFICIENT	STANDARD ERROR
Young Black Male	2.324	(1.932)
Sex Ratio	-.024	(.019)
Percent 65 Years and Older	.003	(.026)
Percent Black	-.071	(.091)
Squared Percent Black	.018	(.096)
RANDOM EFFECTS		
Young Black Male Variance Component	.434	
Chi-Square	51.619**	

NOTE: Standard errors are in parentheses. The models shown also include all control variables and the relevant two-way interaction terms.
**$p \leq .01$.

CHAPTER SEVEN: SUMMARY, IMPLICATIONS, AND CONCLUSION

STUDY SUMMARY

This research addressed two general empirical questions about the ways that community characteristics affect sentencing decisions for felony defendants. First, do community conditions influence whether defendants are incarcerated, the type of sanction if they are incarcerated, or the length of the incarceration term they are given? And second, do community characteristics condition the influences of defendant age, race, and sex on these sentencing outcomes?

These questions were explored using the 1998 State Court Processing Statistics (SCPS) dataset combined with a county-level dataset that provides social, demographic, political, and religious information on the counties in which the cases were adjudicated. The following measures served as dependent variables in the present study: whether the defendant was incarcerated (in/out decision), type of sentence (i.e., prison incarceration versus jail confinement versus probation/fine), and length of incarceration sentence. In general, the explanatory variables were measured at the county level while the control variables were measured at the individual level. The explanatory and control variables included the following: defendant demographics, case/offense characteristics, and county-level social, demographic, political, religious, and crime characteristics. The analytic samples used varied according to whether defendants were eligible for the particular sentencing outcome, but the basic research design used for the analyses was similar across outcomes and samples, with the nature of the dependent variable specifying the type of hierarchical (multilevel) models estimated (e.g., Bernoulli, multinomial, linear).

The present study goes beyond prior research by assessing the effects of several community characteristics on a variety of sentencing decisions neglected in extant theoretical and empirical literature. In this chapter, I summarize the main findings of analyses relevant to the two empirical questions examined, discuss the implications of those findings, and outline future research needs for advancing our understanding of the sentencing process, especially with respect to the role of community context. The analysis lacks information on victim demographics, judicial characteristics, and court organizational characteristics and uses a relatively weak measure of prior record; as such, the conclusions below are sensitive to these limitations. Nevertheless, examining the influence of a wide range of community characteristics on a variety of sentencing outcomes, using a comprehensive data set and multilevel approach, as in the present study, is critical to broadening our understanding of both community effects and sentencing outcomes.

SUMMARY OF FINDINGS

Do community characteristics influence sentencing outcomes for felony defendants? And, do these community characteristics condition the influence of defendant age, race, and sex on sentencing outcomes? If so, what is the direction and strength of these community effects? Is the influence of any one community characteristics more important than the others? More specifically, do any of the community attributes do a better job than the others at explaining county-level variation in sentencing outcomes for convicted felony defendants? The following two sections of this chapter briefly summarize the findings relevant to the first research question (Chapter 5, main effects) and the findings relevant to the second (Chapter 6, conditioning effects).

Main Effects

It is important to reiterate that the initial analyses presented in this research show that, even after controlling for other factors (e.g., individual-level defendant and case characteristics), there is significant variation in all of the sentencing outcomes across the counties included in the analysis. This prompts the following question: What might account for this variation in sentencing across counties? It may be that some of this variation could be accounted for by the absence of some controls (e.g., victim or judge characteristics) or the presence of relatively weak measures of other predictors (e.g., prior record); however, it is unlikely that those factors account for much of the observed between-county variation found in sentencing outcomes. So, what does?

The analyses presented in Chapter 5 address the first research question posed in this study: Do community characteristics influence sentencing outcomes? In general, the answer is no. The results indicated that, although some of the community variables (e.g., age structure, percent Protestant, percent black) have statistically significant bivariate relationships with the various sentencing outcomes, once all individual-level predictors are included in the models, the community characteristics included in the present study do not exert substantial effects on many of the sentencing outcomes examined.

The following community-level characteristics failed to exert any statistically significant influence on any of the sentencing outcomes examined: unemployment rate, sex ratio, percent Republican, violent crime rate, and type of sentencing structure (i.e., sentencing outcomes for felony defendants were not significantly affected by any of these county-level attributes). More specifically, regardless of the sentencing outcome examined, the type of model estimated, or the inclusion/exclusion of additional individual- or community-level predictors, none of the above community characteristics exerted an effect that achieved

statistical significance at conventional levels. This is a very interesting set of nonsignificant findings given the theoretical and empirical expectations discussed in earlier chapters. For example, the economic social threat argument leads to the expectation that defendants adjudicated in communities with higher levels of unemployment should receive more severe sentences due to the perceived level of fear and threat felt by the residents, not to mention arguments about excess labor pools. Contrary to prior research (e.g., Box and Hale, 1986, 1985, 1982; Greenberg and West, 2001; McCarthy, 1990; Wallace, 1981) the weak and statistically nonsignificant finding for the influence of county-level unemployment rates, presented in Chapter 5, fails to support this "threat" expectation.

Additionally, I do not find support for many of the empirical expectations derived from the individual-level survey literature on punitive attitudes. For instance, the weak and nonsignificant effects found for the sex ratio, percent Republican, and the violent crime rate fail to support the expectations derived from the punitive attitudes literature. Contrary to the hypotheses posed in Chapter 3 and the findings of prior research (e.g., Bailey, 1981; Greenberg and West, 2001; Liska et al., 1981; McCarthy, 1990; McGarrell, 1993; Michalowski and Pearson, 1990; Taggart and Winn, 1993; Williams and Drake, 1980), I find no evidence that felony defendants adjudicated in communities with higher male-to-female sex ratios, larger proportions of Republican-oriented residents, or higher rates of violent crime are more likely to receive more severe sentencing outcomes. Even more interesting is the finding for the effect of sentencing structure/guidelines. Specifically, the nature of the sentencing structure (e.g., stringent versus lenient) within the community does not exert a statistically significant effect on 1) whether a felony defendant is incarcerated, 2) the type of

sanction he/she receives, or 3) the length of the incarceration term, at the bivariate level or when all other predictors are considered.

These weak and statistically nonsignificant findings could indicate that a county's sex ratio, political context, crime rate, and official sentencing structure have little to do with sentencing. However, these weak effects might also suggest that these county attributes may influence sentencing outcomes in more subtle ways (i.e., through their effects on courtroom workgroup behaviors/activities or on judges, or possibly the weight given to victim characteristics), and perhaps some of the measures used (e.g., percent Republican, dichotomous sentencing structure indicator) are too crude to fully capture such influences.

Overall, with regard to the in/out incarceration decision, ***none*** of the community characteristics exerts a statistically significant effect regardless of the individual- and county-level predictors included in the models. This indicates that the community conditions included in the present study do not significantly affect whether convicted felony defendants receive a custodial or non-custodial sanction. There are a couple of reasons that might account for the uniform set of weak and statistically nonsignificant effects of community characteristics on this sentencing outcome. First, it may be that the "threat" frameworks and the hypotheses subsequently derived from these perspectives are, in some way, flawed. For instance, it may be that further theoretical and empirical elaboration is needed in order to assess whether the expectations associated with these "threat" theories apply only under certain conditions. More specifically, it is plausible that evidence in support of these perspectives might only be found in analyses that focus on particular groups of criminals (e.g., unemployed, minority, poor) or types of crimes (e.g., murder, rape, aggravated assault) that are perceived as extremely "threatening." In addition, it could also be the case that the

present data are inadequate for providing the information needed (i.e., more strenuous measures of prior record, sentencing structure, political affiliation) to conduct a rigorous examination of the empirical expectations derived from the individual-level punitive attitudes survey literature. However, even if there was a more appropriate indicator of the weak prior record measure, presumably, there would be even smaller community effects.

