

Individual and Contextual Determinants of Prison Sentence Lengths for Violent Offenders in Georgia

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Abstract

This study examined the impact of legal, demographic, and contextual variables on the determination of sentence lengths for violent felons who were sentenced to prison without any subsequent term of probation, from 1981 through 1989. Multiple linear regression analyses were conducted for all violent crimes and separately for four specific types of violent crime: murder and manslaughter, rape, aggravated assault, and robbery. Results indicated that legally relevant factors such as seriousness of the crime and number of conviction charges had the strongest influence on prison sentence lengths. The direction and strength of the effects of demographic variables on sentence lengths were consistent across most of the violent crimes: male, married, older, and better educated offenders received longer sentences than those without such characteristics.

With regard to contextual measures, findings indicated that the average sentence length imposed by a circuit was significantly and positively associated with sentence lengths of violent offenders. We also found that measures of case seriousness within each circuit were negatively associated with prison sentence lengths. For the most part, the remaining contextual variables such as court location, political voting pattern, caseload size and unemployment rate had no significant influence on sentence lengths.

Background

Between 1981 and 1989 the rate of violent crime in the nation increased by 11.7 percent (Maguire & Flanagan, 1992). In response to this increasing violence, several states, including Georgia, enacted policies that permitted greater use of incarceration and longer prison sentences for violent and repeat offenders (Langan, 1991). In addition, Georgia enacted parole guidelines, through which the Board of Pardons and Paroles considered offense seriousness, prior criminal justice experience, and social background factors when making release decisions. Research on criminal sentencing in other jurisdictions (discussed in the next section) has suggested that legal and non-legal factors such as crime seriousness, criminal records, gender, race, education and social class had significant effects on sentencing of offenders. Thus, in trying to understand how Superior Court judges in Georgia made their sentencing decisions in the 1980s, it is important to consider a variety of factors.

This report examined the influence of legally relevant, demographic, and contextual factors on prison sentence lengths for violent felons in Georgia from 1981 through 1989. Of particular concern to this research was whether contextual attributes of court circuits, such as caseload size, political voting pattern, and level of punitiveness influenced sentence severity. Further, we assessed whether legally relevant and social background characteristics influenced sentence lengths differently across rural/urban contexts.

I. Literature Review

Numerous studies have examined the influence of legal variables (e.g., crime severity, prior record) and extra-legal variables (e.g., race/ethnicity, gender, employment status) on sentencing decisions. Most recent research has indicated that the presence of a prior record and the seriousness of the current offense are the most influential variables affecting sentence severity. Once these variables are controlled for, the direct effect of race/ethnicity and social class on sentence severity often disappears. Recent research has also addressed the possibility that racial discrimination in sentencing is confined to less serious cases (Spohn & Cederblom, 1991) or to those cases in which the appropriate criminal punishment is less certain (Unnever & Hembroff, 1988; Walsh, 1991). In other words, in more serious cases, the

appropriate sentence is determined by the attributes of the case -- the seriousness of the crime and the seriousness of the defendant's prior record. In less serious cases, where appropriate sentences are not clearly indicated, judges may consider non-legal factors, such as the defendant's race, economic status, gender, or court context, in making sentencing decisions.

Relatively little attention has been paid to how the larger social and political context affects judges' sentencing decisions. Three studies (Austin, 1981; Hagan, 1977; Pope, 1976) reported that non-whites received harsher treatment in rural than urban courts, even after controlling for legally relevant variables. Differences in cultural values between urban and rural areas might explain the observed differences in sentencing, although there is little research on this issue. Another explanation relates to bureaucratization. Hagan (1977) found that urban districts in Canada were more bureaucratized (i.e., had higher caseloads and larger staffs and were hierarchical in organization) and were more likely to consider legal than non-legal factors in sentencing decisions than were rural districts. Rural districts, on the other hand, were considerably less bureaucratized and relied more heavily on non-legal factors in sentencing decisions. Similar results were found in Austin's (1981) study in Iowa and Pope's (1976) study in California.

