

ENVIRONMENTAL CONSTRAINTS ON THE BEHAVIOR OF JUDGES: A REPRESENTATIONAL MODEL OF JUDICIAL DECISION MAKING

JAMES L. GIBSON*

In recent years there has been substantial concern over the issue of whether the judiciary is a representative institution. Most research on the matter suggests that judges are to some degree sensitive to public opinion, but confusion exists over the process through which the public affects the courts. This research is designed to reduce the level of confusion.

Taking advantage of the quasi-experimental research design afforded by the "circuit" system of court organization used by the Iowa trial courts, this research investigates the "sharing" model of representation. In order to insure against spurious results, controls are introduced for three types of influences on sentencing decisions: defendant and case attributes, judge attributes and role orientations, and local system practices. Analysis of a path model consisting of measures of sentencing behavior, seriousness of crime in the local jurisdiction, and perceptions of crime seriousness reveals that one-sixth of the variance in sentences can be explained. However, substantial variation across judges in responsiveness to local norms is also discovered.

Further investigation of these data was undertaken to determine the factors that account for variation in the strength of environmental linkages. The analysis suggests that judges with greater contact with their constituencies, who have experienced electoral defeat, and who assume a "delegate" role orientation, are far more influenced by environmental factors.

The article concludes with some observations on how the process of recruitment and early career patterns affect representation.

I. INTRODUCTION

As research on the judicial process has accumulated in the last 20 years it has become apparent that American courts are political institutions and that the traditional view of courts as somehow distinctive and insulated from the remainder of the political system has little value for empirical or theoretical analysis. As a consequence, considerable effort has been directed to investigating the linkage between judicial decisions

* I would like to acknowledge with gratitude the assistance of Beverly B. Cook and Ronald D. Hedlund in this research. David Gow and Marjorie Mowlam also provided useful comments. Finally, the *Review's* editor and referees offered many useful suggestions.

and the sociopolitical attributes of the environments in which courts function. Some of these findings have led to the suggestion that courts act as representative institutions. Yet the implications of this research have been equivocal. Hindered by serious methodological problems, the conclusions drawn are often open to question. There has been only modest success in differentiating among several possible theories of court-environment linkage. If attributes of courts' environments do impinge upon judicial decisions, we still do not know how or why. Without this evidence, conclusions about the representativeness of judicial institutions are premature.

This article investigates linkages between criminal trial courts in Iowa and the sociopolitical attributes of their environments. The analysis begins with an effort to control for several variables that can lead to the observation of spurious environment-court relationships. These controls make it possible to determine rigorously the degree to which judges' decisions are congruent with the character of the local (county) environments in which they are made. The data suggest variation in the responsiveness of individual judges to environmental cues, and the next stage in the analysis investigates the impact of several conditional variables. Different linkage processes are evaluated, a new model is proposed, and implications of the findings for theories of judicial representation are considered.

II. PROCESSES OF REPRESENTATION

Extant Research

Empirical research has shown that significant variation exists in the decisions made by courts functioning within different jurisdictions, despite similarities in court structure, statutes, and other "legal" factors. For example, federal court sentences for a given offense are significantly different in different parts of the country (Harries, 1974; Richardson and Vines, 1970). State criminal courts exhibit similar variability (Jacob and Vines, 1971), as do state supreme courts (Atkins, 1976). Intra-state variations have also been observed (Jacob, 1973; Neubauer, 1972).

Two questions arise from these findings: Is inter-jurisdiction variance systematically related to the characteristics of the jurisdiction? If so, by what *process* do the attributes of the environment affect decisions? In answer to the first question, considerable research does suggest that the

variance is systematic. While much of the evidence is from case studies involving only a few jurisdictions (e.g., Levin, 1972; Dolbeare, 1967; Friedman and Percival, 1976; Eisenstein and Jacob, 1977) corroboration from more systematic, comparative studies also exists. Vines (1964) observed a moderate correlation between the concentration of blacks in a district and court decisions in civil rights cases, while Markham (1972) and Cook (1973, 1977) were able to attribute some of the variance in sentences for draft evasion to district characteristics. Similarly, Kuklinski and Stanga (1979) report that California criminal courts were responsive in their sentencing decisions to the results of a marijuana referendum. State supreme court decisions also seem to be affected by environmental constraints (Canon and Jaros, 1970; Jaros and Canon, 1971; Atkins and Glick, 1976).¹

This research does not, however, tell us about the *process* which links courts to their environments. Are judges nothing more than black-robed representatives, responsive to the wishes of their “constituents”? I think not. But the limitations of research design in the studies do not permit differentiation between representative and nonrepresentative linkages. Consider, for instance, Cook’s finding that the sentences of federal district court judges varied systematically, although belatedly, with fluctuations of public opinion on the Vietnam War (Cook, 1977). Her data are entirely compatible with the following nonrepresentative process:

- (1) Judges base their sentencing decisions on their own attitudes and values (ignoring public opinion).
- (2) Their attitudes and values are not static, but rather are influenced by dynamic environmental factors (just as are the attitudes and values of the mass public).
- (3) Changes in the judges’ behavior reflect changes in their own attitudes (irrespective of public opinion).

Judges may change their attitudes less easily and more slowly than mass publics, and the factors causing change may be similar for judges and mass publics, but Cook’s data do not *require* interpretation within a representational framework (see also Kritzer, 1979; Cook, 1979). Correlations between attributes of the jurisdiction and court outputs cannot be taken as evidence of judicial “representation” without a research design that can control for other variables that, while related to

¹ Despite the potential relevance of research on the representativeness of the U.S. Supreme Court, little attention will be paid in this article to that literature. The basic problem with that research is that data limitations make it quite difficult to unravel the complex chain of causality. These limitations also exist at the trial court level, but it is the purpose of this article to demonstrate how they can be resolved or minimized. At the Supreme Court level, it is unclear that they can be resolved or minimized.

public opinion, structure outputs through a completely different, nonrepresentational process. In order to eliminate alternative, nonrepresentational hypotheses, a variety of different types of data are necessary. These data are difficult, if not impossible (as in Cook's research), to collect. And the necessity of incorporating so many control variables into the model presents intractable statistical problems. It is not surprising that firm conclusions are elusive. Extant research has suffered seriously from lack of conceptual clarity and rigor. In order to avoid this pitfall the model of judicial representation that guides this research must be considered in greater detail.

Models of Representation

"Representation" is a multifaceted concept, even when considered within the familiar context of legislative institutions. When applied to the courts it is even more ambiguous. Some of this ambiguity stems from contradictory expectations of what judges ought to do. On one hand, judges are expected to be objective, "insulated," nonpartisan, and apolitical. Their job is to resolve disputes on the basis of internally generated and highly constrained legal criteria, criteria which certainly do not include majority or public opinion. If "representation" in the judicial context means that public preferences are assigned a nonzero weight in the decisional calculus, there is little basis for expecting that judges act in a representative fashion.

However, the norm that courts should be oblivious to public opinion creates an obvious strain within societies that purport to be "democratic." How can control over public policy be maintained if judges are to act "independently" of politics? Who judges the judges? The predominant solution to this problem of judicial accountability is to allow the expression of majority satisfaction with judges through the electoral process. In 22 states partisan elections are used to select judges; only Delaware, Massachusetts, and New Hampshire uniformly deny the mass public any role in the selection of trial court judges. While elections may or may not be a device to allow citizens to effectively evaluate the technical competence of their judges, judicial elections are a concession to the expectation of majority control over judicial policy making. At the same time, however, it is widely accepted that judges must be independent of political control. Resolving the tension between a

responsive, accountable judiciary and the norm of judicial independence is a dilemma of no mean proportions.