With regard to the type of sanction outcome, the results are a little less straightforward. First, for the contrasts between prison and probation/fine and jail and probation/fine the results are virtually identical to those reported for the in/out decision. Specifically, ***none*** of the community characteristics in the present analysis exerts a statistically significant effect on whether convicted felony defendants receive a prison sentence or a jail sentence when contrasted with an assignment or probation or a fine, regardless of the individual- or county-level predictors in the model. Intuitively, this makes sense because both contrasts examine, in further detail, the likelihood of a specific type of "in" sentence versus an "out." Again, these weak and nonsignificant effects might indicate generalizability concerns for the "threat" perspectives or possibly the use of weak measures for some of the control or explanatory variables (e.g., prior record, political context, sentencing structure), as discussed above.

Models that contrast the two types of incarceration (i.e., prison versus jail) assess which, if any, community characteristics affect the type of incarceration sentence given to felony defendants. The results for this contrast indicate that defendants adjudicated in counties with a relatively large proportion of Protestants are significantly more likely to receive prison sentences as opposed to jail terms. Contrary to prior research (e.g., Borg, 1997; Feld, 1991; Hagan, 1977), the same set of results suggests that defendants adjudicated

in counties located in the South are significantly *less* likely to receive a prison sentence relative to a jail sentence.

The positive effect found for the proportion of Protestants within a community is expected and further evidence of the punitiveness associated with this type of religious orientation (e.g., Flanagan and Longmire, 1996; Gerber and Engelhardt-Greer, 1996). But, the negative effect found for Southern region is in the opposite direction to that suggested by the literature. The extant research has suggested a more "punitive climate" in the South and thus, more punitive sanctions (e.g., Borg, 1998). It may be that jails in the South are perceived as harsher than prisons. More likely, however, is that defendants might be less likely to receive prison sentences because of the harshness associated with those incarceration terms once they are imposed. Due to the punitiveness associated with punishments given in the South (see e.g., Borg, 1998) defendants may not be fully processed to the point of receiving a prison term because of the severity of those terms (see also, Zimring, 2003). However, it seems likely that the same argument could be made for jail confinement terms as well and that is clearly not what the present results suggest. It is also possible that jail or prison capacity in the South affects the likelihood that convicted felony defendants receive a custodial or noncustodial sanction.

With regard to the sentence length decision, only percent Protestant exerts a statistically significant effect. As discussed briefly, the results suggest that defendants adjudicated in communities with a relatively large proportion of Protestants are significantly more likely to receive lengthy terms of incarceration compared to defendants adjudicated in communities with smaller proportions of Protestant residents. This finding provides some support for the hypothesis, drawn from the individual-level punitive attitudes survey

research, that defendants adjudicated in communities with a relatively larger proportion of Protestant-affiliated residents will receive more severe sentences.

Conditioning Effects

The analyses presented in Chapter 6 address the second research question posed in this study: Do community characteristics condition the influence of defendant age, race, and sex on sentencing outcomes? In general, the answer is no. With one notable exception, none of the community characteristics included in the present study helps to explain the variation in defendant age, race, and sex effects on sentencing outcomes, across counties. With regard to both the in/out incarceration decision and the trichotomous sentencing decision, none of the effects of the defendant characteristics varies significantly across counties. Thus, there is no individual-level variation in these effects to be explained by community-level factors. Although the effects of age, race, and sex exert a statistically significant influence on these sentencing outcomes in many of the models examined, these effects do not vary across the communities included in the study. In other words, the present findings indicate that, for the in/out decision and the type of sentence outcome, the influences of defendant age, race, and sex are fairly consistent across the 39 counties. Male defendants are at a greater disadvantage, compared with female defendants, during sentencing.

Black defendants are also at a disadvantage, compared with non-black defendants, during sentencing. Although the influence of defendant race is not statistically significant for two of the sentencing contrasts—jail versus probation/fine and prison versus jail—the race effect does vary across counties in the case of sentence length and this variation is not a function of the community characteristics examined in this study. Whether the defendant is young (i.e., 18 to 29 years old), does not significantly influence any of the sentencing

outcomes examined; although in the case of sentence length, the age effect *does* vary across counties. However, even where there is significant variation in the individual-level age and race effects as well as the three-way age, race, and sex interaction effect, neither the corresponding community-level characteristics (i.e., age structure, racial composition, sex ratio) nor additional community-level features (e.g., unemployment rates, region, violent crime rates, etc.) help to explain the variation. It is important to point out that, at least for the in/out and type of sentence outcomes, the effects of defendant age, race, and sex as well as the three-way interaction between these characteristics *do not vary* across the counties included in the present study. More specifically, this finding indicates that the influence of these defendant characteristics on the decision to incarcerate and the specific type of sentence received is fairly consistent across counties.

DISCUSSION AND IMPLICATIONS

Although the findings presented above provide little support for the theoretical frameworks and extant research discussed previously or for the hypotheses drawn from these literatures, several caveats need to be addressed. Recall that the present research examined hypotheses from the conflict-oriented "threat" perspectives as well as a set of hypotheses drawn from the individual-level survey literature on punitive attitudes using a nationally representative sample of felony defendants. The theoretical and empirical frameworks used to form the general expectations and specific hypotheses tested suggest that the composition of community residential populations should influence the kinds of sentences imposed on defendants adjudicated within these various communities so that defendants processed in communities with certain characteristics (e.g., high unemployment rates, high violent crime rates, relatively large proportions of Republicans and Protestants) are more likely to be

incarcerated, receive more severe types of sentences, and receive longer terms of incarceration than defendants sentenced in other types of communities. The present findings lend little support, in general, to these expectations of community effects. Why not?

It is critical to reiterate that the analysis revealed significant variation across counties in all three sentencing outcomes considered (i.e., in/out decision, trichotomous sentencing decision, and sentence length). This suggests that there is indeed either an advantage *or* disadvantage for criminal defendants sentenced in different counties with differing characteristics. It is possible that some omitted control variable or measurement error in the present analysis accounts for some of this variation, but it is extremely unlikely given the present findings that these factors account for the large amount of variation observed across counties in all of the sentencing outcomes examined. Most importantly, neither the individual-level defendant and case characteristics nor the community-level characteristics explain the significant amount of variation found for each of the sentencing outcomes across counties. What might help to explain this sentencing variation?

With regard to the weak and statistically nonsignificant effects found in the present research, data and measurement shortcomings might account for lack of community effects. Specifically, the lack of information on victim characteristics, judicial characteristics, and court organizational characteristics might be affecting the results of the present analyses. These characteristics have been associated with various criminal justice outcomes in prior research; thus, their exclusion from the present analyses may be a contributing factor to the null findings reported here. It may be that some community factors affect sentencing outcomes for felony defendants only in certain types of courts overseen by certain types of judges or when the offenses are committed against certain types of victims. It may also be

the case that the absence of judicial, court, and/or victim information could account for some of the variation found, across counties, in the various sentencing outcomes. That is, it is possible that county variation in sentencing outcomes may be due to differences in judicial attributes, court characteristics, or victim demographics. Without information on these potentially important contributing factors (i.e., judicial attributes, court characteristics, victim demographics), it is possible that the controls included in the present study do not fully capture the compositional effects that could be important predictors of sentencing.

It is also possible that the use of a data set that provides information only on urban counties impedes the ability to evaluate fully some of the hypotheses. Perhaps the results would be more supportive of the hypotheses drawn from prior theory and research if the data analyzed included information on a broader range of urban *and* rural areas. The inclusion of both urban and rural counties would expand the variation associated with the dependent variables and the individual- and community-level explanatory variables (see e.g., Hagan, 1977; Myers and Talarico, 1987, 1986b), which may increase the chances of finding support for these hypotheses.

