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## THE IMPORTANCE OF COUNTY CONTEXT IN THE MEASUREMENT OF SENTENCE DISPARITY: THE SEARCH FOR ROUTINIZATION

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### ABSTRACT

*Using felony court cases from three Florida counties, this article examines the hypothesis that sentence disparity results from the contextual routinization of courtroom behavior and not necessarily differential treatment of similar offenders. When different contexts are analyzed, it is believed that courtroom actors will treat similar offenders in similar ways as much as possible. Sentence reformers have attempted to alleviate disparity with sentencing guidelines that usually do not take into account the tendency of courtroom actors to make decisions in routine ways. The analysis reveals the routinization of sentencing behavior within each county which appears to be sentence disparity when county context is not isolated. Because the routinization of sentencing behavior is not a singular part of the courtroom process, the routinization of arrest charge, bail, arraignment charge, and conviction charge decisions are analyzed in conjunction with the sentence decisions for each county. If disparity is not occurring within counties, but across counties, the concern over disparity needs to be reexamined. Isolating county context indicates how courts make decisions. These are the patterns of routinization that have developed in each court's attempt to determine who should receive more severe sentences. These patterns suggest the degree to which warranted and unwarranted disparity takes place from one jurisdiction to another. The analysis of these patterns is used to recommend the elements necessary in the proper measurement of sentence disparity. Implications for sentence reform and future disparity research are discussed.*

## INTRODUCTION

In recent years, judicial sentencing discretion has come under attack because of the assumption that this discretion results in sentence disparity. In earlier efforts to revise the federal criminal code, United States Senator Edward Kennedy (Justice in Sentencing, *New York Times*, 29 July 1977, p. 21) referred to judicial sentencing as a "national scandal." In testifying before a Senate committee about their sentencing studies, Yale Law School professors said that "sentencing in the Federal courts is a judicial lottery marked by gross and shocking disparities" (U.S. Court Sentencing Called Judicial Lottery, *New York Times*, 10 June 1977, p. 28). Federal Judge Marvin E. Frankel proclaimed that "the almost wholly unchecked and sweeping powers we give to judges in the fashioning of sentences are terrifying and intolerable for a society that professes devotion to the rule of law" (Frankel, 1973:5).

In an effort to eliminate this alleged sentence disparity, sentencing guidelines, mandatory sentences, minimum sentences, and presumptive sentences were implemented in most jurisdictions (Gottfredson and Gottfredson, 1988). One of the most extensive efforts to control perceived sentence disparity has occurred in the federal system. In 1984, Congress revised the federal criminal code after years of attempting to do so (Terry, 1989). This revision included a provision for establishing a federal sentencing commission charged with the responsibility of establishing sentencing guidelines for federal judges. Those guidelines were criticized by scholars as well as by some members of the U.S. Sentencing Commission. Some federal judges refused to follow the guidelines; some federal courts held them unconstitutional, while others upheld the guidelines. The U.S. Supreme Court settled the constitutional issue in 1989 by upholding the federal guidelines, indicating that the guidelines are an appropriate remedy for sentence disparity (*Mistretta v. United States*, 488 U.S. 361, 1989).

The irony of the debate on sentencing is that with such widespread concern over alleged unfair sentence practices, little attention

has been given to the nature and source of the alleged disparity. It is important to understand that sentence disparity is not demonstrated solely by differential sentences. Disparity exists when factors, such as race, ethnicity, gender, and religion are the basis of sentence differences. Sentence differences based on prior records do not necessarily constitute disparity.

It is important to understand that removing judicial sentencing discretion cannot guarantee fairness in the criminal justice system. In fact, the perceived unfairness may even be greater unless there are greater controls over police discretion (in determining whether to arrest), prosecutorial discretion (in determining whether to prosecute and, if so, which charges to bring, and so on), grand jury discretion (in determining whether to return an indictment), and the discretion of juries to refuse to find guilt. Thus, a jury that perceives the mandatory sentence to be too long might find the defendant not guilty even when they believe him or her to be guilty.

Far too little attention has been given to all of these issues, especially the measurement of alleged sentence disparity as a basis for discussion and policy implementation. An exception is the work of Barry and Greer (1981). Using some of their basic assumptions, this article reports an analysis of the potential of county context to account for some sentence variation. The article is not intended to measure disparity comprehensively, but, rather, to highlight some of the major issues in the proper measurement of the concept. Those issues include the potential of county context to account for reductions in disparity and the potential of routinization of behavior by courtroom personnel to be part of the reduced disparity within counties.

This study is a comparison of the factors that affect the arraignment charge, conviction charge, and sentence decisions. Comparing and contrasting factors that influence these decisions is employed to see whether the decisionmaking of the courtroom work groups varies from one jurisdiction to another.

This analysis demonstrates the importance of county context in any effort to analyze disparity. Once county context has been isolated

and routine decisionmaking patterns explored, the measurement of sentence disparity becomes more valid. Because this analysis shows county context is important in disparity research, implications for sentence reform and future research are discussed.

## LITERATURE REVIEW

Limited research has been conducted to measure the existence of sentence disparity (Barry and Greer, 1981; Gottfredson and Gottfredson, 1988). One of the few studies that has attempted to measure disparity involves the development of a quantitative indicator of disparity using offense seriousness, prior record, sentence discretion, and prosecutorial discretion to account for variability in sentences (Barry and Greer, 1981). Barry and Greer's model identifies some of the critical factors that must be taken into account in any attempt to demonstrate disparity.

First, Barry and Greer (1981) define *disparity* as different outcomes for people who should be treated in a similar manner. Given a definition of disparity, research must be concerned with classification of similar offenders for comparison purposes. Barry and Greer use the Minnesota sentencing guidelines to categorize their cases by offense seriousness. Like most guidelines, the Minnesota sentencing guidelines place crimes into categories based on judges' perceptions of seriousness (Neubauer, 1988). This allows the researcher to classify crimes into similar categories. The assumption is that similar sentences should be given to offenders within each category.

Second, to classify similar offenders further, Barry and Greer (1981) take prior record into account for differential sentencing within each category. Sentencing guidelines also reflect the judges' use of prior record to influence sentencing. Prior record and offense seriousness are the two major legal criteria in sentencing (Farrell and Swigert, 1978; Clarke and Koch, 1976; Zatz, 1984; Durham, 1987; Van Dine, Dinitz, and Conrad, 1977; Gertz and Price, 1985; Gottfredson and Gottfredson, 1988).

Third, the demonstration of sentence disparity must be concerned with the measurement of different types of sentences. It is not enough to look only at prison sentence length because offenders receive multiple types of penalties, including probations and fines. The relative severity of each penalty type must be taken into account as well.