More recently, Myers and Talarico (1987) examined the influence of court bureaucratization and court location on sentence outcomes using a stratified random sample of all felons who were sentenced to prison or probation in Georgia between 1976 and 1985. They grouped felony offenses into five categories -- common law violent (murder, manslaughter, attempted murder, attempted manslaughter, aggravated assault, rape, sodomy, other sexual assaults), robbery (armed, unarmed, and attempts), burglary, property theft and damage, and drug. Results indicated that judges in urban counties imposed shorter prison terms than did their rural counterparts. White offenders, regardless of court location, received shorter sentences than did non-white offenders. Both caseload size (the number of felony filings per judge) and court specialization (whether or not the court heard mainly felony cases) affected sentencing outcomes. As caseload size increased, the length of prison sentences decreased. Court specialization showed a similar pattern to that of caseload size, in that it varied inversely with prison sentence lengths.

Although the research of Myers and Talarico (1987) advanced our knowledge regarding the influence of community contextual variables and court bureaucratization on individual sentencing outcomes, it did not address the influence of political culture on sentencing decisions. Using a measure constructed from public opinion polls, Waltman and Bowers (1993) found that conservatism led to longer sentences for violent offenders but not for property offenders. This differential influence was attributed to the intensity to which citizens in conservative states favored lengthy prison sentences for those convicted of violent offenses.

II. The Current Study

Because prior research has failed to assess adequately the effects of various contextual measures on sentence severity, the present study focused on the influence of four major contextual variables: (1) the location of the court (urban or rural), (2) the political voting patterns of the jurisdiction (as an indicator of political culture), (3) the caseload size (as one indicator of bureaucratization), and (4) the punitiveness of the circuit. Prior studies revealed that rural courts were less legalistic in their decision making and that extra-legal factors such as race had significant effects on sentencing decisions in rural courts but not in urban courts. Therefore, it was important to evaluate how individual and contextual

variables affected sentencing outcomes across the two environments. In order to assess the impact of political context on sentencing, we created a measure of political voting pattern (percentage of citizens voting for the Republican candidate in presidential elections) for each of the state's 45 judicial circuits. Bureaucratization was conceptualized as the administration of legal cases through various court units following a routine direction. This concept was measured by the size of court caseload under the assumption that the greater the caseload, the higher the level of bureaucratization. In addition to court location, political voting pattern, and caseload size, our study included two measures, a surveillance index and an imprisonment rate, that assessed the degree of punitiveness of a circuit. The surveillance index measured the average sentence length given to offenders and the imprisonment rate measured the tendency of a circuit to use prison incarceration.

Other contextual measures examined in our study were the unemployment rate, average household income, crime rate, percentage of population growth over the preceding year, percentage of males in the population, and percentage of the population aged 15 to 24. These measures were included because they have been found in prior research to affect the imprisonment rate at the aggregate level. Most studies have reported that both the unemployment rate and the crime rate are positively related to prison incarceration rates, but mixed findings have been reported for average household income, percentage of population growth, percentage of males in the population, and percentage of the population aged 15 to 24. No study has analyzed how these contextual measures affect sentencing at the individual level.

III. Methodology

A. Data Source

Information on felons sentenced to prison or split sentenced (a prison term followed by probation) was obtained from the inmate file maintained by the Evaluation and Statistics Section of the Georgia Department of Corrections (GDC). The inmate file contained an admission record for each prisoner. If an inmate came to prison as a result of a probation or parole revocation, he/she would have multiple records for a given sentence. Because we were interested in the initial sentencing outcomes of inmates, only the initial sentencing information was examined, and all sentencing outcomes resulting from revocations were omitted from the data analyses.

B. Cases studied

Violent felons incarcerated in Georgia's prisons might have received either a straight or split sentence. Straight-sentenced prisoners were given prison sentences without probation. A split sentence would require a prisoner to serve a period of confinement followed by a period of probation. The length of imprisonment for each inmate was recorded in the GDC's data file, but no information was available regarding the probation term of those split-sentenced offenders. Because an unknown probation term of a split sentence may skew the sentence severity of an offender, split cases were not included in our analysis of prison sentence lengths¹. Our study included all felons who received straight prison sentences from 1981 through 1989 for the following 15 offenses: murder, manslaughter, attempted murder, rape, attempted rape, aggravated assault, attempted aggravated assault, aggravated battery, aggravated sodomy, aggravated assault against a police officer, aggravated battery against a police officer, armed robbery,

¹Examination of the split sentencing decision (prison followed by probation) and the in/out decision (decision to incarcerate or probate) could not be conducted because it was not possible to determine the sentencing status of probationers and the percentage of time served on probation. These two sentencing decisions will be examined at a later date contingent upon the availability of such data from the GDC.

attempted armed robbery, simple robbery, and attempted simple robbery. The nine-year period was used because of the availability of county and circuit-level data.