The use of proxy variables as indicators of economic (unemployment rate) and racial threat (percent black) also may be masking the true relationships between sentencing outcomes and perceived economic or racial threat. This might be the case for the use of additional proxy variables as measures of perceived level of fear in the community (violent crime rate) and punitive climate (e.g., region, political orientation, sex ratio), as well. In sum, the lack of information on victim, judge, and court characteristics as well as the focus on urban counties only and the use of indirect measures (proxies) for many of the explanatory variables may, singly or in combination with one another, be masking the

theoretically- and empirically-derived relationship between sentencing and community context. Given this, the conclusions drawn regarding the empirical validity of the perspectives that guided this research must be tentative. It is also possible that the theoretical expectations discussed in this research only apply to certain offenders or offenses. Specifically, it may be that only black defendants, who represent the "threatening" population, are at a disadvantage during the sentencing stage. And, perhaps only those defendants adjudicated for the most "threatening" offenses (i.e., murder, rape, aggravated assault) are at a greater disadvantage during the sentencing phase.

One final observation from the present research deserves discussion: the statistically nonsignificant effect of sentencing structure—the presence of stringent versus lenient sentencing guidelines—on all of the sentencing outcomes examined. It is extremely important to highlight the weak and nonsignificant effect found for type of sentencing structure. Overall, sentencing structure exerts no statistically significant effect on any of the measures of sentencing. Moreover, the results of supplementary analyses (not shown in tabular form) reveal that sentencing structure does not condition the effects of defendant age or race or any of the two-way or the three-way interactions on any of the outcomes. This finding is especially interesting since the main goal associated with the implementation of sentencing guidelines is to limit the degree to which "extra-legal" factors (e.g., race, age, sex) affect sentencing outcomes; the results of the present analysis reveals that sentencing structure does *not* moderate the effects of these "extra-legal" attributes.

The results from the present study lead to several important implications for both future empirical research and policy making. The results indicate that sentencing research should continue to examine the importance of a variety of individual and contextual

influences on criminal justice outcomes. Additionally, because of the many null effects found for community characteristics on sentencing, future empirical efforts should include an emphasis on the earlier stages of the criminal justice process. It may be that community effects are stronger during the pre-sentencing stages (i.e., prosecutorial screening, indictment, charging, adjudication) and empirical examinations that emphasize the importance of community context in earlier decision-making stages may lead to more definitive conclusions regarding community effects. Future research endeavors should also include stronger measures of criminal history than was available in the current study. Prior research (e.g., Farrell and Swigert, 1978; Myers and Talarico, 1987; Petersilia, 1985; Wilbanks, 1987) emphasizes the importance of a variety of rigorous criminal history measures in criminal justice research. Also, the present findings seem to concur with prior research (e.g., Britt, 2000; Myers and Talarico, 1987; Wilbanks, 1987) and underscore the importance of examining sentencing via multilevel techniques. It is possible that other community features (i.e., conservatism, education levels, poverty) have greater explanatory power for sentencing than some of the community characteristics included in the present analysis. It is also possible that the measurement of some of the community characteristics in the present study (i.e., type of sentencing structure, political affiliation) is too crude to fully capture the effect that these community features exerts on sentencing decisions. In addition, future empirical studies should not only emphasize the importance of defendant, case, and community features as is the case in the present study; they would benefit greatly from the inclusion of a variety of judicial, court, and victim attributes.

The findings of the present study also have potentially important implications for officials within the criminal justice system and policymakers in general. First, the general

lack of community influence signals to criminal justice officials (i.e., judges, prosecutors, defense attorneys) that what goes on inside the courtroom is potentially more important, at least with regard to sentencing, than any contributing factors outside the court. This means that sentencing variation might be curtailed or even eliminated if scarce resources and efforts are focused on the activities and behaviors of the individuals working within the court and the processes that occur therein. More specifically, advances in consistent, fair, and uniform sentencing practices across communities might be achieved by systematic changes within the court system itself.

It is important to point out that supplementary analyses (not shown in tabular form) indicate that the current sentencing structures and guidelines in place across the 39 counties ***do not*** significantly influence the type or length of sentences imposed nor do these structures influence the effects of defendant demographics such as age, race, and sex on sentencing outcomes. It may be that the dichotomous measurement of this community characteristic is too crude to capture the influence of sentencing guidelines; but it might also indicate that, in fact, sentencing guidelines fail to guide criminal justice officials in their sentencing decisions. This is critical information for criminal justice officials and policymakers. It may be that a more rigorous, systematic policy evaluation of current sentencing structures is needed in order to assess—using a more appropriate scale or indicator of sentencing structure—the impact, if any, of sentencing guidelines. However, it might be that the sentencing structures that have been implemented across the United States fail to achieve their main objective: to enhance the equity and consistency of sentencing decisions imposed on criminal defendants.

Finally, it is critical to point out that the results of this study indicate that even after controlling for a wide variety of individual- and county-level, legal and extralegal factors, in general, defendant race and sex exert statistically significant influences on sentencing. All else being equal, males and blacks remain at a substantial disadvantage when facing a sentencing decision within the United States' criminal justice system although there is some variation across counties in these effects. Thus, it is apparent that, at least for the 39 counties included in the present analysis, current sentencing guidelines have not eliminated the race or sex disparity in sentencing. Finding the types of policies and practices that will reduce these sentencing differentials is an extremely worthwhile objective of future sentencing research.

FUTURE RESEARCH

Drawing from the findings of the present research, the following issues are critical considerations for future research. An important next step for future research is to address some of the data and measurement limitations evident in this and other multilevel research. In particular, sentencing research should focus not only on the defendant, case, and community characteristics included in the present study, but also include information on key victim, judicial, and court organizational characteristics. Future research should also use more direct measures of the explanatory variables used in the present study to test the threat hypotheses (i.e., the extent to which residents actually feel threatened by blacks or unemployed persons) as well as those used to replicate the findings from the individual-level survey literature (i.e., the level of fear, punitive feelings toward criminal defendants). Additionally, the present analyses should be replicated using data on a broader range of communities. An ideal data set would include information on defendants, victims, cases, judges, courts, and communities within urban, suburban, and rural settings. Although

currently not available, this type of analysis would certainly increase the amount of variation in the individual-, court-, and community-level characteristics so that a more comprehensive examination of sentencing outcomes across different types of areas is possible.

Finally, and perhaps most importantly, future research should focus on both a race-specific and an offense-specific replication of the present study. As discussed above, the lack of support for the hypotheses drawn from the threat perspectives might reflect the fact that these expectations only hold true for certain types of "threatening" persons or "threatening" crimes. Sentencing research as well as community effects research would benefit from a race- and offense-specific replication of the present analysis.

REFERENCES

Adams, Kenneth. 1986. "Gender Differences in Court Processing: A Methodological Comment." *Journal of Research in Crime and Delinquency* 23: 295-303.

Albonetti, Celesta A. 1997. "Sentencing Under the Federal Sentencing Guidelines: An Analysis of the Effects of Defendant Characteristics, Guilty Pleas, and Departures on Sentencing Outcomes for Drug Offenses." *Law and Society Review* 31: 601-634.

_____. 1996. "Prosecutorial Discretion to Defer Criminalization: The Effects of Defendant's Ascribed and Achieved Status Characteristics." *Journal of Quantitative Criminology* 12: 63-81.

_____. 1992. "Charge Reduction: An Analysis of Prosecutorial Discretion in Burglary and Robbery Cases." *Journal of Quantitative Criminology* 8: 317-333.

_____. 1991. "An Integration of Theories to Explain Judicial Discretion." *Social Problems* 38: 247-65.

_____. 1990. "Race and the Probability of Pleading Guilty." *Journal of Quantitative Criminology* 6: 315-334.

_____. 1989. "Bail and Judicial Discretion in the District of Columbia." *Sociology and Social Research* 74: 40-47.

_____. 1987. "Prosecutorial Discretion: The Effects of Uncertainty." *Law and Society Review* 21: 291-318.

_____. 1986. "Criminality, Prosecutorial Screening, and Uncertainty: Toward a Theory of Discretionary Decision Making in Felony Case Processing." *Criminology* 23: 623-644.

Albonetti, Celesta A., Robert M. Hauser, John Hagan, and Ilene H. Nagel. 1989. "Criminal Justice Decision Making as a Stratification Process: The Role of Race and Stratification Resources in Pretrial Release." *Journal of Quantitative Criminology* 5: 57-82.