The tension between accountability and judicial independence complicates the task of modeling the processes of judicial representation. Of course judges are not expected to submit individual cases to some mass “jury,” but more subtle forms of representation are possible. In fact, five different theoretical models of representation have been identified: (1) the rational-activist model; (2) the political parties model; (3) the pressure group model; (4) the sharing model; and (5) the role-playing model (Luttbeg, 1974). Each of the first three models “. . . hinges on the ability of the public or groups of the public monitoring the representatives’ behavior and using elections to reward and penalize them” (Luttbeg, 1974: 6). They are thus “coercive,” demand-input models. Yet, the evidence that members of the mass public are incapable of performing the “monitoring” function is overwhelming (see for instance Wahlke, 1971). If judges act representatively, it is unlikely that they do so through any of these three processes.

The other two models cannot be dismissed so lightly. Judges could quite easily behave representatively in the “sharing” sense. This style of representation requires only that: (1) governmental decision makers hold values which are congruent with the modal values of their constituents; and (2) the decision makers make decisions congruent with these values. This style of representation can occur even in the absence of any conscious effort to represent (and is most likely the kind of representation observed in the appointed federal judiciary).

“Sharing” is a passive form of representation and may be difficult to distinguish from nonrepresentative behavior. The central empirical question—whether there is congruence between the values of the representatives and the constituents—presents the insoluble problem of specifying the value domain in which congruence is to be assessed. Sharing is also problematic when representatives are not initially selected by the constituents (e.g., Missouri plan systems) and when representatives serve multiple, diverse constituencies (e.g., circuit systems). Indeed, the passive and perhaps unintentional representation created by “sharing” makes this akin to representation by coincidence, and is thus only a minimal standard by which the representativeness of institutions can be assessed.

The "role-playing" model depicts a far more active style of representation. In this model the personal attitudes and values of the decision makers are of less importance; decision makers, acting out of a sense of obligation, try to express their constituents' preferences in their decisions, even if the preferences conflict with the representatives' own values and attitudes. Decisions are made through a two-step process: (1) representatives attempt to identify the preferences of the constituents, and (2) they predicate their decisions on constituent preferences. The "role-playing" model does not rely on coincidental congruence, but depends instead on motivations to maintain an active, continuous linkage to the people of the jurisdiction.

It is unlikely that judges make decisions in individual cases by seeking out the preferences of members of the community served by the court. However, it is quite plausible that judges' decisions are guided by more general, and more diffuse, values of a community. Determination of what constitutes pornography or obscenity is an obvious example. But this is not the only type of case in which judges might welcome community cues for their decisions. Sentencing decisions in so-called "victimless" crime cases seem equally susceptible to the influence of community standards. It is even possible that more general sentencing standards are influenced by community norms. Community reaction may influence sentences when the community is plagued by a high incidence of a particular type of crime. Judges who rely on their perceptions of local community standards ("norms," "values," "opinion," etc.) in making decisions are behaving as representatives in the role playing sense.

No known empirical evidence supports the rational-activist, political parties, and pressure group models. There are some data suggesting that judges may act "representatively" in the sense of sharing characteristics with their constituents, but the difficulties inherent in testing this model empirically leave great areas of uncertainty. There is also no evidence that judges engage in "role playing" as defined above; no extant research has investigated this type of linkage between courts and their environments. The research reported here makes such an effort.

III. RESEARCH DESIGN AND MEASUREMENT

The Research Setting

The district courts in Iowa are the trial courts of general jurisdiction. All criminal charges handled by these courts are either felonies or indictable misdemeanors. In noncriminal matters, the district courts try most major civil actions. The trial courts are organized into eight judicial districts. Each district includes several counties, and each judge in the district decides cases in each of the counties. District judges are selected by a Missouri plan procedure. This research focuses upon the three southeastern districts, which include 25 of the 99 counties in Iowa.

The Iowa district courts are well suited for an investigation of the environmental influences on court behavior. Like nearly three-quarters of the state trial court systems in the U.S., Iowa has a true circuit court system in which the judges travel from county to county to hear cases. The circuit style of organization presents a natural quasi-experimental research design: that is, the judges are making decisions within *varying* environmental contexts²; with proper controls, inter-county variance in behavior can be attributed directly to environmental factors.³ Thus, this research does not merely analyze variation across judges, each sitting in different jurisdictions, but also compares variation *by* judges *across* jurisdictions.

Policy Outputs: Sentencing Behavior

While trial court judges make a variety of policy decisions that are subject to environmental influences, this research

² Some indication of the extent of diversity among these 25 counties is given by several census variables. The county populations range from 8,200 to 163,200; urbanization ranges from 0 percent to 88.5 percent; population growth varies from -11.6 percent to 34.4 percent (1960 to 1970); the percentage of the population employed in manufacturing varies from 7.7 percent to 36.1 percent; and median income ranges from \$6,000 to \$11,000. While the variation in these variables is obviously less than nation-wide variation, sufficient diversity exists to allow analysis.

³ There is little question that the "environment" of the district court is best conceived of as the county. The county is a very significant geographical environment for the courts because, organizationally, each district is divided into a number of county district courts, each with its own administrative staff (court clerks, etc.). When reorganization schemes for the trial courts are proposed or adopted the county is never split. Further, in the 25 county areas on which this study is based, no major city or its suburbs crosses county lines. The county is also an especially significant social and political entity in rural Iowa. In many counties there is a county newspaper. In most urban areas the city is roughly synonymous with the county. For these reasons the county is the appropriate focus, in both rural and urban Iowa, for assessing the impact of the environment on court outputs.

focuses on sentencing policies. The legal options available to sentencing judges are extremely broad, ranging from deferred or suspended sentences, to fines, probation, incarceration in county jails, and ultimately to incarceration in prison. Because sentencing decisions are discretionary and have consequences well beyond the instant case, they represent an important type of judicial policy making.

Sentence decisions represent only one of the many policy decisions trial court judges make. Decisions on bail, pretrial motions, motions at trial, and opinions in civil cases are also important instances of judicial policy making. Ideally it would be useful to examine the impact of environmental constraints on all of these decisions, but complete decisional data were not available from court records. Nevertheless, there is little reason to believe that sentencing decisions represent an aberrant class of decisions.⁴ There may exist a narrow class of technical legal decisions which are immune to environmental influences (just as there are no doubt countless decisions within other institutions which are also immune), but these decisions are probably not the major policy decisions. Sentencing also represents the policy on which the public is most likely to have opinions.

A measure of sentence severity has been created from information in criminal case files. The universe of cases analyzed includes all cases initiated in 1972 and 1973, and concluded by the end of 1974. The data were collected from criminal case files stored at each of the county courthouses. In 22 of the counties, all cases were selected. In the three remaining counties, the three most populous in the selected districts, random sampling was employed. These procedures resulted in a sample of 5,350 cases. Convictions resulted in 2,715 cases, 51 percent of the total. Since this study focuses on sentencing, dismissals or acquittals were excluded from the analysis.

On its face, sentence severity is easy to measure quantitatively, but in reality the difficulties are considerable. Three characteristics are highly desirable in any measure of

⁴ In terms of decisions made by the criminal justice system, sentence severity is only a single indicator of a more general punitiveness dimension of system outputs. That is, when average sentence severity, average amount of bail, percent unable to make bail, and average time between arrest and trial are factor analyzed (using the county as the unit of analysis), a single punitiveness dimension emerges, with approximately equal factor loadings for each of the items (Gibson, 1978b). This suggests that various policy decisions stem from a single factor, at the system level, and that the findings reported here would vary little across different policy decisions.

sentence severity: (1) it should measure severity at least at the ordinal level; (2) it should consist of a single scale incorporating all the different penalties in sentences; and (3) its scale should be equally applicable to sentences from crimes of widely varying seriousness. With one exception, a scale for measuring sentence severity first proposed by the Administrative Office of the U.S. Courts, and later applied by Cook (1973) and others (Tiffany *et al.*, 1975; Gibson, 1978a) to sentences in federal criminal cases, satisfies these criteria. The scale is an ordinal measure based on (1) the length of probation, (2) the length of incarceration, (3) the amount of fine, and (4) whether the sentence was suspended or whether a deferred sentence was imposed.