Barry and Greer (1981) use penalty severity scales developed by Buchner (1979) and Erickson and Gibbs (1979) to construct a measure of sentence outcome using perceived severity and amount. Buchner used the judgments of city criminal court judges to classify penalty severity and Erickson and Gibbs used police officers and citizens. Analysis of these perceptions resulted in weights reflecting the perceived severity of different penalty types.

Borrowing some of the basic assumptions of the Barry and Greer (1981) model, this study hypothesizes that much of the disparity targeted by reformers and demonstrated by Barry and Greer's technique is the result of routinization within jurisdictions. Routinization, according to Mileski (1971), happens when courts attempt to routinize their activities to dispose of cases rapidly and efficiently. Usually, the basis for such judgments are offense seriousness and prior record.

Courtroom personnel tend to develop a going rate for what Sudnow (1965) designates as normal crime. Whenever an offender meets a particular set of criteria for an offense, the offender receives whatever the going rate is. Offenders who do not meet those standards get a sentence that deviates from the normal going rate. This serves as a basis for differences in sentences across counties and probably reduces sentence disparity within counties. Any remaining disparity is the result of each county's routinization behavior.

Barry and Greer (1981) did not isolate county context in their analysis. While their study attempted to analyze the sources of disparity within offense classifications, this study shows that disparity research should look at how warranted and unwarranted factors associated with the offenders are used in each jurisdiction.

The evidence of this study indicates that apparent sentence disparity may be the result

of jurisdictional context. Within each context, the courtroom work group may have developed similar processing patterns for similar offenders, which implies less disparity. The courtroom work group is comprised of the prosecutor, defense attorney, and judge who interact with each other in the processing of offenders (Eisenstein and Jacob, 1977).

Overall disparity should not be the focus of concern (Gottfredson and Gottfredson, 1988). Overall disparity is comprised of warranted and unwarranted disparity. Warranted disparity is the approved deviation that results from the use of accepted factors such as employment stability and prior record. Unwarranted disparity, variation in sentencing considered to be unjust or unfair, should be the target of reform and research. Unwarranted disparity results from the use of suspect factors such as race, ethnicity, or gender.

### *The History of Criminal Court Research*

A complete understanding of the criminal court process is necessary to measure the concept of sentence disparity adequately. Incomplete knowledge may result in model misspecification and hinder further the development of a proper measure of sentence disparity.

The development of criminal court research can be traced from an early concentration on one actor and/or process. The actor and process receiving the most study have been the judge and the sentencing decision. The principal reason for this focus was the assumption of the importance of the judge's role and the power of that role in deciding the outcome of a particular case. This assumption is derived from a traditional view of law as precedent (Rheinstein, 1954). Using this perspective, judicial decisionmaking is the product of a judge's legal training. The judge makes a decision on a case through a calculated process in which the case is compared to analogous cases. The facts and the judicial response from the precedent cases serve as standards that influence the outcome of the present case.

Despite the wealth of judicial behavior research, the inadequacies of the models have

caused researchers to search for better explanations of decisionmaking. Researchers have diverted their attention to the element of discretion associated with the decisionmaking of all the courtroom actors. The assumption that only legal factors are used in court processing has been questioned, and researchers have made attempts to explain how other factors are part of the decisionmaking operation. While the traditional approach was critical of this discretion, the realist approach began with the assumption that discretion was an inherent aspect of court behavior (Cardozo, 1921; Frank, 1949). With this assumption, realist research turned its attention to understanding the dynamics of discretion (Nardulli, 1979).

The study of the dynamics of discretion begins with the realization that legal decisions are not solely the result of legal precedent; they may be influenced by the operations of the courtroom actors as well. These operations are not calculated processes that can be followed for each case. In some instances, the law may be too rigid or too outdated to be applied to the instant case. In some situations, the case may provide a circumstance of first impression to the court. That is, there is no legal precedent. The result is decisionmaking built on the discretion of multiple actors and how they use warranted and unwarranted factors from each case.

In the 1980s, with realist research beginning to develop models based on the structure of decisionmaking (Eisenstein and Jacob, 1977), the conditions were excellent for the development of improved explanatory, structural models. These new models would be incomplete, however, if all aspects of the court process were not integrated to yield the context in which decisions were being made. This integration would acknowledge the interaction of individual, court, and environmental influences on court decisionmaking which had only been qualitatively described up to that point.

The impact of these influences can be understood when the court is analyzed using equilibrium analysis. Equilibrium analysis (Easton, 1965) assumes the presence of environmental influences as a must for understanding an organization operating as an open

system. These influences have the ability to disrupt the balance of power in an organization. Equilibrium analysis is used to study a system or organization in terms of its ability to return to a state of equilibrium or stability in light of the outside influences or demands exerted on it. For a court, this environmental influence means responding to political and social demands emanating from the court's own community.

The integration of individual, court, and environmental influences, also known as contextual analysis, has been incorporated into the works of Myers and Talarico (1987) and Nardulli, Eisenstein, and Flemming (1988). Myers and Talarico (1987) achieve this integration through the analysis of three conceptual contexts; the county, court, and time. These three contexts represent county influences, court influences, and historical influences that may affect decisionmaking. Using race and offense type in interaction with the three contexts, the various aspects of county, court, and time condition the direction and strength of their influence.

A major contribution to this integrated approach was accomplished through the conception of the courthouse community in the work of Nardulli, Eisenstein, and Flemming (1988). The courthouse community concept is derived from this idea using the systems theory assumption that courts are highly decentralized and complex. Due to their decentralized nature, courts can be understood only as part of a system or community. The courthouse community represents the actual court under study including the various actors who make decisions, the sponsoring organizations and policies that produce these actors, and the environmental influences in which everything else must operate. Each courthouse community has its own set of values, norms, structures, and activities that are the derivative of a particular community's adaptations to local pressures or influences. The concept of a courthouse community functions as a conceptual apparatus to understand the impact of individual, organizational, and environmental influences.

Myers and Talarico (1987) and Nardulli,

Eisenstein, and Flemming (1988) both illustrate major attempts in the model-building process of integrated criminal court decision-making research. While each contributes to the theoretical development of the model, some key issues have been overlooked both theoretically and methodologically. These works focus primarily on the sentence decision. That focus fails to acknowledge the importance of decisions made prior to sentencing, such as arraignment charges and conviction charges. Arraignment charges are the charges the prosecutor or grand jury assign to the defendant at the beginning of the court process. Conviction charges are the charges assessed to the defendant by the courtroom work group after plea bargaining or by the jury after evidence has been presented at trial.

As indicated by the literature, the courtroom scene is an interactive, cooperative one. Each actor must reconcile his/her own needs and goals to accomplish the group goal of achieving justice (Cole, 1970). By implication, no decision is made independently of all others. All decisions should be related to each other by the cooperative, interactive nature of the courtroom actors.