Arvanites, Thomas M. 1992. "Increasing Imprisonment: A Function of Crime or Socio-economic Factors? *American Journal of Criminal Justice* 37: 19-38.

Austin, Thomas L. 1981. "The Influence of Court Location on Type of Criminal Sentence: the Rural-Urban Factor." *Journal of Criminal Justice* 9: 305-16.

Austin, Roy L. and Mark D. Allen. 2000. "Racial Disparity in Arrest Rates as an Explanation of Racial Disparity in Commitment to Pennsylvania's Prisons." *Journal of Research in Crime and Delinquency* 37: 200-220.

Austin, James and John Irwin. 2001. *It's About Time: America's Imprisonment Binge.* Belmont, CA: Wadsworth Publishing Co.

Bailey, William C. 1981. "Inequality in the Legal Order: Some Further Analysis and Commentary." *Social Problems* 29: 51-60.

Baumer, Eric P., Steven F. Messner, and Richard B. Felson. 2000. "The Role of Victim Characteristics in the Disposition of Murder Cases." *Justice Quarterly* 17: 281-308.

Beaulieu, Mark and Steven F. Messner. 1999. "Race, Gender, and Outcomes in First Degree Murder Cases." *Journal of Poverty* 3: 47-68.

Beckett, Katherine and Theodore Sasson. 2000. *The Politics of Injustice: Crime and Punishment in America.* Thousand Oaks, CA: Pine Forge.

Beeley, A. 1927. *The Bail System in Chicago.* Chicago: University of Chicago Press.

Berk, Richard A. 1983. "An Introduction to Sample Selection Bias in Sociological Data."

American Sociological Review 48: 386-98.

Berk, Richard A. and Subhash C. Ray. 1982. "Selection Biases in Sociological Data." *Social Science Research* 11: 352-398.

Bernstein, Ilene Nagel, Edward Kick, Jan T. Leong, and Barbara Schultz. 1977. "Charge Reduction an Intermediary State in the Process of Labelling Criminal Defendants." *Social Forces* 56: 362-384.

Bickle, Gayle S. and Ruth D. Peterson. 1991. "The Impact of Gender-Based Family Roles on Criminal Sentencing." *Social Problems* 38: 372-392.

Bishop, Donna M. and Charles E. Frazier. 1984. "The Effects of Gender and Charge Reduction." *Sociological Quarterly* 25: 385-396.

Black, Donald. 1989. *Sociological Justice*. New York: Oxford University Press.

Blalock, Hubert. 1967. *Toward a Theory of Minority-Group Relations*. New York: John Wiley & Sons.

Bohm, Robert M. 1991. *The Death Penalty in America: Current Research*. Cincinnati, OH: Anderson.

Borg, Marian J. 1998. "Vicarious Homicide Victimization and Support for Capital Punishment: A Test of Black's Theory of Law." *Criminology* 36: 537-67.

_____. 1997. "Southern Subculture of Punitiveness? Regional Variation in Support for Capital Punishment." *Journal of Research in Crime and Delinquency* 34: 25-45.

Boris, Steven Barnet. 1979. "Stereotypes and Dispositions for Criminal Homicide." *Criminology* 17: 140-158.

Box, Steven and Chris Hale. 1986. "Unemployment, Crime, and Imprisonment, and the Enduring Problem of Prison Overcrowding." In Roger Matthews and Jock Young (eds.), *Confronting Crime*. London: Sage Publications.

_____. 1985. "Unemployment, Imprisonment, and Prison Overcrowding." *Contemporary Crises* 9: 209-28.

_____. 1982. "Economic Crisis and the Rising Prisoner Population in England and Wales." *Crime and Social Justice* 17: 20-35.

Bridges, George S. and Robert D. Crutchfield. 1988. "Law, Social Standing, and Racial Disparities in Imprisonment." *Social Forces* 66: 699-724.

_____. 1985. "On Law, Social Structure, and Racial Inequality in Imprisonment." Revised version of a paper presented at the annual meetings of the American Sociological Association, Washington, D.C.

Bridges, George and Sara Steen. 1998. "Racial Disparities in Official Assessments of Juvenile Offenders: Attributional Stereotypes as a Mediating Mechanism." *American Sociological Review* 63: 554-570.

Britt, Chester L. 2000. "Social Context and Racial Disparities in Punishment Decisions." *Justice Quarterly* 17: 707-32.

Bryk, Anthony S. and Stephen W. Raudenbush. 1992. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Newbury Park: Sage Publications.

Bryk, Anthony S., Stephen W. Raudenbush, and Richard T. Congdon. 1996. *Hierarchical Linear and Nonlinear Modeling With the HLM/2L and HLM/3L Programs*. Chicago, IL: Scientific Software International, Inc.

Bureau of the Census. 2000. *CENSUS BUREAU SUMMARY TAPE FILES, 2000.* Washington, D.C.: U.S. Department of Commerce.

_____. 1997. *CENSUS OF CHURCHES, 1997.* Washington, D.C.: U.S. Department of Commerce.

_____. 2000. *COUNTY AND CITY DATA BOOK, 2000.* Washington, D.C.: U.S. Department of Commerce.

Bureau of Justice Statistics. 2000. State Court Sentencing of Convicted Felons, 1996. U. S. Department of Justice, Office of Justice Programs. Washington, D. C.

Carroll, Leo and Mary Beth Doubet. 1983. "U.S. Social Structure and Imprisonment." *Criminology* 21: 449-456.

Chambliss, William J. and Robert B. Seidman. 1971. *Law, Order and Power*. Reading, MA: Addison-Wesley.

Chesney-Lind, Meda. 1979. "Chivalry Reexamined: Women and the Criminal Justice System." In L. H. Bowker (ed.), *Women, Crime, and the Criminal Justice System.* Lexington, MA: D.C. Heath.

Chiricos, Theodore G. 1987. "Rates of Crime and Unemployment: An Analysis of Aggregate Research Evidence." *Social Problems* 34: 187-212.

Chiricos, Theodore G. and William D. Bales. 1991. "Unemployment and Punishment: An Empirical Assessment." *Criminology* 29: 701-724.

Chiricos, Theodore G. and Charles Crawford. 1995. "Race and Imprisonment: A Contextual Assessment of the Evidence." In Darnell F. Hawkins (ed.), *Contemporary Issues and Debates*. Albany: State University of New York Press.

Clayton, Obie, Jr. 1983. "A Reconsideration of the Effects of Race in Criminal Sentencing."

Criminal Justice Review 8: 15-20.

Clements, Mark C. 1972. "Sex and Sentencing." *Southwestern Law Journal* 26: 890-904.

Crawford, Charles, Ted Chiricos, and Gary Kleck. 1998. "Race, Racial Threat, and Sentencing of Habitual Offenders." *Criminology* 36: 481-511.

Curran, Debra A. 1983. "Judicial Discretion and Defendant's Sex." *State Court Journal* 2: 13-18, 38-40.

Daly, Kathleen. 1994. "Gender and Punishment Disparity." In George S. Bridges and Martha A. Myers (eds.), *Inequality, Crime, and Social Control*. Boulder, CO: Westview Press.

_____. 1987. "Discrimination in the Criminal Courts: Family, Gender, and the Problem of Equal Treatment." *Social Forces* 66: 152-175.

Daly, Kathleen and Rebecca Bordt. 1995. "Sex Effects and Sentencing: A Review of the Statistical Literature." *Justice Quarterly* 12: 143-177.

Demuth, Stephen H. 2000. "The Processing of White, Black, and Hispanic Defendants in Large Urban Courts: Main and Interactive Effects of Race and Ethnicity on Case-Process Decision-Making." Unpublished doctoral dissertation, The Pennsylvania State University, PA.

Dixon, Jo. 1995. "The Organizational Context of Criminal Sentencing." *American Journal of Sociology* 100: 1157-98.

Eisenstein, James and Herbert Jacob. 1977. *Felony Justice: An Organizational Analysis of Felony Courts*. Boston: Little, Brown.

Eisenstein, James, Roy Flemming, and Peter Nardulli. 1999, 1988. *The Contours of Justice: Communities and Their Courts.* Boston: Little, Brown.