The Problem of Control Variables

While this research is mainly concerned with the impact of the environment on sentencing decisions, it is essential that factors influencing court policy outputs that are also related to characteristics of the environment be incorporated into the analysis as control variables. Without these controls, any observed relationship between the environment and sentencing decisions might be spurious. The problem, one not faced in research on collegial courts, stems from the fact that different judges are deciding different cases in different county courts. It is critical that at least three major types of variables be controlled.

(1) *Case/defendant attributes*: Inter-jurisdictional policy variance may be a function of inter-jurisdictional variance in the type of cases heard by the courts. Cases may differ because of “natural” differences in the criminal population in the district (independent of differences in arrest and/or charging practices—see number 3). For instance, drug law offenders in rural areas may be more likely to be “experimenters,” while their counterparts in urban areas are more likely to be habitual users. The difference in the “natural” attributes of the offenders may well account for inter-system variance in decision making.

Nine characteristics of the cases and defendants have been identified as potentially influencing sentencing decisions. These are: (1) the seriousness of the charge (based on the legislatively defined maximum sentence); (2) whether the defendant was released on bail; (3) the defendant’s plea; (4) whether the defendant’s counsel was privately retained; (5) the defendant’s sex; (6) whether there were multiple cases against

the defendant; (7) the number of previous misdemeanor convictions; (8) the number of previous felony convictions; and (9) the age of the defendant.⁵ The Pearson correlations between each of these variables and the Administrative Office severity scale are shown in Table 1.

Table 1. Case Characteristics and Sentence Severity

Case Characteristic	Bivariate Pearson Correlation	N	Partial Correlation Controlling for Charge Seriousness
Charge Seriousness	-.58	2570	----
Bail	-.41	1815	-.23
Plea	.24	2706	.21
Type of Counsel	.22	2730	.04
Defendant's Sex	-.05	2516	-.06
Multiple Cases	.12	2730	.05
Previous Misdemeanor Convictions	.15	564	.07
Previous Felony Convictions	.12	629	.08
Defendant's Age	.13	1347	-.01

Only two of the variables, charge seriousness and whether the defendant was released on bail, are even moderately associated with the sentence severity scores. The type of counsel retained by the defendant and the defendant's plea are weakly related to sentence severity. However, the seriousness of the charge is the only variable which has a significant *independent* impact on sentence severity. This is suggested by the fact that the relationships between the variables and sentence severity while controlling (through partial correlations) for the impact of charge seriousness are reduced to substantively insignificant levels. This implies that charge seriousness determines *both* sentence severity and, at an earlier stage, whether the defendant is released on bail prior to

⁵ The variables were coded as follows. Charge seriousness: rank order of the charged offense in terms of the legislatively prescribed maximum sentence (low-serious). Bail: 1-not released, 2-released. Plea: 1-guilty, 2-not guilty. Type of counsel: 0-privately retained, 1-public. Defendant's sex: 1-male, 2-female. Multiple cases: 0-no other cases, 1-some other cases. Previous misdemeanor convictions: number of convictions. Previous felony convictions: number of convictions. Defendant's age: year of birth.

Admittedly, these variables do not measure all relevant differences among cases. For instance, drug "experimenters" are not differentiated from those who are debilitated by drug use. If "type of user" is related to attributes of the environment, as it most likely is, then the model is misspecified. However, if the variety of mitigating and aggravating factors is related to the overall mean sentence for the county, then their effect is removed in the control for local legal culture (see below).

trial. Charge seriousness is, therefore, the only variable for which it is necessary to control.

The linear relationship between sentence severity and charge seriousness is fairly strong: a third of the variance in sentence severity can be explained by charge seriousness. However, the total impact of charge seriousness on severity is not linear. η^2 is .71, indicating that an additional one-third of the severity variance can be accounted for if the assumption of linearity is relaxed. Indeed, the null hypothesis that the variables are linearly related can be rejected at the .001 level. Apparently these judges do not react to the various crimes in the same way in which legislators react. More important for this analysis, the linear and nonlinear effect of this variable must be controlled. Converting the sentence severity scores to "Z" scores *within each of the values of the charge seriousness variable* is one way in which the impact of charge seriousness on sentence severity can be removed. This procedure measures the severity of each sentence only in relationship to crimes of equal seriousness. Placing all the sentences on a common metric (Z scores) makes the sentences comparable.⁶

(2) *Attitudes and values of criminal justice officials:* The attitudes and values of decision makers within the criminal justice system also influence their behavior. Because of bias in selection mechanisms (or a homogeneous population of lawyers within the jurisdiction), these attitudes may vary systematically across jurisdictions and, consequently, may spuriously account for cross-jurisdictional policy variation. Or, a correlation between community values and policy outputs may be spurious because it reflects the fact that judges selected are representative of the community. Of course, it is difficult for a single judge to represent the multiple counties in a district, but judges' values must nevertheless be controlled.

⁶ No problem is presented for the analysis if these characteristics have different impacts on different judges. The impact is a constant across counties (for each judge) and therefore would not contribute to inter-county variation.

A separate issue is whether this indicator of sentence severity is preferable to a simple "time-no time" variable. While the issue of incarceration may be of paramount importance to the defendant, this does not mean that other variations (e.g., number of years of incarceration, amount of fine, etc.) are of no importance. Indeed, the amount of measurement error in the dichotomy is enormous. Further, such an indicator is of little utility for measuring decisions in cases in which it is clear that incarceration will not be imposed (or vice versa). It is also unclear that "subjective severity" is the concept which should be measured, and, if so, whether the dichotomy is a useful measure of the concept. Further, the correlations shown in Table 1 differ little if the dichotomy is used as the dependent variable. These considerations, as well as the purely statistical limitations of dichotomies, have led me to the use of the continuous measure.

If attitudes completely determine sentencing, then no inter-county variation would be observed.

Judges' values do indeed have an impact on their sentencing behavior. The regression of the average standardized sentence severity score for the judges on their attitudes and role orientations (measured during interviews) explains 64 percent of the sentencing variance,⁷ confirming the expectation that values do indeed influence behavior. However, it remains to be considered how the impact of these factors can be controlled.

If judges relied exclusively on their attitudes and role orientations in making sentencing decisions, there would be no inter-county variation in policy outputs. Only variation in sentencing that deviates from a purely attitudinal decision should be considered in assessing the question of linkages. The problem is one of partitioning the cross-county variance into a county-specific component and a general, attitudinal component.

Such a partitioning is possible. The attitudinal component can be represented by the predicted sentencing score (\hat{Y}) from the regression analysis described in footnote 7. This \hat{Y} represents the total impact of attitudes on behavior: it is the judge's average sentence if no other confounding factors were involved. In order to remove all variance that can legitimately be attributed to the values of the judges, the \hat{Y} for each judge was subtracted from his mean sentence in each county. Cross-county variance in these deviation scores cannot be attributed to the attitudes and role orientations of the judges.