Criminal court decisionmaking research should focus on multiple decision points and all actors involved. This comparison should take into account the interrelationships among criterion variables and the structure of a multiple point decisionmaking process, as well as use the contextual approach to address the environmental constraints on the courtroom actors.

## DATA AND METHODS

Variables representing individual and court influences are analyzed in conjunction with three critical decisions of the courtroom actors. These decisions are the arraignment charge, conviction charge, and penalty. These decisions are analyzed across three Florida counties to control for the influence of each county's particular environment.

These decisionmaking points are chosen because presumably they reflect the thinking of

the decision maker(s) at the time. The arraignment charge is the actual set of charges/counts given through indictment by the grand jury or the information returned by the prosecutor prior to the arraignment hearing. The conviction charge is the set of charges/counts assessed to the defendant at conviction. The penalty decision is the actual sentence the defendant received.

The three counties in this analysis were selected based on the county's willingness to participate in the study, its data quality, and travel convenience. Anonymity was a request of the counties; so County A refers to the large caseload county; County B and County C refer to the medium and small caseload counties, respectively. Caseload determinations were made using 1986 data compiled by the Florida State Court Administrator's Office in Tallahassee, Florida.

Using 1986 case files to ensure that most of the cases had been disposed of, the total felony court caseload for each county was sampled randomly to obtain a sample of 250 cases from each county. Table 1 indicates the results of the sampling procedure.

### *Dependent Variables*

The three dependent variables are operationalizations of the penalties or potential penalties judges imposed, prosecutors sought, or courtroom work groups plea bargained when processing the individuals in the sample. At arraignment, the prosecutor's intent is established with the charges. This is the first point at which the prosecutor makes a decision based on the set of factors available. At con-

viction, the decisionmaking of the courtroom work group as the result of plea bargaining is evident in the charges on which the defendant is convicted or it may be the result of the jury's deliberation process. Finally, at sentencing, the penalty received reflects the judge's sentencing decision. A comparison of each of these decisions across the three counties should reveal differences in processing from one county to another, potential patterns of routinization, and differential processing patterns from one type of decision to another.

*Seriousness of charges at arraignment and conviction.* The arraignment charge and conviction charge variables are defined as the maximum potential time that could be served, defined by law, for the arraignment charge(s) and the conviction charge(s). These measures reflect what the courtroom actors were seeking as potential penalties once a conviction had been obtained or once a plea bargaining agreement had been reached. There is no way to know what each actor had in mind other than to measure the maximum potential penalty based on the charges and/or counts given at each point.

To construct the maximum potential sentence index, the maximum statutory penalties were obtained from the Florida felony statutes which governed sentencing in 1986. The penalties have been defined by degree. The degree levels and the corresponding penalties are listed in Table 2. Capital felonies are not listed because there were none in the data set.

Both indexes are calculated as consecutive charges to account for the maximum possible penalty. The corresponding penalties were

TABLE 1  
SAMPLING INFORMATION AND RESULTS

	County A	County B	County C	Total
Felony case totals	17,890	5,179	376	23,445
Cases collected	250	250	250	750
Convicted cases	175	193	189	557
Nonconvicted cases	75	57	61	193
Percent nonconvicted cases	30%	23%	24%	

TABLE 2

DEGREE LEVELS AND THE CORRESPONDING PENALTIES  
FROM THE FLORIDA FELONY STATUTES, 1986

<i>Crime Type</i>	<i>Maximum Possible Sentence</i>
Life felony	Expectation of life in years <sup>a</sup>
Felony, 1st degree	30 yrs.
Felony, 2nd degree	15 yrs.
Felony, 3rd degree	5 yrs.
Misdemeanor	1 yr.

<sup>a</sup>The statutory penalty for a life felony has been defined as ninety-nine years. No defendant, however, has ever faced the potential ninety-nine years because of their finite life span. If ninety-nine years were assigned to each of the life felonies, then overinflation of the possible penalty has occurred because the expected life span of the offender has not been taken into account. To better estimate the remaining life spans, the ages of the five life felons in the data set were obtained and used to determine the expectation of life. These numbers were obtained from the United States Bureau of the Census (1989:69), Table 109.

multiplied by the number of counts for each separate charge and then added together. For example, a defendant charged with two counts of a second degree felony and one count of a third degree felony would have a maximum possible penalty of thirty-five years.

*Magnitude of penalty severity at sentencing.* In contrast to the charge severity variable, the sentencing variable is constructed as a composite of the penalty received by each defendant. Barry and Greer (1981) suggest this is a more valid indicator of sentence than just prison sentence length. The penalties included in the data set involve life sentences in a state facility, state facility time, county jail time, community control length, probation length, fines, community service, and restitution.<sup>1</sup>

The penalty index was developed using a weighted scale constructed by Erickson and Gibbs (1979). The weighted scale is a measurement of perceived severity based on the perceptions of Arizona police officers and citizens between 1974 and 1976. The overall model is:

$$\log Y = a + b \log X + e$$

where  $Y$  = median perceived severity of a specific penalty and  $X$  = amount of penalty in number of days or dollars for fines. Estimates for each penalty type are as follows:

$$\text{Prison} \quad Y = .24 + .77 \log X,$$

$$\text{Jail} \quad Y = .16 + .70 \log X,$$

$$\text{Probation} \quad Y = -.14 + .62 \log X, \text{ and}$$

$$\text{Fines} \quad Y = -.15 + .62 \log X.$$

Community control, a new alternative sanction, has not been utilized in any scale to date. It has been adapted to the Erickson and Gibbs (1979) scale using the perceived severity associated with community control from the relevant literature (Blomberg, 1990a; Blomberg, 1990b). The perceived severity is thought to be closer to that of jail than probation according to those who have received the penalty. Using the equations for jail and probation, a new equation was created by splitting the difference between the two unstandardized betas and adding .01 to approximate the leaning of the severity toward jail severity. The jail equation intercept was also used to reflect the leaning of the severity toward jail time. The derived estimate for community control is as follows:

$$Y = .16 + .67 \log X.$$

The construction of the penalty index was complicated by the incorporation of several types of penalties, such as state prison time, jail time, community control time, probation time, restitution, community service, and fine. Restitution and community service were excluded from the index because the two penalties were not comparable to the time served variables of arraignment charge severity and convicted charge severity already constructed. Few of the offenders received these penalties, 21 percent and 17 percent, respectively. The fine penalty could not be excluded using this logic because fines were received by a large number of the offenders (61 percent in the total sample). To justify its exclusion, two penalty severity indexes were constructed, one with fine and one without. In a comparison of identical regression models, the inclusion of the fine made little difference.