Ekstrand, Laurie E. and William A. Eckert. 1978. "Defendant's Sex as a Factor in Sentencing." *Experimental Study of Politics* 6: 90-112.

Everett, Ronald S. and Barbara C. Nienstedt. 1999. "Race, Remorse, and Sentence Reduction: Is Saying You're Sorry Enough?" *Justice Quarterly* 16: 99-122.

Farnworth, Margaret and Patrick M. Horan. 1980. "Separate Justice: An Analysis of Race Differences in Court Processes." *Social Science Research* 9: 131-139.

Farrell, Ronald A. and Malcolm D. Holmes. 1991. "The Social and Cognitive Structure of Legal Decision-Making." *Sociological Quarterly* 32: 529-42.

Farrell, Ronald A. and Victoria Lynn Swigert. 1978. "Prior Offense as a Self-fulfilling Prophecy." *Law and Society Review* 12: 437-454.

Federal Bureau of Investigation. 1997. *Uniform Crime Report, 1997.* Washington, D.C.

Feeley, Malcolm M. 1979. *The Process is the Punishment: Handling Cases in a Lower Criminal Court.* New York: Sage Publications.

Feld, Barry C. 1991. "Justice By Geography: Urban, Suburban, and Rural Variations in Juvenile Justice Administration." *The Journal of Criminal Law and Criminology* 82: 156-210.

Figueira-McDonough, Josefina. 1985. "Gender Differences in Informal Processing: A Look at Charge Bargaining and Sentence Reduction in Washington, DC." *Journal of Research in Crime and Delinquency* 22: 101-133.

Fine, Gary Alan. 1984. "Negotiated Orders and Organizational Cultures." *Annual Review of Sociology* 10: 239-262.

Flanagan, Timothy J. and Dennis R. Longmire. 1996. *American's View Crime and Justice: A National Public Opinion Survey.* Thousand Oaks, CA: Sage Publications.

Flemming, Roy, Peter Nardulli, and James Eisenstein. 1992. *The Craft of Justice: Work and Politics in Criminal Court Communities.* Philadelphia: University of Pennsylvania Press.

Foote, Caleb. 1954. "Compelling Appearance in Court: Administration of Bail in Philadelphia." *University of Pennsylvania Law Review* 102: 1031-1079.

Galster, George C. and Laurie A. Scaturo. 1985. "The U.S. Criminal Justice System: Unemployment and the Severity of Punishment." *Journal of Research in Crime and Delinquency* 22: 163-189.

Gelles, Richard J. and Murray A. Straus. 1975. "Family Experience and Public Support of the Death Penalty." *American Journal of Orthopsychiatry* 45: 596-613.

Gerber, Jurg and Simone Engelhardt-Greer. 1996. "Just and Painful: Attitudes Toward Sentencing Criminals." In Timothy J. Flanagan and Dennis R. Longmire (eds.), *Americans View Crime and Justice: A National Public Opinion Survey.* Thousand Oaks, CA: Sage Publications.

Goldkamp, John S. 1979. *Two Classes of Accused: A Study of Bail and Detention in American Justice.* Cambridge, MA: Ballinger.

Gottfredson, Stephen D. and Roger G. Jarjoura. 1996. "Race, Gender, and Guidelines-Based Decision Making." *Journal of Research in Crime and Delinquency* 33: 49-69.

Greenberg, David F. 1977. "The Dynamics of Oscillatory Punishment Processes." *Journal of Criminal Law and Criminology* 68: 643-651.

Greenberg, David F. and Valerie West. 2001. "State Prison Populations and Their Growth, 1971-1991." *Criminology* 39: 615-654.

Guttentag, Marcia and Paul F. Secord. 1983. *Too Many Women? The Sex Ratio Question.* Beverly Hills, CA: Sage Publications.

Hagan, John. 1989. "Why is There So Little Criminal Justice Theory? Neglected Macro- and Micro-level Links Between Organization and Power? *Journal of Research in Crime and Delinquency* 26: 116-135.

_____. 1977. "Criminal Justice in Rural and Urban Communities: A Study of the Bureaucratization of Justice." *Social Forces* 55: 595-612.

_____. 1975. "Parameters of Criminal Prosecution: An Application of Path Analysis to a Problem of Criminal Justice." *Journal of Criminal Law, Criminology, and Police Science* 65: 536-44.

_____. 1974. "Extra-Legal Attributes and Criminal Sentencing: An Assessment of a Sociological Viewpoint." *Law and Society Review* 8: 357-84.

Hagan, John and Kristin Bumiller. 1983. "Making Sense of Sentencing: A Review and Critique of Sentencing Research." In Alfred Blumstein, Jacqueline Cohen, Susan E. Martin, and Michael H. Tonry (eds.), *Research on Sentencing: The Search for Reform.* Volume II. Washington, DC: National Academy Press.

Hagan, John and Marjorie S. Zatz. 1985. "The Social Organization of Criminal Justice Processing: An Event History Analysis." *Social Science Research* 14: 103-25.

Hartman, Raymond. 1991. "A Monte Carlo Analysis of Alternative Estimators in Models Involving Selectivity." *Journal of Business and Economic Statistics* 9: 41-49.

Hawkins, Darnell F. 1987. "Beyond Anomalies: Rethinking the Conflict Perspective on Race and Criminal Punishment." *Social Forces* 65: 719-45.

Heckman, James J. 1979. "Sample Selection Bias as a Specification Error." *Econometrica* 47: 153-161.

_____. 1976. "The Common Structure of Statistical Models of Truncation, Sample Selection and Limited Dependent Variables and a Simple Estimator for Such Models." *Annals of Economic and Social Measurement* 5: 475-492.

Heinz, Anne, Herbert Jacob, and Robert L. Lineberry (eds.). 1983. *Crime in City Politics.* New York: Longman.

Hindus, Michael Stephen. 1980. *Prison and Plantation: Crime, Justice, and Authority in Massachusetts and South Carolina, 1767-1878.* Chapel Hill, NC: The University of North Carolina Press.

Holmes, Malcolm and Howard Daudistel. 1984. "Ethnicity and Justice in the Southwest: The Sentencing of Anglo, Black, and Mexican Origin Defendants." *Social Science Quarterly* 65: 263-277.

Holmes, Malcolm, Harmon Hosch, Howard Daudistel, Delores Perez, and Joseph Graves. 1996. "Ethnicity, Legal Resources, and Felony Dispositions in Two Southwestern Jurisdictions." *Justice Quarterly* 13: 11-30.

Horan, Patrick M., Martha A. Myers, and Margaret Farnworth. 1982. "Prior Record and Court Processes: The Role of Latent Theory in Criminological Research." *Sociology and Social Research* 67: 40-58.

Horney, Julie, Ruth Peterson, Doris MacKenzie, John Martin, and Dennis Rosenbaum. 2000. "Introduction to Volume 3: Policies, Processes, and Decisions of the Criminal Justice System." In Julie Horney (ed.), *Criminal Justice 2000.* U. S. Department of Justice, Office of Justice Programs. National Institute of Justice, Washington, D. C.

Hox, J. J. 1995. *Applied Multilevel Analysis.* Amsterdam: TT-Publikaties.

Hox, Joop J. and Ita G.G. Kreft. 1994. "Multilevel Analysis Methods, Introduction Special Issue on Multilevel Analysis." *Sociological Methods and Research* 22: 283-300.

Jackson, Pamela Irving. 1989. *Minority Group Threat, Crime, and Policing.* New York: Praeger.

Jackson, Pamela Irving and Leo Carroll. 1981. "Race and the War on Crime: The Sociopolitical Determinants of Municipal Police Expenditures in 90 Non-southern U.S. Cities." *American Sociological Review* 46: 290-305.

Jacobs, David. 1979. "Inequality and Police Strength: Conflict Theory and Coercive Control in Metropolitan Areas." *American Sociological Review* 44: 913-925.