(3) *Policies and practices of pretrial decision makers:* Even if criminal populations and decision maker values are controlled, the discretion of criminal justice officials to divert cases from the system may result in significantly dissimilar populations of criminal court defendants. For instance, rural police, presumably less estranged from the population, may resolve disputes without official intervention, while urban police may routinely process all offenders. The pattern may also be precisely the opposite: urban courts, overloaded with cases, may exercise quite restrictive screening procedures. The

⁷ I interviewed 26 of the 27 judges who made the sentencing decisions in these cases. Using the judge as the unit of analysis, previous research (Gibson, 1978a) has demonstrated that attitudes and role orientations very strongly predict sentencing behavior. Sentence severity scores for these judges were regressed on five measures of their criminal justice attitudes and four measures of their political liberalism in interaction with a measure of their role orientations. The interactive equation was able to explain 64 percent of the variance in sentencing behavior.

policies and practices of the system structure the nature of the cases that go to the courts (cf. Wilson, 1968), and judges may sentence differently in different counties, not because of some interaction with mass publics, but rather because of these local system norms and practices. That is, inter-county variance may stem only from acquiescence on the part of the judges to local courthouse standards. While this may represent one mechanism of incorporating environmental factors into decision, it is certainly not representation in the “role-playing” sense.

The procedure by which the effect of the local legal culture is removed is not as straightforward as the procedure for controlling for judicial values. The problem is essentially one of theoretical multicollinearity: judges’ perceptions of the local (noncourt) environment are related to organizational norms to the extent that the norms of the organization reflect the attributes of the community.⁸ To remove all of the variance attributable (spuriously and not spuriously) would bias the findings in that some variance due to the local environment would be removed. Therefore, the objective is to remove that portion of the county means variance that is not related to judge perceptions or district attributes.

This control can be accomplished through a two-step procedure. First, the average sentence (irrespective of judge) in the county is assumed to represent the norms of the system.⁹ The county means are then regressed on the environmental attribute variables (see below), and residuals are created. These residuals represent for each county the organizational effect that is unrelated to the independent variables. The residuals are then subtracted from the corrected judge-county means, resulting in measures of the sentencing behavior of each judge for each county in which he decided more than four cases, corrected for the attitudes and role orientations of the judge and the organizational practices of the county courts. (Table 2 summarizes the steps in the construction of the measures.) Using this measure, a quite rigorous test of the degree to which judges are affected by different environmental circumstances can be conducted.

⁸ Previous analysis has demonstrated that community values are indeed related to organizational behavior (Gibson, 1978b).

⁹ There may be some doubt as to whether the average sentence in the county adequately measures the norms of the local court system. As indicated in footnote 4, sentence severity is related to other measures of the punitiveness of court outputs. In addition, however, average sentence severity at the county level is strongly related to system plea bargaining practices (Gibson, 1978b). It is not clear how a more suitable summary measure could be constructed.

Table 2. Summary of Methods of Controlling Extraneous Variables

Equation	Unit of Analysis	Effect
$Z_{ij} = (\bar{X}_{ij} - \bar{X}_{.j})/S_j$	case	Removes effect of case/defendant attributes from sentence severity score
$\bar{Y}_{.i} = f(\text{attitudes, role orientations})$	judge	Calculates attitude/role influence on judge sentencing mean
$\bar{U}_{k\ell} = (\bar{Z}_{k\ell} - \bar{Y}_{.i})$	judge-county	Removes effect of attitude/role attributes from judge-county mean
$\bar{W}_{k\ell} = f(\text{county attributes, perceptions of attributes})$	judge-county	Calculates variance in county mean due to attributes/perceptions
$(\bar{Z}_{k.} - W_{k\ell})$	judge-county	Calculates variance in county mean due exclusively to legal culture
$\bar{V}_{k\ell} = \bar{U}_{k\ell} - (\bar{Z}_{k.} - \bar{W}_{k\ell})$	judge-county	Removes effect of legal culture from judge-county mean

SYMBOLS: $\bar{X}_{.j}$ = Mean unstandardized sentence severity score for cases in charge seriousness class j.
 S_j = Standard deviation of unstandardized sentence severity scores for charge seriousness class j.
 X_{ij} = Unstandardized sentence severity score for case i in charge seriousness class j.
 Z_{ij} = Standardized sentence severity score for case i in charge seriousness class j.
 $\bar{Y}_{.i}$ = predicted mean standardized sentence severity score for judge ℓ .
 $\bar{Z}_{k\ell}$ = mean standardized sentence severity score for county k, judge ℓ .
 $\bar{U}_{k\ell}$ = deviation of judge ℓ in county k from attitude/role predicted score.
 $\bar{W}_{k\ell}$ = predicted mean standardized sentence severity score for judge ℓ , county k.
 $\bar{Z}_{k.}$ = mean standardized sentence severity score for county k.
 $\bar{V}_{k\ell}$ = deviation of judge ℓ , in county k from attitude/role/county legal culture predicted score.

Unit of Analysis

A final clarification must be made regarding the unit of analysis for this study. The proper unit of analysis is neither the county nor the judge but rather the "judge-county." This is necessary because each judge serves multiple counties (i.e., in a circuit system each judge sits in each of the counties within the circuit). Similarly, each county is represented by more than a single judge. In legislative studies based on single-member districts, the unit of analysis is the legislator-constituency; but, of course, each constituency has only one representative, and each representative serves only one constituency. With 26 judges, 25 counties, and essentially four circuits, there is a maximum of 160 units. The strategy adopted is to compute an adjusted mean standardized sentence severity score for each of the judge-county units; but to insure that there is at least a modicum of stability in these means (i.e., that the means are not seriously affected by other extraneous variables), it was decided that judge-county units in which fewer than five cases were sentenced would be excluded. This results in a total of 116 judge-county units.¹⁰

IV. INTER-COUNTY DIFFERENCES

The first question to be considered is whether judges behave differently in different jurisdictions. One indicator of the variability in a judge's behavior is the standard deviation of the distribution of adjusted county sentence means. If a judge's sentences were the same in each of the counties, then

¹⁰ While the circuit style of court organization presents a useful, natural quasi-experiment, it also creates some difficult statistical problems. Foremost among these is the lack of statistical independence of the (judge-county) units. Independence is of course a necessary assumption for the calculation of significance tests. But significance tests are not appropriate with these data for several other reasons (e.g., the cases, judges, and courts represent the population of the three districts, or a nonrandom sample of the districts in a nonrandomly selected state for a nonrandomly selected time period). Therefore statistical significance is not reported for the analyses.

A related problem created by the research design is that the ordinary least squares analysis is afflicted by heteroskedasticity and consequently that weighted least squares might be a more appropriate statistical model. However, it is not clear that heteroskedasticity is actually a problem in these data. Applying Gorringer's simple test for homoskedasticity (see Johnston, 1972: 219) results in Spearman coefficients of -.01 and -.07 for the two independent variables and leads to the conclusion that the problem is of little consequence for the substantive conclusions. Therefore, the analysis reported below relies on OLS methods.

the standard deviation (across counties) would be zero—that is, no inter-county differences would be apparent.¹¹

The standard deviations reveal considerable variability. The smallest standard deviation is .06, indicating very great similarity in sentences in different counties for the judge, while the largest is .68. The average standard deviation for the 24 judges is .30 (with a standard deviation of the distribution of standard deviations of .16). This reflects a great deal more variation within judges across counties than is found across judges irrespective of county ($s = .12$) or across counties irrespective of judges ($s = .19$). While the manipulations of the data preclude substantive illustrations of the differences, it is obvious that the behavior of some judges differs sharply across jurisdictions.

It does appear that there is sufficient variability across jurisdictions to hypothesize that decisions made in different counties reflect, at least in part, the character of the particular counties. Further, it is clear that judges react differently to the differences in the stimuli presented in each of the counties; some judges are virtually insensitive to county attributes, whereas other judges are extremely sensitive. The question of the representativeness of the courts must therefore be treated as a question of the representativeness of judges. Consequently, the analysis will now turn to an examination of several of the factors that may account for the observed differences in the behavior of these judges.

V. A SIMPLE CAUSAL MODEL OF ENVIRONMENTAL INFLUENCES

These judges vary in their responses to the stimuli presented in the different counties, but inter-county differences are not the result of the types of cases heard, local legal practices, or the values of the judges. What then does account for the variation?