### *Independent Variables*

The independent variables for the analysis are derived from the individual and court influences shown by prior studies to be important in court processing. Some of these factors can be used for legal enhancement of a sentence under the Florida Sentencing Guidelines (Sentencing Guidelines Commission, 1987). Others are used for differential sentencing of offenders and are accepted reasons for deviation. The factors include marital status, age, and employment. The rest are factors that should not be used to enhance sentencing. The factors of race, ethnicity, gender, or religion are suspect categories. The nature of warranted and unwarranted disparity can be explored in this analysis because the regression techniques used show how each of these factors affects each decision.

*Individual influence variables.* These variables are divided into crime event attributes, defendant attributes, and victim attributes. Crime event attributes are measures of factors associated with the most serious offense. Seriousness of the crime is a factor used frequently to support enhanced sentences. The most serious offense for the offender is categorized according to the offense seriousness categories of the Florida Criminal Code. The most serious offense is classified as a drug offense, property crime, violent crime, or a personal crime.

Multiple charges is another acceptable way to enhance sentences under the Florida Sentencing Guidelines (Sentencing Guidelines Commission, 1987). Multiple charges at arrest are used to account for multiple charge use in decisionmaking processes.

The offender's role in the crime, alone or with a group, is a factor that is used frequently by decision makers. A group crime can be seen as peer-pressure influence. Depending on the decision maker, the punishment may be based on this factor as mitigating or aggravating. Weapon use also is included among the crime event attributes.

The defendant characteristics are prior record, age, race, gender, marital status, employment status, and county resident. Prior

convictions can be used as a legal rationale for sentence enhancement, while the other characteristics can be used for warranted or unwarranted deviations.

Of the victim attributes included in the models, victim injury can be used to enhance the sentencing decision under the guidelines. Victim injury in this study is measured as victim loss and includes monetary loss, physical injury, or personal loss. The remaining victim attributes include race of the victim, the relationship between the victim and the defendant, and type of victim.

*Court influence variables.* Court influences are the characteristics and policies of a particular court. Those policies cannot be measured by the data used in this analysis, but they can be assumed from the actions taken. Court influences refer to the characteristics that have been demonstrated to affect the daily operations of individual courtroom work groups in their decisions regarding offenders. Each of the factors represents organizational action regarding an offender.

The most widely studied of these actions is the plea bargain. While there is no direct way to measure plea bargaining activity when using secondary data, certain organizational actions can be examined to suggest how bargaining operations might be occurring. These policy actions include whether the defendant pled or was tried, whether the defendant was convicted on original charges, and whether any charges were dropped.

Bail activity for each defendant is another court operation that may affect outcomes for defendants. Release pending trial is extremely important to a defendant and to society. Failure to detain a dangerous person or one who might not report for trial threatens society; detention of a nondangerous person who can be predicted to report for trial is harmful to the defendant, increases the cost to society, and may be illegal, depending on the circumstances and the law. Bail activity variables include bond amount, released on recognizance, bond offered, and bond made.

Another policy action in Florida involves the use of sentencing guidelines. Guidelines have been mandatory since 1983 (Sentencing



Guidelines Commission, 1987). Judges are allowed to deviate from the guidelines only when the defendant meets the legal requirements for deviation.

Other characteristics of the court include the particular courtroom actors who may influence outcomes. The type of attorney is one such factor presumed to influence sentence outcomes. Some studies indicate public defenders are associated with more severe sentences than are private attorneys in many cases (Sudnow, 1965), while others claim the type of attorney does not make a difference in sentence outcomes (Taylor et al., 1973; Wice, 1985). The courtroom work group literature indicates that judges and prosecutors work in courts on a regular basis, but not all defense attorneys do. Those defense attorneys who work in court on a regular basis are thought to be more cooperative with prosecutors and judges, which results in more lenient sentences (Eisenstein and Jacob, 1977). Defense attorneys in this study were defined as regulars if they were responsible for over 2 percent of the cases in a particular county.

The variables representing the actors involved in decisionmaking include the judge, the state attorney or prosecutor, and the defense counsel. With so many of each actor type within counties, only a select group were chosen for the analysis because a large proportion of the actors probably would not make a significant difference in the analyses. The standard for inclusion was judges and state attorneys who handled 5 percent or more of the cases, and defense attorneys who were involved in 2 percent or more of the cases. (A list of variables, codes, means, and standard deviations can be obtained from the lead author.)

## ANALYSIS

Ordinary least squares regression, corrected for sample selection bias, was used to model all three decision processes for each county (see Table 3). The samples are reduced for the arraignment charge severity, convicted charge severity, and the sentencing phase because of case attrition. Natural logarithms were used to transform the distribution of each depen-

dent variable. Because of inequality of variance and because the degree of the problem was unknown, a general weighted least squares procedure was used. The prior record variable is measured as the logarithmic function of the number of prior convictions for each defendant in each county because the mean for this variable in each county is skewed toward zero.

The sample selection procedure involves estimating probit equations based on whether the offender was convicted. The estimated probit becomes the probability that the *i*th offender will be convicted (see Heckman [1979] for a discussion of the procedure). The second equation, the actual regression equation, predicts the dependent variable using the set of independent variables plus the new regressor, the hazard rate (referred to as  $\lambda$ ), derived from the first equation. The regression models are presented in Tables 4, 5, and 6. (The probit equations for each model can be obtained from the lead author.)

## RESULTS

Analysis of the three counties indicates which factors are related to each particular decision. If there were no sentence disparities, the patterns for each decision should be the same for all three counties. Indications of overall disparity mean that isolating county context exhibits how courts actually make decisions. The patterns that emerge indicate the patterns of routinization that may have developed in each court's attempt to determine who should receive more severe sentences. These patterns also suggest the degree to which unwarranted disparity, through the use of suspect decisionmaking factors, takes place from one jurisdiction to another.

### *Arraignment Charge Severity*

In the arraignment severity models, the intent of the analysis was to show which factors were used to arrive at the arraignment charges and/or counts for each offender, or, in other words, which factors were used to determine the magnitude of the arraignment charge and how they were used (see Table 4).

TABLE 3  
VARIABLES FOR EACH DECISIONMAKING MODEL

<i>Arraignment Charge Severity</i>	<i>Convicted Charge Severity</i>	<i>Penalty Severity</i>
Multiple charges at arraignment	All variables from the previous model except prior convictions	All variables from the previous two models
Weapon used		
Drug offense		
Property crime	<i>New Variables</i>	<i>New Variables</i>
Violent crime		
Personal crime	Charges dropped	Sentencing guidelines
Offender role	Method of conviction	
Prior convictions (log)	Charges convicted on	
Age	Bond amount	
Race	Released on recognizance	
Gender	Bond offered	
Marital status	Bond made	
Marital status*	Private attorney	
Unemployed	Public defender	
Unemployed*	Regular defense attorney	
County resident	AJ1-AJ5 (County A judges)	
White victim	ADA1-ADA12 (County A defense attorneys)	
Non-White victim	BJ1-BJ2 (County B judges)	
Victim race*	BDA1-BDA2 (County B defense attorneys)	
Victim-defendant relationship	CJ1-CJ3 (County C judges)	
Personal victim	CDA1-CDA4 (County C defense attorneys)	
Business victim		
Victim loss		
Female victim		
Male victim		
ASA1-ASA6 (County A prosecutors)		
BSA1-BSA9 (County B prosecutors)		
CSA1 (County C prosecutor)		

\* Missing data dummy variable.