_____. 1978. "Inequality and the Legal Order: An Ecological Test of the Conflict Model." *Social Problems* 25: 515-530.

Jankovic, Ivan. 1977. "Labor Market and Imprisonment." *Crime and Social Justice* 8: 17-31.

Joubert, Paul E., J. Steven Picou, and W. Alex McIntosh. 1981. "U.S. Social Structure, Crime, and Imprisonment." *Criminology* 2: 29-48.

Katzenelson, Susan. 1976. *The Female Defendant in Washington.* Washington, D.C.: The Institute for Law and Social Research.

Kauder, Neal, Brian Ostrom, Meredith Peterson, and David Rottman. 1997. *Sentencing Commission Profiles: State Sentencing Policy and Practice.* Williamsburg, VA: National Center for State Courts.

Kempf, Kimberly L. and Roy Austin. 1986. "Older and More Recent Evidence on Racial Discrimination in Sentencing." *Journal of Quantitative Criminology* 2: 29-48.

Kleck, Gary. 1981. "Racial Discrimination in Criminal Sentencing: A Critical Evaluation of the Evidence with Additional Evidence on the Death Penalty." *American Sociological Review* 46: 783-805.

Klein, Stephen, Joan Petersilia, and Susan Turner. 1990. "Race and Imprisonment Decisions in California." *Science* 247: 812-816.

Kramer, John H. and Anthony Scirica. 1986. "Complex Policy Choices: The Pennsylvania Commission on Sentencing." *Federal Probation* L: 15-23.

Kramer, John H. and Darrell Steffensmeier. 1993. "Race and Imprisonment Decisions." *Sociological Quarterly* 34: 357-376.

Kramer, John H. and Jeffery Ulmer. 2002. "Downward Departures for Serious Violent Offenders: Local Court 'Corrections' to Pennsylvania's Sentencing Guidelines." *Criminology* 40: 601-636.

_____. 1996. "Sentencing Disparity and Departures from Guidelines." *Justice Quarterly* 13: 401-425.

Krisberg, Barry, Paul Litsky, and Ira Schwartz. 1984. "Youth in Confinement: Justice By Geography." *Journal of Research in Crime and Delinquency* 21: 153-181.

LaFree, Gary D. 1985. "Official Reactions to Hispanic Defendants in the Southwest." *Journal of Research in Crime and Delinquency* 22: 213-237.

Langan, Patrick A. 1996. "Sentence Reductions for Drug Traffickers for Assisting Federal Prosecutors." Unpublished manuscript.

Langan, Patrick A. and John M. Dawson. 1995. *Spouse Murder Defendants in Large Urban Counties.* Washington, D.C.: Department of Justice, Bureau of Justice Statistics.

Lieberman, Joel B., S. A. Schatter, and J. M. Martin. 1972. *The Bronx Sentencing Project of the Vera Institute of Justice.* Washington, D. C.: U. S. Government Printing Office.

Liska, Allen E. 1992. "Introduction to the Study of Social Control." In Allen E. Liska (ed.), *Social Threat and Social Control.* Albany, NY: SUNY Press.

Liska, Allen E. and Mitchell B. Chamlin. 1984. "Social Structure and Crime Control Among Macrosocial Units." *American Journal of Sociology* 90: 383-95.

Liska, Allen E., Joseph J. Lawrence, and Michael Benson. 1981. "Perspectives on the Legal Order: The Capacity for Social Control." *American Journal of Sociology* 87: 413-426.

Lizotte, Alan J. 1978. "Extra-legal Factors in Chicago's Criminal Courts: Testing the Conflict Model of Criminal Justice." *Social Problems* 25: 564-580.

Longmire, Dennis R. 1996. "Americans' Attitudes About the Ultimate Weapon: Capital Punishment." In Timothy J. Flanagan and Dennis R. Longmire (eds.), *Americans View Crime and Justice: A National Public Opinion Survey.* Thousand Oaks: Sage.

Lundsgaarde, Henry P. 1977. *Murder in Space City.* New York: Oxford University Press.

Marenin, Otwin, Alexander W. Pisciotta, and Tom J. Juliani. 1983. "Economic Conditions and Social Control: An Empirical Assessment of the Relationship between Unemployment and Incarceration in the U.S.A., 1958-1978." *Criminal Justice Review* 8: 43-53.

Maxfield, Linda Drazha and John H. Kramer. 1998. *Substantial Assistance: An Empirical Yardstick Gauging Equity in Current Federal Policy and Practice.* Washington, D.C.: U.S. Sentencing Commission.

McCarthy, S. R. 1990. "A Micro-level Analysis of Social Structure and Social Control: Intrastate Use of Jail and Prison Confinement." *Justice Quarterly* 7: 326-340.

McGarrell, Edmund F. 1993. "Institutional Theory and the Stability of a Conflict Model of the Incarceration Rate." *Justice Quarterly* 10: 7-28.

Mears, Daniel P. and Samuel H. Field. 2000. "Theorizing Sanctioning in a Criminalized Juvenile Court." *Criminology* 38: 983-1020.

Michalowski, Raymond J. and Michael A. Pearson. 1990. "Punishment and Social Structure at the State Level: A Cross-Sectional Comparison of 1970 and 1980." *Journal of Research in Crime and Delinquency* 27: 52-78.

Miethe, Terance D. and Charles A. Moore. 1986. "Racial Differences in Criminal Processing: The Consequences of Model Selection on Conclusions About Differential Treatment." *Sociological Quarterly* 27: 217-237.

_____. 1985. "Socioeconomic Disparities Under Determinate Sentencing Systems: A Comparison of Preguideline and Postguideline Practices in Minnesota." *Criminology* 23: 337-363.

Moore, Charles A. and Terance D. Miethe. 1986. "Regulated and Non-Regulated Sentencing Practices Under the Minnesota Felony Sentencing Guidelines." *Law and Society Review* 20: 253-265.

Myers, Martha A. 1995. "Gender and Southern Punishment After the Civil War." *Criminology* 33: 17-46.

_____. 1990. "Black Threat and Incarceration in Postbellum Georgia." *Social Forces* 69: 373-393.

_____. 1987. "Economic Inequality and Discrimination in Sentencing." *Social Forces* 65: 746-766.

_____. 1980. "Personal and Situation Contingencies in the Processing of Convicted Felons." *Sociological Inquiry* 50: 65-74.

_____. 1979. "Offended Parties and Official Reactions: Victims and the Sentencing of Criminal Defendants." *Sociological Quarterly* 20: 529-540.

_____. 1977. "The Effects of Victim Characteristics in the Prosecution, Conviction, and Sentencing of Criminal Defendants." Unpublished Ph.D. dissertation. Bloomington: Indiana University.

Myers, Martha A. and Susette M. Talarico. 1987. *The Social Contexts of Criminal Sentencing*. New York: Springer-Verlag.

_____. 1986a. "The Social Contexts of Racial Discrimination in Sentencing." *Social Problems* 33: 236-251.

_____. 1986b. "Urban Justice, Rural Injustice? Urbanization and Its Effect on Sentencing." *Criminology* 24: 367-91.

_____. 1985. *Disparity and Discrimination in Sentencing: The Case of Georgia.* Athens, Georgia. Prepared for the National Institute of Justice.

Nagel, Ilene H. 1983. "The Legal/Extra-Legal Controversy: Judicial Decisions in Pretrial Release." *Law and Society Review* 17: 481-515.

Nagel, Ilene H. and John Hagan. 1983. "Gender and Crime: Offense Patterns and Criminal Court Sanctions." In Michael Tonry and Norval Morris (eds.), *Crime and Justice: An Annual Review of Research,* Vol. 14, pp. 91-144. Chicago: University of Chicago Press.

Nagel, Stuart and Lenore J. Weitzman. 1971. "Women as Litigants." *Hastings Law Journal* 23: 171-198.

Nardulli, Peter F., James Eisenstein, and Roy B. Flemming. 1988. *The Tenor of Justice: Criminal Courts and the Guilty Plea Process*. Urbana, IL: University of Illinois Press.