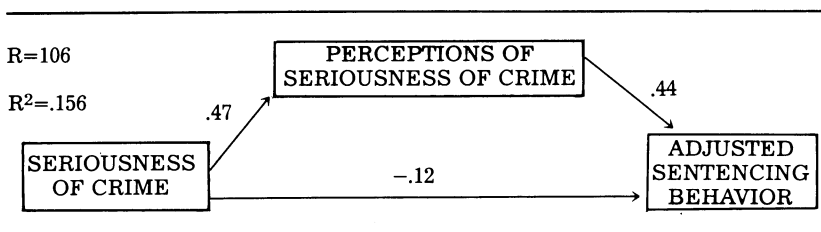
It can be hypothesized that the judges are responding to their perceptions of the nonlegal attributes of the counties—more specifically, to the concern over crime in a particular county. Popular concern over crime is assumed to be related to

¹¹ Because of the nature of the adjustments to the dependent variable, tests of statistical significance are impossible. The adjustments necessary to control extraneous variables were made on central tendency measures aggregated to different units as dictated by theoretical concerns (see Table 2). Because of these procedures, no within-county standard deviations are associated with the means. This, of course, makes inferential statistics inappropriate.

the actual crime rate in the county: where the crime rate is high, concern is thought to be high. High concern is postulated to produce preferences for more severe sentences. Therefore, judges' perceptions of the seriousness of the crime problem in the county are expected to be related to their sentencing behavior.

Judges may be sensitive to this particular characteristic of the counties in which they sit, but detailed information about local norms is often quite difficult to gather (especially for a nonresident circuit judge). Judges, like academic researchers, must rely on surrogate measures of local sentiment. From the local crime rate, a bit of information that is quite accessible to criminal court judges, inferences are made about the opinions of the residents of the county. Higher incidences of crime are associated with expectations of more severe sentences. In relying on their perceptions of the seriousness of the county's crime problem, judges may believe that they are responding to the views of local constituents. Thus, it is expected that differences in the crime rates in the county affect the behavior of the judges. However, in order for such an impact to exist, the judges must first perceive the differences and then act upon them. This suggests a model of interjurisdictional variation that incorporates three variables: the seriousness of crime; perceptions of the seriousness of crime; and sentencing behavior.¹² Given the data at hand, this model can be estimated empirically.

Figure 1. Environmental Impact on Sentencing Behavior



The results of a path analysis of the three-variable causal model are shown in Figure 1. The data indicate that the incidence of crime does indeed influence judges' decisions, accounting for approximately one-sixth of the variance in sentencing behavior. The actual amount of crime in the

¹² The amount of crime in each county is taken from the Uniform Crime Reports. Perceptions of "the seriousness of the crime problem" in each of the counties were measured by asking the judges to rank order the counties.

counties is moderately related to the judges' perceptions of the seriousness of the crime problem, and these perceptions are moderately related to sentencing behavior. Where crime is perceived to be more serious, it is more serious, and more severe sentences are given.

The analysis suggests that these judges are responsive to the environment in which they work. When the (perceived) character of the environment changes, so does sentencing behavior. The causal model provides a partial description of the process linking judges to their environment, but not a complete understanding. The important question of *why* judges are responsive to environmental inputs remains. Not only may judges respond for different reasons, but also they vary in the degree to which they respond. It is therefore necessary to explore the conditions under which the linkage between the environment and decisions is facilitated, treating the strength of the linkage as a variable.

VI. FACILITATORS OF JUDICIAL REPRESENTATION

What accounts for variation in the strength of linkages to the local environment? Two factors are essential to understanding the process. The first is knowledge of the character of the county. Since these judges make decisions in several jurisdictions, judges may vary in their degree of familiarity with the county. Where familiarity is high the linkages are expected to be strong.

The second factor concerns the reasons for incorporating county characteristics into sentencing decisions. Since these judges are elected public officials, they may harbor normative conceptions (role orientations) about the proper role of environmental factors in their decision making. That is, some judges may be motivated toward judicial "representation" because of their beliefs about the proper relationship between public opinion and the courts. Judges who perceive public opinion as a legitimate and proper source of influence on their sentences ("delegates") are expected to be more strongly influenced by the attributes of the environment than those who perceive such decisional criteria as illegitimate ("trustees").

A second motivational factor may also influence the process. Because these judges must face the electorate (through retention elections), they may be motivated by electoral forces to try to reflect county opinion in their sentencing decisions. Thus, one would expect that judges more fearful of being rejected by the people of the county would be

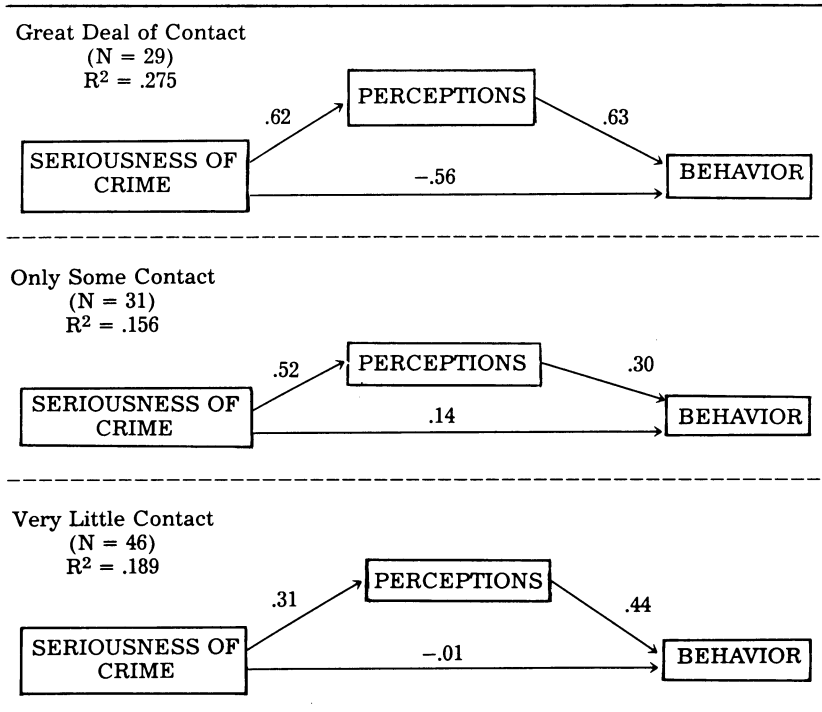
more sensitive to county characteristics. Each of these conditional variables will be considered in more detail.

Familiarity with the County

The more familiar judges are with the respective counties, the more likely that they will have intelligible perceptions and, therefore, that those perceptions will influence behavior. For instance, Giles and Walker (1975) have demonstrated that familiarity and contact significantly affected school desegregation decisions of federal judges. The effect of this variable may be especially significant because these judges serve multiple constituencies and because there is a great deal of variation in the amount of contact the judges have with each of the counties.

To measure familiarity, the judges were asked about the degree of contact ("a great deal," "only some," or "very little") they have had with the people in each of the counties in their districts. The three-variable path model was then analyzed for each of the three degrees of contact, and Figure 2 shows the result of the analysis.

Figure 2. Environmental Impact on Sentencing Behavior: Familiarity as a Conditional Variable



The hypothesis is strongly confirmed with regard to the accuracy of perceptions. The path coefficient between the amount of crime in the county and perceptions for those counties with which the judges had "a great deal of contact" is .62; for the counties with which there was "only some contact" the coefficient is .52; and for the counties with "very little contact" the coefficient is .31. Increased contact very clearly increases the accuracy of perceptions.