The analysis indicated differential patterns of decisionmaking. The only factor that was significant in all three counties was the legal factor of multiple charges at arraignment. Offenders who possessed multiple charges prior to arraignments were more likely to receive severe arraignment charges. County B's relationship between multiple charges and arraignment charge severity was the weakest of the three.

The counties' use of prior record was not consistent. It was a significant factor in County A only. As one might expect, the more prior convictions offenders had, the more likely they were to receive more severe arraignment charges.

Violent and personal crimes should receive more severe charges than drug and property crimes. The type of crime was a factor in County A only. Property crimes were associated with less severe arraignment charges than other crime types. Victim loss was significant

in County A, but not in the other two counties. When a loss was experienced by the victim, the arraignment charge severity was more severe.

The rest of the factors played a differential role across the counties. Single people were more likely to receive a more severe arraignment charge in County A. The role of the offender in the crime can sometimes affect perceptions of seriousness. In County A, offenders who acted in concert with others were more likely to receive severe arraignment charges. In County C, solo offenders were more likely to receive severe arraignment charges. The only influential victim factor was the victim's gender. In County A, offenders who committed crimes against women received more severe arraignment charges than those whose victims were men.

The only court influence on the arraignment charge severity came from some of the state attorneys involved. This was expected be-

TABLE 4  
ARRAIGNMENT SEVERITY MODELS

Variable	County A		County B		County C	
	B (t)	Beta	B (t)	Beta	B (t)	Beta
Prior convictions	.16** (2.28)	.14	.08 (.78)	.06		
Multiple charges at arraignment	.61*** (7.55)	.47	.21* (1.92)	.16	.45*** (3.52)	.41
Marital status	.35*** (2.31)	.12				
Marital status****					.26*** (-2.61)	-.16
Offender role	.40*** (3.04)	.18			-.29** (-2.35)	-.14
Property crime	-.58*** (-3.95)	-.30				
Female victim	.28** (2.07)	.12				
Victim loss	.59*** (3.94)	.30	.11 (.71)	.06		
ASA1	-.26 (-1.55)	-.09				
ASA4	-.25 (-1.60)	-.09				
BSA2			-.40 (-1.62)	-.11		
BSA6			-.76*** (-3.38)	-.26		
CSA1					-.36*** (-4.03)	-.22
Lambda	.07 (.31)		-2.05*** (-3.15)		-.42 (-1.08)	
Adjusted R-square	.37		.26		.35	

\*.05 <  $p$  < .10.

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

\*\*\*  $p$  < .01.

\*\*\*\* Missing data dummy variable.

cause the arraignment charge is the decision primarily of the state attorney. Two state attorneys, one in County B and one in County C, were associated with less severe arraignment charges than the other attorneys in their respective counties. The remaining prosecutors were more consistent with one another regarding arraignment charge decisions.

Another pattern that emerged involved missing data. The missing data for marital status in County C was not the result of random error. For some systematic reason, this information was not collected. The analysis indicates that those offenders who had this information recorded were associated with more severe arraignment charges. Most likely, less serious cases were not handled with the same

degree of care as the more serious, and those responsible for recording this information are not as meticulous with what they consider to be the less serious cases. In a small caseload court such as the one in County C, this is possible because there are fewer employees to cover the work load.

#### *Conviction charge severity*

Analyzing the conviction severity models shows that, once again, multiple charges prior to arraignment were associated strongly with decisions in all three counties. The weakest of the three effects was in County C. County A was the only county in which the type of crime was associated with the severity of the charges.

TABLE 5  
CONVICTION SEVERITY MODELS

Variable	County A		County B		County C	
	<i>B (t)</i>	<i>Beta</i>	<i>B (t)</i>	<i>Beta</i>	<i>B (t)</i>	<i>Beta</i>
Multiple charges at arraignment	.55*** (2.82)	.42	.47*** (3.70)	.33	.25** (2.08)	.21
Weapon used			-.36** (-2.48)	-.14		
Offender role					-.22 (-1.54)	-.10
Violent crime	.50** (2.32)	.13				
Bond amount	.00*** (4.95)	.30	.00*** (5.68)	.31	.00*** (2.74)	.19
Bond offered					.58*** (3.45)	.31
Released on recognizance					.73*** (3.56)	.29
Bond made			1.18*** (4.12)	.30		
Charges convicted on			.80*** (2.63)	.30		
Charges dropped			1.00*** (5.72)	.44		
Male victim					-.10 (-.77)	-.05
Male victim****	.27** (2.14)	.13				
AJ2	-.62*** (-2.58)	-.17				
ASA4	-.33* (-1.87)	-.11				
ASA6	-.26 (-1.30)	-.09				
ADA7	1.06*** (2.64)	.18				
ADA9	.64* (1.93)	.12				
ADA12	1.24*** (2.94)	.17				
BSA4			.58*** (2.64)	.15		
BDA6			-.32 (-1.51)	-.08		
CJ3					.37** (2.21)	.18
CDA1					-.42*** (-2.80)	-.24
Lambda	.18 (.34)		-1.22 (-2.30)		-.20 (-.72)	
Adjusted R-square	.41		.54		.21	

\*.05 < *p* < .10.

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

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

\*\*\*\* Missing data dummy variable.

TABLE 6  
PENALTY SEVERITY MODELS

Variable	County A		County B		County C	
	<i>B</i> ( <i>t</i> )	<i>Beta</i>	<i>B</i> ( <i>t</i> )	<i>Beta</i>	<i>B</i> ( <i>t</i> )	<i>Beta</i>
Prior convictions	.51*** (3.84)	.37	.38*** (3.67)	.20	.42*** (5.98)	.36
Multiple charges at arraignment			.29*** (3.01)	.18	.32*** (4.00)	.23
Offender role	.41** (2.31)	.16				
Age			-.01 (-1.40)	-.07		
Drug offense					-.32*** (-2.74)	-.14
Bond amount	.00*** (3.76)	.25	.00*** (3.97)	.21	.00*** (5.04)	.28
Released on recognizance					.35** (2.11)	.12
Bond made			1.29*** (5.31)	.29	.78*** (5.24)	.29
Charges convicted on	.40** (2.03)	.13	.79*** (3.36)	.26		
Method of conviction					1.07*** (3.00)	.15
Victim loss			.24 (1.62)	.09		
Regular defense attorney					-.32* (-1.83)	-.10
ASA5	-.43** (-2.12)	-.13				
ADA2	1.42*** (3.21)	.22				
ADA7	.41 (.93)	.06				
BJ1			.38** (2.11)	.37		
BSA2			-.62** (-2.56)	-.14		
BSA5			.45* (1.75)	.10		
BSA9			.58** (2.47)	.14		
CSA1					-.31*** (-2.90)	-.15
CDA4					-.41* (-.07)	-.09
Lambda	-.23 (-.61)		-.29 (-.77)		.21 (.88)	
Adjusted R-square	.30		.46		.51	

\*.05 < *p* < .10.