Nardulli, Peter F., Roy B. Flemming. 1984. "Unraveling the Complexities of Decision-making in Face-to-Face Groups: A Contextual Analysis of Plea-bargained Sentences." *American Political Science Review* 78: 918-928.

Ostrom, Brian, Neal Kauder, David Rottman, and Meredith Peterson. 1998. *Sentencing Digest: Examining Current Sentencing Issues and Policies*. Williamsburg, VA: National Center for State Courts.

Parker, Robert Nash and Allan V. Horwitz. 1986. "Unemployment, Crime and Imprisonment: A Panel Approach." *Criminology* 24: 751-773.

Paternoster, Raymond. 1984. "Prosecutorial Discretion in Requesting the Death Penalty: A Case of Victim-Based Racial Discrimination." *Law and Society Review* 18: 437-478.

Patterson, E. Britt and Michael J. Lynch. 1991. "Bias in Formalized Bail Procedures." In Michael Lynch and E. Britt Patterson (eds.), *Race and Criminal Justice*. Albany, NY: Harrow and Heston.

Petee, Thomas A. 1994. "Recommended for Release on Recognizance: Factors Affecting Pretrial Release Recommendations." *Journal of Social Psychology* 134: 375-382.

Petersilia, Joan. 1985. "Racial Disparities in the Criminal Justice System: A Summary." *Crime and Delinquency* 31: 15-34.

_____. 1983. *Racial Disparities in the Criminal Justice System*. Santa Monica, CA: Rand.

Peterson, Ruth D. and John Hagan. 1984. "Changing Conceptions of Race: Toward an Account of Anomalous Findings of Sentencing Research." *American Sociological Association* 49: 56-70.

Phillips, Charles David. 1986. "Social Structure and Social Control: Modeling the Discriminatory Execution of Blacks in Georgia and North Carolina, 1925-1935." *Social Forces* 65: 458-475.

Pope, Carl E. 1976. "The Influence of Social and Legal Factors on Sentencing Dispositions: A Preliminary Analysis of Offender Based Transaction Statistics." *Journal of Criminal Justice* 4: 203-21.

Pruitt, Charles R. and James Q. Wilson. 1983. "A Longitudinal Study of the Effect of Race on Sentencing." *Law and Society Review* 17: 613-35.

Radelet, Michael L. 1981. "Racial Characteristics and the Imposition of the Death Penalty." *American Sociological Review* 46: 918-927.

Raudenbush, Stephen, Anthony Bryk, Yuk Fai Cheong, and Richard Congdon. 2001. *HLM 5, Hierarchical Linear and Nonlinear Modeling.* Chicago, IL: Scientific Software International, Inc.

Rhodes, William and Stephen Matsuba. 1984. "Pretrial Release in Federal Courts: A Structural Model with Selectivity and Qualitative Dependent Variables." *Evaluation Review* 8: 692-704.

Rosenstone, Steven J., Donald R. Kinder, Warren E. Miller, and the National Election Studies. *AMERICAN NATIONAL ELECTION STUDY, 1996: PRE- AND POST-ELECTION SURVEY* [Computer file]. 4th version. Ann Arbor, MI: University of

Michigan, Center for Political Studies [producer], 1999. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2000.

Rountree, Pamela Wilcox, Kenneth C. Land, and Terance D. Miethe. 1994. "Macro-Micro Integration in the Study of Victimization: A Hierarchical Logistic Model Analysis Across Seattle." *Criminology* 32: 387-414.

Sampson, Robert J. and Dawn Jeglum Bartusch. 1998. "Legal Cynicism and (Subcultural?) Tolerance of Deviance: The Neighborhood Context of Racial Differences." *Law and Society Review* 32: 777-804.

Sampson, Robert J. and John H. Laub. 1993. "Symposium: Crime, Class, and Community-An Emerging Paradigm." *Law and Society Review* 27: 255-359.

Sampson, Robert J. and Janet L. Lauritsen. 1997. "Racial and Ethnic Disparities in Crime and Criminal Justice in the United States." In Michael Tonry (ed.), *Ethnicity, Crime, and Immigration: Comparative and Cross-National Perspectives*. Chicago, IL: University of Chicago Press.

Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* 277: 918-24.

Savelsberg, Joachim. 1994. "Taming the System: The Control of Discretion in Criminal Justice, 1950-1990." *Contemporary Sociology-A Journal of Reviews* 23: 862-863.

_____. 1992. "Law that Does Not Fit Society: Sentencing Guidelines and Substantivized Law." *American Journal of Sociology* 97: 1346-81.

Sellin, Thorsten. 1928. "The Negro Criminal: A Statistical Note." *The Annals of the American Academy of Political and Social Science* 140: 52-64.

Simon, Rita J. 1975. *Women and Crime*. Lexington, MA: Lexington.

Simon, Rita J. and Navin Sharma. 1979. *The Female Defendant in Washington.* Washington, D.C.: Inslaw.

Snell, Tracy L. 2000. *Capital Punishment.* Washington, D.C.: U. S. Department of Justice, Bureau of Justice Statistics.

Snijders, Tom A. B. and Roel J. Bosker. 1999. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling.* Thousand Oaks, CA: Sage Publications.

Spears, Jeffrey and Cassia C. Spohn. 1997. "The Effect of Evidence Factors and Victim Characteristics on Prosecutors' Charging Decisions in Sexual Assault Cases." *Justice Quarterly* 14: 501-524.

Spohn, Cassia C. 2000. "Thirty Years of Sentencing Reform: The Quest for a Racially Neutral Sentencing Process." In Julie Horney (ed.), *Criminal Justice 2000.* U. S. Department of Justice, Office of Justice Programs. National Institute of Justice, Washington, D.C.

_____. 1994. "Crime and the Social Control of Blacks: Offender/Victim Race and the Sentencing of Violent Offenders." In George S. Bridges and Martha A. Myers (eds.), *Inequality, Crime, and Social Control.* Boulder, CO: Westview Press.

Spohn, Cassia C. and David Holleran. 2000. "The Imprisonment Penalty Paid by Young, Unemployed Black and Hispanic Male Offenders." *Criminology* 38: 281-306.

Spohn, Cassia C. and Jeffrey Spears. 1996. "The Effect of Offender and Victim Characteristics on Sexual Assault Case Processing Decisions." *Justice Quarterly* 13: 649-79.

Spohn, Cassia C., John Gruhl, and Susan Welch. 1987. "The Impact of the Ethnicity and Gender of Defendants on the Decision to Reject or Dismiss Felony Charges." *Criminology* 25: 175-191.

_____. 1982. "The Effect of Race on Sentencing: A Re-Examination of an Unsettled Question." *Law and Society Review* 16: 71-88.

Steffensmeier, Darrell. 1980. "Assessing the Impact of the Women's Movement on Sex-Based Differences in the Handling of Adult Criminal Defendants." *Crime and Delinquency* 26: 344-357.

Steffensmeier, Darrell and Stephen Demuth. 2001. "Ethnicity and Judges' Sentencing Decisions: Hispanic-black-white comparisons." *Criminology* 39: 145-178.

_____. 2000. "Ethnicity and Sentencing Outcomes in U.S. Federal Courts: Who is Punished More Harshly—White, Black, White-Hispanic, or Black-Hispanic Defendants?" *American Sociological Review* 65: 705-729.

Steffensmeier, Darrell, Jeffery Ulmer, and John Kramer. 1998. "The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of Being Young, Black, and Male." *Criminology* 36: 763-93.

Steffensmeier, Darrell, John H. Kramer, and Cathy Streifel. 1993. "Gender and Imprisonment Decisions." *Criminology* 31: 411-446.

Stinchcombe, Arthur L., Rebecca Adams, Carol A. Heimer, Kim L. Scheppele, Tom W. Smith, and Garth D. Taylor. 1980. *Crime and Punishment: Changing Attitudes In America.* San Francisco: Jossey-Bass Publishers.

Stolzenberg, Ross and Daniel Relles. 1997. "Tools for Intuition About Sample Selection Bias and Its Correction." *American Sociological Review* 62: 494-507.