The data are also moderately supportive of the second half of the hypothesis. Perceptions are most influential when contact is high ($p = .63$). However, it is difficult to account for the somewhat stronger relationship between perceptions and behavior among low-contact judges as compared to moderate-contact judges. While increased familiarity with the residents of the county does tend to increase the accuracy of perceptions, accuracy is not a necessary condition for influence. Nevertheless, greater familiarity does seem to facilitate representative behavior.

Motivations: Representational Role Orientations

Perhaps the critical conditional variables are more motivational in nature. That is, judges who are motivated to incorporate environmental attributes into their decisions may be able to overcome the obstacles imposed by lack of familiarity with the jurisdiction. The motivations of the judges should therefore be considered as prime candidates to explain the linkage between the environment and sentencing.

Two sources of motivation toward representative behavior have been recognized traditionally: fear and obligation. The fear which might motivate a judge is, of course, fear of electoral defeat. The obligation of the judge can best be thought of in terms of representational role orientations. Each of these variables is worthy of further consideration.

A major source of motivations to represent is the belief that it is properly a part of one's position to act representatively. That is, the representational role orientation of the judge may be a critical conditional variable. While role orientations have not been particularly useful predictors of behavior in previous research,¹³ one particular conception of

¹³ Much of the research on role orientations is more concerned with the development of typologies than with the prediction of behavior (e.g., Vines, 1969; Flango *et al.*, 1975; Unga and Baas, 1972; and Galanter *et al.*, 1979). Investigations showing only weak correlations between role orientations and behavior include Becker, 1966; Vines, 1969; and Howard, 1977.

role orientations has been shown to be extremely useful (Gibson, 1978a). According to this notion the basic function of decision making role orientations is to specify what variables can legitimately be allowed to influence decision making and, in case of conflict, what priorities to assign to different decision making criteria. Judges' role orientations should not affect the substance of their behavior directly; on the contrary, to the extent that role orientations affect judges' behavior it is probable that they determine the procedures (criteria), not the substance, of decision making. In order to demonstrate why this is the case the reconceptualization of decision making role orientations should first be explicated.

Role orientations reflect judges' beliefs about the criteria which are legitimately a part of decision making. It is the *process* which is the object of these orientations, reflecting perhaps the strong emphasis on procedure in the American legal system. For example, equality before the law is an ideal with the highest priority. It exhorts judges (and others) to ignore attributes of inequality (e.g., socioeconomic status) and render decisions only on the basis of variables which can be applied equally to the rich and poor alike (e.g., did the defendant rob the bank or didn't he?). Similarly, the presumption of innocence in criminal cases supports the expectation that *pretrial* decisions will be unaffected by the assumed guilt or innocence of the defendant. But judges may disagree about the legitimacy of certain variables, the more so where decisions are highly discretionary, and this results in different styles of incorporating such factors into a judge's decisional calculus. Role orientations should therefore facilitate predicting the *degree of influence* of environmental factors on sentencing decisions.

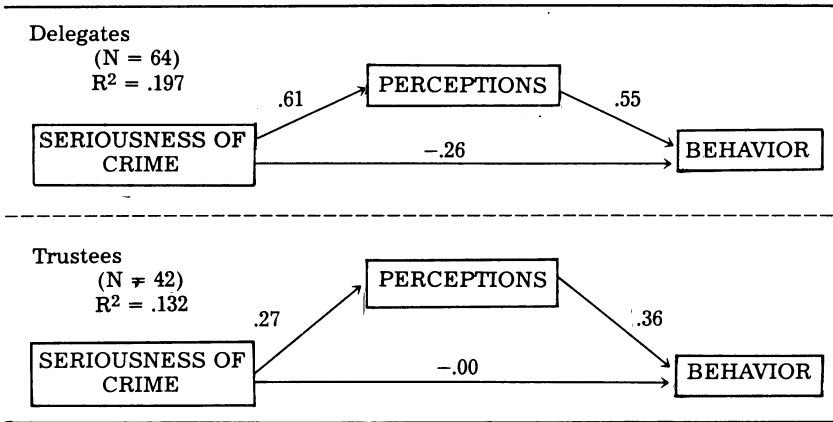
The measure of representational role orientations used in this study indicates the degree to which the judge views public opinion as an appropriate criterion of decision making and is derived from a factor analysis of the responses to three items:

- 1) "Judges should be totally uninfluenced by public opinion."
- 2) "The people are the ultimate source of law and their opinions on issues litigated in the courts should be given great weight."
- 3) "How influential do you think public opinion should be in sentencing defendants found guilty in criminal courts?"

The responses to the first two items were recorded using Likert response sets, while the third item employed a five-point response set, ranging from "extremely influential" to "uninfluential." Factor scores from the single factor which emerged from the principal components factor analysis are used as the measure of representational role orientations. In

order to determine the effect of role orientations on representative behavior, the measure has been dichotomized to form two groups. In admittedly loose terms these groups will be designated "delegates" and "trustees."¹⁴ A "delegate" role orientation is hypothesized to be associated with accuracy in perceptions of the seriousness of crime and a relatively strong relationship between perceptions and behavior.

Figure 3: Environmental Impact on Sentencing Behavior: Representational Role Orientation as a Conditional Variable



The effect of representational role orientations as a conditional variable is very strong indeed (see Figure 3). The relationship between the amount of crime and perceptions for delegates is .61; for trustees it is .27. The difference in the influence of the perceptions on behavior is also great: for delegates the path coefficient is .55; for trustees it is .36. Thus the hypothesis is strongly supported: the judges' representational role orientations do appear to perform the function of legitimizing the use of environmental inputs as criteria for decision making.

One further piece of evidence also supports the strong intervening effect of role orientations. The judges were asked about "pressures to give severe sentences" in the different counties. While only eight of the 26 judges admitted to such pressures, these eight are very much more accurate in their

¹⁴ The intermediate category "politico" has been ignored in the construction of the representational role orientation measure. "Politicos," rather than having a clear theoretical interpretation, are usually those whose open-ended responses cannot be classified. It makes little sense to create a "politico" category from the continuous measure of role orientations.

perceptions of crime in the counties (.79 compared to .30 for those who felt no pressure). However, there is little difference in the degree of influence of perceptions on behavior (.45 *versus* .46). Interestingly, seven of the eight judges perceiving pressure are “delegates.” This seems to suggest that sentencing pressure is perceived *only by those predisposed to be receptive to environmental pressure*. It is probably not that these judges are inundated with “demands” from the counties (indeed, even legislators can hardly be thought of as demand processors; see Wahlke, 1971), but rather that the delegates are actively seeking out cues from the environment. Judicial representation then is a process in which some judges are “creating” demands by searching for decisional criteria. This explanation is particularly appealing because judicial representation no longer is contingent upon highly informed, knowledgeable, active mass publics (which apparently do not exist in general, and certainly do not exist in reference to the judiciary). Rather it is the motivation of the representative that is the key to the process.¹⁵

Motivations: Electoral Sanctions

Elected officials may be motivated toward incorporating environmental factors into their decisions by non-normative factors. In particular, fear of being removed from office may

¹⁵ The finding that role orientations strongly intervene between constituency opinion and representative behavior is at odds with some findings in legislative research. Hedlund and Friesema (1972) found that trustee legislators, not delegates, were more likely to accurately perceive constituency opinion. On the other hand, Jones (1973) provided some support for the theory in his study of Texas state legislators. Trustees were found to rely much more heavily on their own values than did delegates. However, delegates did not rely more heavily on their perceptions of constituency opinion, as was expected.