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

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

Those offenders who had committed violent crimes were more likely to receive severe conviction charges. The only significant personal factor was the use of a weapon. In County B, the lack of a weapon was associated with severe conviction charges (see Table 5).

In some cases, bond decisions are a predictor of conviction decisions. Bond amount was related positively to the charge severity in all three counties as expected. The weakest of the relationships was in County C. When bond was not offered in County C, the charge se-

verity was likely to be higher. In County C, those who were released on their own recognizance received less severe conviction charges.

Plea bargaining may be playing a major role in the conviction charge decisions. Note its differential use in each county (see Table 5). In County B, if offenders pled to the original charges, they received more severe conviction charges. When some of the charges were dropped in County B, the conviction severity charge was less.

At the conviction stage, all members of the courtroom work group may have an impact on the decisionmaking. The analysis showed that certain actors were associated with unique patterns for each county. One particular judge was associated with less severe conviction charges than the other four judges in County A. In County C, the decisions of one judge were associated with more severe conviction charges than the other two judges. There were no significantly different decisions by judges in County B.

There were also some unique decision patterns associated with state attorneys across the counties. In County A, one state attorney was associated with less severe conviction charges than the other five. In County B, one state attorney was associated with more severe conviction charges than the other eight. In County C, the decisions of none of the state attorneys stood out from the rest.

The decision patterns of defense attorneys were varied as well. In County A, three defense attorneys were associated with more severe conviction charges than the other nine. In County C, one defense attorney was associated with less severe conviction charges than the other three. County B did not show any unique decision patterns for defense attorneys.

The only missing data pattern indicated was in County A. The missing data associated with male victims was not random. Those cases in which missing data had been replaced were more likely to receive severe conviction charges.

### *Penalty Severity Models*

Of the legal factors that could be considered to determine sentences in Florida, prior

record was the only one used consistently in all three counties. The weakest relationship was in County B. Multiple charges at arraignment resulted in more severe sentences in County B and County C. Type of crime was significant only in County C. Drug offenses were associated with less severe sentences. Offender role was important only in County A. Those offenders who committed their crimes as part of a group were more likely to receive severe sentences (see Table 6).

Bond decisions were related to the sentencing process as well. The amount of the bond was a consistent factor in all three counties. Those released on their own recognizance in County C received less severe sentences. Offenders who did not make bond in County B and County C received more severe sentences.

Plea bargaining may be the most direct cause of differential patterns in sentencing. While not directly measurable with these data, the following patterns emerged. Offenders in County A and County B who were convicted on original charges were more likely to receive a severe sentence. The association was much stronger in County B than in County A. Offenders in County C who went to trial instead of pleading guilty received more severe sentences. Some researchers conclude that this might be the result of the jury trial penalty in which the courtroom work group penalizes the offender for not pleading guilty (Uhlman and Walker, 1980).

The impact of the various actors in the courtroom work group may be significant at the sentencing stage either through plea agreements between attorneys or judicial decisions. It may be assumed that some of the state attorneys involved in these agreements were responsible for differential sentencing of offenders. In County A, one state attorney was associated with less severe sanctions than the other prosecutors. In County B, one state attorney was associated with less severe sentences and two were associated with more severe sanctions than the rest of the state attorneys. One state attorney in County C was associated with less severe sentencing practices. These differences could be attributed to unwarranted disparity if these attorneys are not prosecuting crimes that generally result in more severe sentences.

Only one judge across all three counties was associated with differential sentencing patterns. In County B, one judge was associated with more severe sanctions than the rest of the judges in that county. This indicates a judge who probably exercises some unilateral decisions on his/her own regardless of any plea agreement.

Defense attorneys can play a complicated and significant role in the sentencing process although the data in this study do not detail the extent and nature of that role. In County A, one defense attorney was associated with more severe sentences than the rest of the defense attorneys. One defense attorney in County C was associated with less severe sentences than the others. Regular defense attorneys in County C were associated with more severe sentences, not less, as might be expected.

### *Significance of County Context*

To determine whether the results obtained for each dependent variable were the product of the county in which the processes occurred, a dummy variable equation representing county context was developed. The purpose was to determine whether the effects of the independent variables differ across counties.

Using a procedure described by Thomas (1983:261–62) and Wonnacott and Wonnacott (1970:68–75), a dummy variable was constructed for each county. The dummy variable was coded 0 for the other two counties and coded 1 for the county of interest. A regression was run on the entire data set to determine which variables were significant to the overall data set. A significance level of  $p < .20$  was used for inclusion. Interaction terms were constructed for each variable found to be significant in the separate county runs. These interactions were ranked according to how different a given independent variable's coefficients were across the three counties. This meant that the most different factor would be one in which only one county regression revealed that variable to be significant. The second most different would be variables found to be significant in two of the counties. Interactions also were tested for those variables found to be significant in all three counties to

see whether the coefficients were significantly different from each other. All variables significant to the models with a  $p$  value between .10 and .20 also were tested to determine whether these coefficients were radically different across the counties.

With this procedure, significant interactions indicate that the effect of the independent variable differs across county contexts. The most different variables were tested first in a step-by-step process, followed by the second most different. Variables were eliminated if they were not found significant. The results for each county are contained in Table 7.

In the arraignment charge severity model, the interaction term for marital status in County A was significant as was offender role in County C. These interactions indicate that arraignment charge severity is associated with being single in County A and being a solo offender in County C more than in the other county contexts.

In the conviction charge severity model, the only significant interactions were the County B interactions of charge reduction, weapon use, and charge dropping. All three were unique to County B. The charge reduction and charge dropping factors probably reveal a heavy reliance on plea bargaining practices in contrast to the other two counties. Plea bargaining seems to be the most plausible explanation even though it has been acknowledged that other forces, such as the judge, might be causing the charge reduction. The most that can be said, however, is that defendants convicted in County B are more likely to receive more severe charges when charges are not reduced or dropped than in the other two counties.