_____. 1985. *Calculation and Practical Application of GMAT Predictive Validity Measures.* Santa Monica, CA: Graduate Management Admission Council.

Sutton, John. 2000. "Imprisonment and Social Classification in Five Common Law Democracies, 1955-1985." *American Journal of Sociology* 106: 350-386.

Sutton, L. Paul. 1978. *Variations in Federal Criminal Sentences: A Statistical Assessment at the National Level.* Albany, N.Y.: Criminal Justice Research Center.

Taggart, William A. and Russell G. Winn. 1993. "Imprisonment in the American States." *Social Science Quarterly* 74: 736-749.

Taylor, D. Garth, Kim L. Scheppele, and Arthur L. Stinchcombe. 1979. "Salience of Crime and Support for Harsher Criminal Sanctions." *Social Problems* 26: 413-24.

Tepperman, Lorne. 1973. "The Effects of Court Size on Organization and Procedure." *Canadian Review of Sociology and Anthropology* 10: 346-365.

Thomas, Charles W. and Samuel C. Foster. 1975. "A Sociological Perspective on Public Support for Capital Punishment." *American Journal of Orthopsychiatry* 45: 641-57.

Thomson, Randall J. and Matthew T. Zingraff. 1981. "Detecting Sentencing Disparity: Some Problems and Evidence." *American Journal of Sociology* 86: 869-880.

Tjaden, Patricia G. and Claus-Dieter Tjaden. 1981. "Differential Treatment of the Female Felon: Myth or Reality." In Marguirite Q. Warren (ed.), *Comparing Male and Female Offenders.* Sage Research Progress Series in Criminology, Vol. 21. Beverly Hills, CA: Sage.

Tonry, Michael. 1995. *Malign Neglect: Race, Crime, and Punishment in America.* New York: Oxford University Press.

Turk, Austin. 1969. *Criminality and the Legal Order.* Chicago: Rand McNally.

Tyler, Tom R. and Renee Weber. 1982. "Support for the Death Penalty: Instrumental Response to Crime, or Symbolic Attitude?" *Law and Society Review* 17: 21-45.

Uhlman, Thomas M. and N. Darlene Walker. 1979. "A Plea is No Bargain: The Impact of Case Disposition on Sentencing." *Social Science Quarterly* 60: 218-234.

Ulmer, Jeffery. 1997. *Social Worlds of Sentencing: Court Communities Under Sentencing Guidelines.* Albany, N.Y.: SUNY Press.

Ulmer, Jeffery and John Kramer. 1998. "The Use and Transformation of Formal Decision-Making Criteria: Sentencing Guidelines, Organizational Contexts, and Case Processing Strategies." *Social Problems* 45: 248-267.

_____. 1996. "Court Communities Under Sentencing Guidelines: Dilemmas of Formal Rationality and Sentencing Disparity." *Criminology* 34: 383-408.

Unnever, James D. 1982. "Direct and Organizational Discrimination in the Sentencing of Drug Offenders." *Social Problems* 30: 212-225.

Unnever, James D. and Larry A. Hembroff. 1986. "When Judges Discriminate." Revised version of a paper presented at the 1985 annual meetings of the American Society of Criminology, San Diego.

Unnever, James D., Charles E. Frazier, and John C. Henretta. 1980. "Race Differences in Criminal Sentencing." *The Sociological Quarterly* 21: 197-205.

U.S. Department of Justice, Bureau of Justice Statistics. 2000. *STATE COURT PROCESSING STATISTICS, 1998: FELONY DEFENDANTS IN LARGE URBAN COUNTIES* [Computer file]. Conducted by Pretrial Services Resource Center. 2nd ICPSR ed. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [producer and distributor].

U.S. Department of Justice, Bureau of Justice Statistics. 1998. *STATE COURT ORGANIZATION, 1998*. Office of Justice Programs, Washington, D.C.: Government Printing Offices.

Vidmar, Neil and Phoebe C. Ellsworth. 1974. "Public Opinion and the Death Penalty." *Stanford Law Review* 26: 1245-70.

Visher, Christy A. 1983. "Gender, Police, Arrest Decisions, and Notions of Chivalry." *Criminology* 21: 5-8.

Wallace, Don. 1981. "The Political Economy of Incarceration Trends in Late U.S. Capitalism: 1971-1977." *The Insurgent Sociologist* 10: 59-67.

Welch, Susan, John Gruhl, and Cassia Spohn. 1984. "Dismissal, Conviction, and Incarceration of Hispanic Defendants: A Comparison with Anglos and Blacks." *Social Science Quarterly* 65: 257-264.

Weidner, Robert R. and Richard Frase. 2001. "A County-level Comparison of the Propensity to Sentence Felons to Prison." *International Journal of Comparative Criminology* 1: 1-22.

Wheeler, Stanton, David Weisburd, and Nancy Bode. 1982. "Sentencing the White-Collar Offender: Rhetoric and Reality." *American Sociological Review* 47: 641-659.

Wilbanks, William. 1987. *The Myth of a Racist Criminal Justice System*. Monterey, CA: Brooks/Cole.

_____. 1984. *Murder in Miami: An Analysis of Homicide Patterns and Trends in Dade County (Miami) Florida, 1917-1983*. Lanham, MD: University Press of America.

Williams, Kristen M. 1976. "The Effects of Victim Characteristics on the Disposition of

Violent Crimes." In William F. McDonald (ed.), *Criminal Justice and the Victim.* Beverly Hills, CA: Sage Publications.

Williams, Kirk R. and Susan Drake. 1980. "Social Structure, Crime and Criminalization: An Empirical Examination of the Conflict Perspective." *The Sociological Quarterly* 21: 563-575.

Williams, Oliver and Richard J. Richardson. 1976. "The Impact of Criminal Justice Policy on Blacks in Trial Courts of a Southern State." In R. Cole (ed.), *Readings in Criminal Justice.* Belmont, CA: Duxbury Press.

Wong, George Y. and Mason, William M. 1985. "The Hierarchical Logistic Regression Model for Multilevel Analysis." *Journal of the American Statistical Association* 80: 513-24.

Wooldredge, John D. 1998. "Analytical Rigor in Studies of Disparities in Criminal Case Processing." *Journal of Quantitative Criminology* 14: 155-79.

Yeager, Matthew G. 1979. "Unemployment and Imprisonment." *Journal of Criminal Law and Criminology* 70: 586-588.

Zatz, Marjorie S. 2000. "The Convergence of Race, Ethnicity, Gender, and Class on Court Decisionmaking: Looking Toward the 21st Century." In Julie Horney (ed.), *Criminal Justice 2000.* U. S. Department of Justice, Office of Justice Programs. National Institute of Justice, Washington, D.C.

_____. 1987. "The Changing Forms of Racial/Ethnic Biases in Sentencing." *Journal of Research in Crime and Delinquency* 24: 69-92.

_____. 1984. "Race, Ethnicity, and Determinate Sentencing: A New Dimension to an Old Controversy." *Criminology* 22: 147-171.

Zimring, Franklin E. 2003. *The Contradictions of American Capital Punishment.* New York: Oxford University Press.

Appendix A. Correlation Matrix for Explanatory Variables Included in the Analyses (N= 39).

	Percent Unemployed	Percent Black	Sex Ratio	Age Structure	Percent Republican	Percent Protestant	Violent Crime Rate	Sentencing Structure	South
Percent Unemployed	1.000								
Percent Black	.633**	1.000							
Sex Ratio	-.593**	-.725**	1.000						
Age Structure	.095	.151	-.526**	1.000					
Percent Republican	-.519**	-.262	.238	-.201	1.000				
Percent Protestant	-.327*	.260	-.144	-.010	.524**	1.000			
Violent Crime Rate	.586**	.659**	-.268	-.036	-.379*	-.008	1.000		
Sentencing Structure	-.263	-.450**	.610**	-.250	.225	-.231	-.027	1.000	
South	-.133	.350*	-.087	-.059	.331*	.542**	.313	-.041	1.000

**Correlation significant at the .01 level (two-tailed test).
*Correlation significant at the .05 level (two-tailed test).