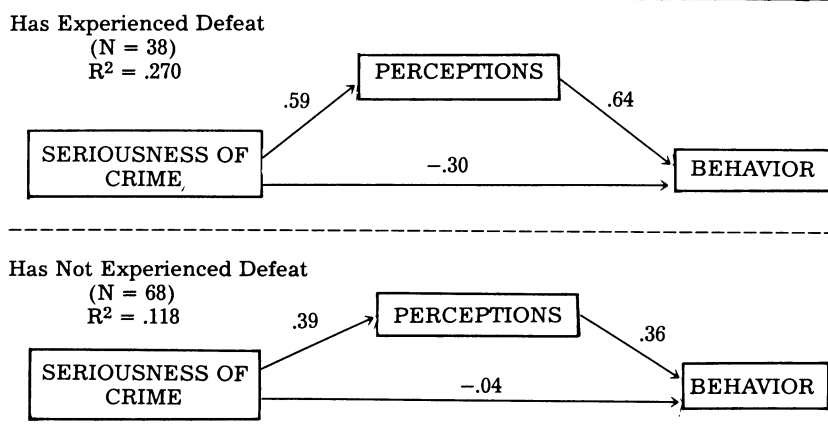
Why are judges' role orientations more significant than legislators' role orientations? It is possible that occupants of judicial positions are subject to more clearly defined, and possibly more restrictive, role expectations than are legislators (cf. McMurray and Parsons, 1965). Formal role expectations, as codified for instance in the Canons of Judicial Ethics, are certainly more constraining on judges than on legislators. Socialization to judicial roles is frequently more formal and explicit (Cook, 1971; Carp and Wheeler, 1972). There may also be greater intra-institutional consensus on role expectations for judges than for legislators, especially if recent analyses of intra-legislative norms are generalizable (Asher, 1973; Herbert and McLemore, 1973). If there are greater role-related requirements for judges, it would not be surprising to find that role orientations are more salient attitudes for judges than for legislators and hence that they are more clearly relevant to role behavior. Generally, legislative studies have not been successful at using role orientations to predict legislative behavior, although judicial scholars have not been noticeably successful at using role orientations to predict legislative behavior, although judicial scholars have not been noticeably successful either. In general, the more salient the role orientation of the actor, the more role orientation will influence role behavior.

inspire officials to be sensitive to environmental inputs.¹⁶ It may therefore be fruitful to consider whether fear of electoral sanctions has any impact on these judges.

It is unlikely, however, that judicial elections, especially retention elections, often present any serious threats to judges (cf., Jacob, 1966; Watson and Downing, 1969), because elections for judgeships are notoriously noncompetitive. Judges are probably not sensitive to relatively minute variations across counties in electoral support. It seems then that electoral sanctions are of little relevance to judges.

While it would be objectively irrational for judges to be concerned about being defeated in a retention election, perceptions of reality are frequently colored by previous experiences. That is, subjective perceptions may be imperfectly related to objective reality. One experience that may influence perceptions is an experience with electoral defeat. Individuals who have been defeated at the polls have experienced the power of the electorate and may therefore be more sensitive to the possibility of, and consequences of, losing an election. If so, it can be hypothesized that judges who have previously experienced a defeat are more receptive to environmental influences than are judges who have not.

Figure 4. Environmental Impact on Sentencing Behavior:
Prior Electoral Defeat as a Conditional Variable



The hypothesis is strongly supported (see Figure 4). Not only does the accuracy of perceptions increase from .39 for judges who have never experienced defeat to .59 for judges with such experience, but the linkage between the perception

¹⁶ Legislative research on this question has generated conflicting findings. See, for instance, Miller (1970); Sullivan and Uslaner (1976).

and behavior is also very much stronger. The path coefficient between perceptions of county crime and sentencing increases from .36 to .64 for judges with a prior defeat. Apparently, once having been subjected to the wrath of the electorate considerably influences future behavior. Even in a Missouri Plan system, the strength of the electoral connection may be very strong indeed.

The electoral connection for judges, however, may not be precisely the same as that for legislators. Certainly, the objective level of threat of elections to judges is lower. Judges engage in few of the traditional legislative campaign activities, and their ties after elections to political parties and other partisan officeholders are weaker. Consequently, elections for judges may serve only a reinforcement function, reinforcing existing "political" predispositions but rarely changing "apolitical" predispositions, whereas for legislators elections reinforce the "political" but frequently change the "apolitical." If judicial elections were as threatening as legislative elections, "apolitical" judges would be forced to change in the same way as an "apolitical" legislator. Further, the reinforcement need not be very frequent because the aberrant nonretentions have such a disproportionate psychological impact. The interpretation, while not the only one possible, is compatible with the data at hand (cf. Kuklinski and Stanga, 1979).

That the propensity may exist among these judges is evidenced by the high percentage of judges who have held either political or political party positions prior to becoming a judge.¹⁷ Elections need only reinforce the attitudes inculcated through socialization in these political positions. Nevertheless, this is not a minor function, as evidenced by the fact that most federal judges (who are not accountable) assume trustee role orientations (Cook, 1973).

VII. CONCLUSIONS

The basic finding of this research is that there is a moderately strong "role-playing" linkage between judges' sentencing decisions and environmental attributes. Three

¹⁷ For instance, 58 percent of the 26 judges have held a political party office or run for a "political" public position; 35 percent have run for a "legal" (e.g., county attorney) public position; and only 8 percent (N=2) have held neither a political party nor a "political" or "legal" public position. Other research has also reported a high level of political activity on the part of judges prior to coming to the bench. See Sayre and Kaufman (1960) and Skogan (1971). This also raises the interesting question of the degree of similarity in the early career patterns and socialization experiences of trial judges and state legislators (especially lawyer legislators).

conditional variables significantly affect the strength of this linkage: increased contact with the constituency, fear of electoral sanction, and the role orientation of the judge. All substantially improve the accuracy of the judges' perceptions of the environment, as well as the degree to which behavior is guided by these perceptions. The linkage model is quite complex, however, and some further specification is needed.

In order to understand the linkage process, variability in the responsiveness of individual judges to environmental inputs must first be acknowledged. Styles of decision making differ, reflecting varying conceptions of "proper" behavior for judges. To some, judging is largely a technical activity, requiring legal competence but few political skills. Others recognize judging as inherently and intimately a part of the allocation of values by the political system. While a variety of factors affect the development of views toward judging, differences in the sources of socialization are no doubt critically important. Some judges enter politics to get a judgeship; others accept a judgeship as simply one additional step in their political careers. Different motivations and different experiences shape views of proper judicial behavior, and these conceptions have dramatic consequences for the individualized decision making process (cf. Levin, 1972).

The suggestion that judges may act like representatives should not obscure differences between representation by judges and representation by legislators. Legislators may experience less serious consequences from role deviation than judges, who are subject to more rigidly defined and more normative role expectations. Legislators are less concerned with normative expectations and more concerned with picking up reliable cues to help them anticipate and avoid electoral repercussions (Matthews and Stimson, 1975). Judges also seem to have more control over their response to environmental factors; it seems necessary for them to assume a more active role than legislators do in identifying constituency cues.

Some closing words of caution are in order. This research is exploratory in nature, and the data certainly require qualification in terms of generalizability. The circuit style of court organization in Iowa presents an ideal context for this kind of research (in fact most trial courts in the United States are organized by circuits). On the other hand, the research setting, while certainly not homogeneous, is less diverse than many other regions. Sentencing decisions, because of their salience to mass publics and the high degree of discretion

allowed by law, may be the most susceptible to influence from the local community. Nevertheless, the importance of this research question for a variety of theoretical perspectives (e.g., democratic theory, decision making theory, organization theory, etc.) makes it imperative that similar research be extended to other courts, environments, and decisions.