The penalty severity model produced three significant interactions in County B and one in County C. Making bond and age<sup>2</sup> of the defendant were unique factors in County B, but were not significant factors in any other county. This may indicate that these factors were unique to County B and not the result of chance. The amount of bond in County B was associated strongly with sentence decisionmaking so the finding that not making bond was likely to result in a more severe penalty could be based on the presumption of factual guilt

TABLE 7  
COUNTY CONTEXT REGRESSION

Variable	Arrestment Charge Severity		Conviction Charge Severity		Penalty Severity	
	B (t)	Beta	B (t)	Beta	B (t)	Beta
Prior convictions	.11*** (2.73)	.09	.06 (1.51)	.05	.42*** (8.31)	.30
Property crime	-1.41*** (-3.97)	-.77	-1.05*** (-2.60)	-.52		
Offender role	.33*** (3.47)	.14				
Marital status	-.02 (-.16)	-.01				
Age					-.00 (-.08)	-.00
Gender					-.32*** (-3.10)	-.11
Multiple charges at arraignment	.51*** (12.34)	.41	.53*** (9.90)	.39	.16* (1.69)	.10
Weapon used			-.14 (-1.08)	-.06		
Violent crime	-.70** (-1.99)	-.23	-.59 (-1.48)	-.18		
Personal crime	-1.00*** (-2.85)	-.43	-.98** (-2.45)	-.38		
Drug crime	-.74** (-2.17)	-.33	-.72* (-1.89)	-.30	.31** (2.57)	.12
Female victim	.33*** (4.01)	.14			.29*** (2.86)	.10
White victim	-.22 (-1.54)	-.05				
Victim loss	.62*** (6.71)	.33	.33*** (3.07)	.16	.44*** (4.32)	.19
Bond amount			.00*** (8.31)	.28	.00*** (7.30)	.25
Bond made			.44*** (4.07)	.14	.74*** (5.45)	.21
Released on recognizance					.14 (1.59)	.05
Charges convicted on			.50*** (4.37)	.22	.42*** (4.33)	.17
Charges dropped			.19 (1.45)	.08	.27** (2.37)	.11
Method of conviction					.38 (1.40)	.05
Private attorney					.19** (1.99)	.07
Victim race****			.27*** (3.39)	.12		
County B	-.72*** (-3.53)	-.38	-2.23*** (-6.96)	-.95	-.47 (-1.20)	-.20
County A	-1.18*** (-2.90)	-.60	.06 (.68)	.03	.02 (.17)	.01
County A x marital status	.32* (1.74)	.31				
County C x offender role	-.43*** (-2.69)	-.28				
County B x weapon used			-.28* (-1.64)	-.07		
County B x charges dropped			.61*** (3.59)	.25		

(continued)



TABLE 7 Continued

Variable	Arraignment Charge Severity		Conviction Charge Severity		Penalty Severity	
	<i>B (t)</i>	<i>Beta</i>	<i>B (t)</i>	<i>Beta</i>	<i>B (t)</i>	<i>Beta</i>
County B × charges convicted on			.80*** (4.44)	.70		
County C × multiple charges at arraignment					.34*** (2.59)	.16
County B × multiple charges at arraignment					.30** (2.28)	.15
County B × age					-.01* (-1.61)	-.18
County B × bond made					.47* (1.79)	.22
(Constant)	11.28		9.10		.70	
Adjusted R-square	.33		.45		.42	

\*.05 < *p* < .10.\*\*.01 < *p* < .05.\*\*\**p* < .01.

\*\*\*Missing data dummy variable.

discussed earlier and/or the stability of the offender (Suffet, 1966). The younger the defendant in County B, the more likely the defendant was to receive a higher penalty. This finding could indicate a bias toward younger offenders or be a characteristic of a population composed of a large number of young people.

The interactions for multiple charges at arraignment in County B and County C were both significant, indicating that the effect was different from one context to another. One explanation for this difference may be the heavy reliance on charge reductions and charge dropings in County B compared to the other two counties. Thus, multiple charges at arraignment may be part of the plea bargain process. While prosecutors in County C might not rely on plea bargaining to the same degree as those in County B, they could be using multiple charges as bargaining tools or they could be using multiple charges to indicate the seriousness of the crime or the culpability of the offender.

## CONCLUSION

This study presents another perspective in analyzing sentencing disparity. It indicates that sentencing may not be a process con-

trolled entirely or even primarily by state statutes or by judicial decisions. In the past, sentence disparity critics have focused their attention on judges as the source of what they perceive as gross unfairness. It is time to analyze the entire process that goes into determining a sentence, along with all the actors who may be involved in those processes.

Although this study does not measure the extent and nature of plea bargaining between defense and prosecuting attorneys, it may be assumed that this process is significant in many decisions in the judicial process. Decisions concerning original charges, whether to grant bail and, if so, the amount and conditions, the reduction or dropping of charges, sentence recommendations, and sentence decisions may be (and in many cases are) influenced strongly by plea bargaining. Even though judges do not have to honor those bargains, in many cases they do. Thus, it is possible, perhaps probable, that sentence assessments by judges reflect the significant influence of prosecutors and defense attorneys.

Little attention has been paid in the United States to the influence of prosecutorial discretion on the final outcome of a criminal case. This study suggests that much of the disparity may be originating in the earlier processing actions of bail or plea negotiation.

Consequently, sentencing reformers could direct their actions at other courtroom actors besides the judge in the effort to manage unwarranted discretion. In the Netherlands, for example, guidelines are directed at the prosecutor rather than the judge because policy makers understand the prosecutor has more power in outcome decisions (Gertz and Myers, 1990). Perhaps something similar to prosecutorial guidelines could be used in the American system.

The conclusion of this study's authors is that the courtroom process must be understood in terms of the total context in which decisions are made. To the extent that sentence disparity exists, it may not be eliminated (or for that matter reduced) by focusing attention solely on judicial decisionmaking. Sentence reformers must consider the impact of defense attorneys and prosecutors as well as judges in their analyses of alleged sentence disparity.

The results of this analysis demonstrate the importance of isolating county context in the measurement of sentence disparity. If the data from the three counties had been combined for analysis, the effects shown by the analysis of individual counties would have been lost. Since the analysis did produce indications of disparity, it is clear that isolating county context provides a method for understanding how courts make their decisions. The patterns that emerged from this analysis are the potential paths of routinization that have developed in these particular courts as they have attempted to determine who should receive more severe sentences. The patterns also allow for the separation of factors into warranted and unwarranted sources of disparity.

This analysis indicates that the following elements must be included in the proper measurement of sentence disparity. First, proper sentence disparity measurement must show how factors are used differentially from one context to another. This should suggest the extent of warranted and unwarranted disparity. Second, the measurement of sentence disparity must involve an analysis of how earlier processing decisions (bail decisions) may affect later conviction and sentencing decisions from one jurisdiction to another. Third, possible

plea bargaining patterns must be demonstrated within each context to show how such patterns result in particular routinized outcomes. Finally, the influence of courtroom actors, judges, prosecutors, and defense attorneys should be isolated by county.