REFERENCES

- ASHER, Herbert B. (1973) "The Learning of Legislative Norms," 67 *American Political Science Review* 499.
- ATKINS, Burton M. (1976) "State Supreme Court Policy-Making: A Comparative Analysis of Judicial Outputs," paper delivered at the 1976 Annual Meeting of the Midwest Political Science Association, Chicago, IL.
- ATKINS, Burton M. and Henry R. GLICK (1976) "Environmental and Structural Variables as Determinants of Issues in State Courts of Last Resort," 20 *American Journal of Political Science* 97.
- BECKER, Theodore L. (1966) "A Survey Study of Hawaiian Judges: The Effect on Decisions of Judicial Role Variations," 60 *American Political Science Review* 677.
- CARP, Robert and Russell WHEELER (1972) "Sink or Swim: The Socialization of a Federal Judge," 21 *Journal of Public Law* 359.
- CANON, Bradley C. and Dean JAROS (1970) "External Variables, Institutional Structure and Dissent on State Supreme Courts," 3 *Polity* 175.
- COOK, Beverly B. (1979) "Judicial Policy: Change Over Time," 23 *American Journal of Political Science* 208.
- (1977) "Public Opinion and Federal Judicial Policy," 21 *American Journal of Political Science* 567.
- (1973) "Sentencing Behavior of Federal Judges: Draft Cases—1972," 42 *University of Cincinnati Law Review* 597.
- (1971) "The Socialization of New Federal Judges: Impact on District Court Business," 1971 *Washington University Law Quarterly* 253.
- DOLBEARE, Kenneth M. (1967) *Trial Courts in Urban Politics: State Court Policy Impact and Functions in a Local Political System*. New York: John Wiley.
- EISENSTEIN, James, and Herbert JACOB (1977) *Felony Justice: An Organizational Analysis of Criminal Courts*. Boston: Little, Brown.
- FLANGO, Victor E., Lettie McSpadden WENNER, and Manfred W. WENNER (1975) "The Concept of Judicial Role: A Methodological Note," 19 *American Journal of Political Science* 277.
- FRANKEL, Marvin E. (1973) *Criminal Sentences: Law Without Order*. New York: Hill and Wang.
- FRIEDMAN, Lawrence M. and Robert PERCIVAL (1976) "A Tale of Two Courts: Litigation in Alameda and San Benito Counties," 10 *Law and Society Review* 267.
- GALANTER, Marc, Frank S. PALEN, and John M. THOMAS (1979) "The Crusading Judge: Judicial Activism in Trial Courts," 52 *Southern California Law Review* 699.
- GIBSON, James L. (1978a) "Judges' Role Orientations, Attitudes, and Decisions: An Interactive Model," 72 *American Political Science Review* 911.
- (1978b) "Performance Indicators in the Court System," in Scott Greer, Ronald D. Hedlund, and James L. Gibson (eds.), *Accountability in Urban Society: Public Agencies Under Fire*. Beverly Hills: Sage.
- GILES, Micheal W. and Thomas G. WALKER (1975) "Judicial Policy-Making and Southern School Segregation," 37 *Journal of Politics* 917.
- HARRIES, Keith D. (1974) *The Geography of Crime and Justice*. New York: McGraw-Hill.
- HEBERT, F. Ted, and Lelan E. McLEMORE (1973) "Character and Structure of Legislative Norms: Operationalizing the Norm Concept in the Legislative Setting," 17 *American Journal of Political Science* 506.
- HEDLUND, Ronald D., and FRIESEMA, H. Paul (1972) "Representatives' Perceptions of Constituency Opinion," 34 *Journal of Politics* 730.
- HOWARD, J. Woodford, Jr. (1977) "Role Perceptions and Behavior in Three U.S. Courts of Appeals," 39 *Journal of Politics* 916.

- JACOB, Herbert (1966) "Judicial Insulation—Elections, Direct Participation and Public Attention to the Courts in Wisconsin," 13 *Wisconsin Law Review* 801.
- (1973) *Urban Justice: Law and Order in American Cities*. Englewood Cliffs: Prentice Hall.
- JACOB, Herbert and Kenneth N. VINES (1971) "State Courts," in Herbert Jacob and Kenneth N. Vines (eds.), *Politics in the American States* (2nd ed.). Boston: Little Brown.
- JAROS, Dean and Bradley C. CANON (1971) "Dissent on State Supreme Courts: The Differential Significance of Characteristics of Judges," 15 *Midwest Journal of Political Science* 322.
- JOHNSTON, John (1972) *Econometric Methods* (2nd ed.). New York: McGraw-Hill.
- JONES, Bryan D. (1973) "Competitiveness, Role Orientations, and Legislative Responsiveness," 35 *Journal of Politics* 924.
- KRITZER, Herbert M. (1979) "Federal Judges and Their Political Environments: The Influence of Public Opinion," 23 *American Journal of Political Science* 194.
- KUKLINSKI, James H. and John E. STANGA (1979) "Political Participation and Governmental Responsiveness: The Behavior of California Superior Courts," 73 *American Political Science Review* 1090.
- LEVIN, Martin A. (1972) "Urban Politics and Judicial Behavior," *Journal of Legal Studies* 193.
- LUTTBEG, Norman R. (1974) *Public Opinion and Public Policy: Models of Political Linkage* (rev. ed.). Homewood, IL: The Dorsey Press.
- McMURRAY, Carl D. and Malcolm B. PARSONS (1965) "Public Attitudes Toward the Representational Roles of Legislators and Judges," 9 *Midwest Journal of Political Science* 167.
- MARKHAM, Walter G. (1972) "Draft Offenders in the Federal Courts: A Search for the Social Correlates of Justice," Ph.D. Dissertation, University of Pennsylvania.
- MATTHEWS, Donald R. and STIMSON, James A. (1975) *Yeas and Nays: Normal Decision-Making in the U.S. House of Representatives*. New York: John Wiley.
- MILLER, Warren (1970) "Majority Rule and the Representative System of Government," in E. Allardt and Stein Rokkan (eds.), *Mass Politics*. New York: Free Press.
- NEUBAUER, David W. (1972) "Policy Outputs of Illinois Trial Courts: An Exploratory Examination," paper prepared delivered at the 1972 Annual Meeting of the American Political Science Association, Washington, D.C.
- RICHARDSON, Richard J., and Kenneth N. VINES (1970) *The Politics of Federal Courts*. Boston: Little, Brown.
- SAYRE, Wallace S. and Herbert KAUFMAN (1960) *Governing New York City*. New York: W. W. Norton.
- SKOGAN, Wesley G. (1971) "Party and Constituency in Political Recruitment: The Case of the Judiciary in Cook County, Illinois," Ph.D. Dissertation, Northwestern University.
- SULLIVAN, John L., and Eric M. USLANER (1976) "Congressional Behavior and Electoral Marginality: Some Considerations Based Upon Spatial Models of Electoral Competition," paper delivered at the 1976 Annual Meeting of the Midwest Political Science Association, Chicago, Illinois.
- TIFFANY, Lawrence P. Yakov AVIHAI, and Geoffrey W. PETERS (1975) "A Statistical Analysis of Sentencing in Federal Courts: Defendants Convicted After Trial, 1967-1968," 4 *The Journal of Legal Studies* 369.
- UNGS, Thomas D. and Larry R. BAAS (1972) "Judicial Role Perceptions: A Q-Technique Study of Ohio Judges," 6 *Law & Society Review* 343.
- VINES, Kenneth N. (1964) "Federal District Judges and Race Relations Cases in the South," 26 *Journal of Politics* 337.
- (1969) "The Judicial Role in the American States: An Exploration," in Joel Grossman and Joseph Tanenhaus (eds.), *Frontiers of Judicial Research*. New York: John Wiley.
- WAHLKE, John C. (1971) "Policy Demands and System Support: The Role of the Represented," 1 *British Journal of Political Science* 271.
- WATSON, Richard, and Rondal DOWNING (1969) *The Politics of the Bench and the Bar*. New York: John Wiley.
- WILSON, James Q. (1968) *Varieties of Police Behavior*. Cambridge: Harvard University Press.