Taking these elements into account in the measurement of sentence disparity will provide a more valid measure of sentence disparity. Knowing more about the nature of disparity will help reformers divide deviations into unwarranted and warranted departures. With this information, reform efforts, such as sentencing guidelines, will have a much better effect and might even be received better by those who use them.

Sentence disparity reformers would have even more of an impact with the knowledge that certain actors are responsible for some of the deviations. The knowledge of which actors are deviating and whether that deviation is warranted would be beneficial in actions directed at specific personnel. Such information could be used by the actors themselves to help them understand their own behavior in context and perhaps modify their own policies.

One final issue that should be considered in an analysis of sentence disparity is the impact that occurs when sentence discretion is removed from judges and parole boards. Determine sentences and mandatory minimums have resulted in swelling prison and jail populations to the point that most are overcrowded; many are under court orders to reduce their populations; and states are struggling to find ways to finance building and operating more penal facilities, while crime rates soar. Consequently, the information gained from the analysis of sentence disparity must be used cautiously and carefully in the development of court reform policies.

#### NOTES

1. Two offenders received penalties of a life sentence. The ages and the expected years of life left (United States Bureau of the Census, 1989:69) for these two offenders were utilized to compute the actual amount of time the offenders would probably serve.

2. Age of the defendant was not significant in the original regression because the significance level was  $p < .10$ .

It was included in this part of the analysis because of the larger significance level of .20. Originally, the beta was  $-.01$ ,  $t = -1.40$ , and Beta =  $-.07$  for the age variable.

## REFERENCES

- Barry, D., and Greer, A. (1981). Sentencing versus prosecutorial discretion: The application of a new disparity measure. *Journal of Research in Crime and Delinquency* 18:254-71.
- Blomberg, T. (1990a). Criminal justice reform and social control: Are we becoming a minimum security society? In *Essays in the sociology of social control*, ed. J. Lowman. Brookfield, VT: Avebury.
- Blomberg, T. Interview by Laura Myers. Tallahassee, Florida, 19 April 1990b.
- Buchner, D. (1979). Scale of sentence severity. *Journal of Criminal Law and Criminology* 70:182-87.
- Cardozo, B. (1921). *The nature of the judicial process*. New Haven, CT: Yale University Press.
- Clarke, S., and Koch, G. (1976). The influence of income and other factors on whether criminal defendants go to prison. *Law and Society Review* 11:57-92.
- Cole, G. (1970). The decision to prosecute. *Law and Society Review* 4:313-43.
- Durham, A. (1987). Justice in sentencing: The role of prior record of criminal involvement. *Journal of Criminal Law* 78:614-43.
- Easton, D. (1965). *A systems analysis of political life*. New York: John Wiley and Sons, Inc.
- Eisenstein, J., and Jacob, H. (1977). *Felony justice: An organizational analysis of criminal courts*. Boston: Little, Brown.
- Erickson, M., and Gibbs, J. (1979). On the perceived severity of legal penalties. *Journal of Criminal Law and Criminology* 70:102-16.
- Farrell, R., and Swigert, V. (1978). Prior offense record as self-fulfilling prophecy. *Law and Society Review* 12:437-53.
- Frank, J. (1949). *Courts on trial: Myth and reality in American justice*. New York: Princeton University Press.
- Frankel, M. E. (1973). *Criminal sentences: Law without order*. New York: Hill and Wang.
- Gertz, M., and Myers, L. (1990). Prosecutorial decision-making in the Netherlands: A research note. *Journal of Criminal Justice* 18:359-68.
- Gertz, M., and Price, A. (1985). Variables influencing sentencing severity: Intercourt differences in Connecticut. *Journal of Criminal Justice* 13:131-49.
- Gottfredson, M., and Gottfredson, D. (1988). *Decision making in criminal justice*. 2nd ed. New York: Plenum Press.
- Heckman, J. (1979). Sample selection bias as a specification error. *Econometrica* 47:153-61.
- Mileski, M. (1971). Courtroom encounters: An observation study of a lower criminal court. *Law and Society Review* 5:473-538.
- Myers, M., and Talarico, S. (1987). *The social contexts of criminal sentencing*. New York: Springer-Verlag.
- Nardulli, P., Eisenstein, J., and Flemming, R. (1988). *The tenor of justice: Criminal courts and the guilty plea process*. Urbana, IL: University of Illinois Press.
- Nardulli, P. (1979). Organizational analyses of criminal courts: An overview and some speculation. In *The study of criminal courts: Political perspectives*, ed. P. Nardulli. Cambridge, MA: Ballinger Publishing Company.
- Neubauer, D. W. (1988). *America's courts and the criminal justice system*. 3rd ed. Pacific Grove, CA: Brooks/Cole.
- Rheinstein, M. (1954). *Max Weber on law in economy and society*. Cambridge, MA: Harvard University Press.
- Sentencing Guidelines Commission. (1987). *Florida sentencing guidelines manual*. Tallahassee, FL: Author.
- Sudnow, D. (1965). Normal crimes: Sociological features of the penal code in a public defender office. *Social Problems* 12:254.
- Suffet, F. (1966). Bail setting: A study of courtroom interactions. *Crime and Delinquency* 12:318-27.
- Taylor, J., Stanley, T., Defflorio, B., and Seekamp, L. (1973). An analysis of defense counsel in the processing of felony defendants in Denver, Colorado. *Denver Law Journal* 50:9-44.
- Terry, W. C. (1989). The U.S. sentencing guidelines and police officer discretion. In *The U.S. sentencing guidelines: Implications for criminal justice*, ed. D. Champion. New York: Praeger.
- Thomas, J. (1983). *An introduction to statistical analysis for economists*. 2nd ed. London: Weidenfeld and Nicolson.
- Uhlman, T., and Walker, D. (1980). He takes some of my time, I take some of his: An analysis of judicial sentencing patterns in jury cases. *Law and Society Review* 14:333-47.
- United States Bureau of the Census. (1989). *Statistical abstracts of the United States*. 109th ed. Washington, DC: U.S. Government Printing Office.
- Van Dine, S., Dinitz, S., and Conrad, J. (1977). The incapacitation of the dangerous offender: A statistical experiment. *Journal of Research in Crime and Delinquency* 14:22-34.
- Wice, P. (1985). *Chaos in the courthouse: The inner workings of the urban criminal court*. New York: Praeger.
- Wonnacott, R., and Wonnacott, T. (1970). *Econometrics*. New York: John Wiley and Sons, Inc.
- Zatz, M. (1984). Race, ethnicity, and determinate sentencing. *Criminology* 22:147-71.

## CASES CITED

*Mistretta v. United States*, 488 U.S. 361 (1989).