A total of 5897 prison records were available during the study period. Social and economic background information was missing for 1177 cases and thus, these cases were excluded from the analysis. The majority of the 4720 offenders whose records we studied were male (95.9%), non-white (69.3%), single (66.9%), between the ages of 15 and 26 (50.7%), and without a high school education (57.6%). They were unemployed (72.5%), earned income less than \$7500 per year (61.7%), and were sentenced in urban courts (62.9%). It should be noted that this is a profile of prison admissions, not of the incarcerated offender population held during the study period.

C. Variables

The variables used in the analysis are listed in Tables 1 and 2. They consisted of the 15 offense types described earlier, 10 offender/offense characteristics of individuals, and 14 contextual variables of circuits. Descriptions of these variables are discussed in the sections below.

GENDER	0 = Female; 1 = Male
RACE	0 = White; 1 = Nonwhite
MARITAL STATUS	0 = Single; 1 = Married
YEARS OF EDUCATION	Interval scale (1-13)
AGE AT SENTENCING	Interval scale (15-67)
EMPLOYMENT STATUS	0 = Employed; 1 = Employed
ECONOMIC STATUS	0 = Welfare or income < \$7,500; 1 = Income > \$7,500
TOTAL NUMBER OF SENTENCES FOR CONVICTED CHARGES	Interval scale (1-25)
SEVERITY - CRIMES RANKED BY THE MIDPOINT OF THE RANGE OF IMPRISONMENT IN YEARS STIPULATED IN THE CRIMINAL CODE	Ordinal scale (1 - 9)
WHETHER OR NOT A PRIOR GEORGIA PRISON INCARCERATION	0 = No; 1 = Yes

1. Offense and offender variables

Offense type, crime severity, and offender background variables such as gender, race, marital status, age, and educational level were included for all cases. The type of crime was effect-coded, with

simple robbery as the criterion category. Effect coding enables one to compare the sentence length difference between the mean of a crime category and the mean of all violent cases. If the mean difference is positive, it suggests that the mean sentence length for a specific type of violent offender is greater than the mean sentence length of all violent offenders. For instance, if convicted rapists received longer sentence lengths than did violent felons in general, the measure of the mean difference between these two groups would be positive.

Crime severity was defined on an ordinal scale from 1 to 9 based upon the midpoints of the range of imprisonment in years stipulated in the criminal code². There was also additional information on offenders' employment status and income level, prior Georgia prison incarceration record, and the number of sentences per conviction (an offender may receive more than one sentence if convicted of multiple crimes).

2. Contextual variables

Contextual variables and their sources included crimes known to the police by year by county (collected from Georgia's Department of Community Affairs). Political voting pattern was operationalized as the percentage of citizens who voted for the Republican candidate in presidential

Table 2
Contextual Variables

Circuit of Conviction	0 = Urban circuit; 1 = Rural circuit
Percentage of citizens who voted for the Republican candidate in presidential elections	
Surveillance index - circuit's mean sentence length	
Imprisonment rate - circuit's tendency to use imprisonment	
Number of criminal and civil cases filed per judge	
Total index crime rate per 1000 inhabitants	
Unemployment rate	
Average household income	
Population growth over the previous year	
Percentage of population who are male	
Percentage of population between ages 15-24	
Mean level of crime severity	
Mean number of sentences per conviction	
Mean level of prior incarcerations of inmates	

²Crime severity levels were ranked from least to most severe based upon the midpoint year of the range of imprisonment stipulated in the criminal code. Specifically ratings were as follows: 1 - attempted simple robbery and attempted aggravated assault; 2 - attempted armed robbery; 3 - aggravated assault, aggravated battery, and simple robbery; 4 - attempted rape; 5 - aggravated assault against a police officer; 6 - aggravated battery against a police officer; 7 - manslaughter; 8 - attempted murder, rape, and aggravated sodomy; and 9 - murder.

elections³ (obtained from the Georgia County Guide and Professor Charles Bullock of the University of Georgia). Two variables assessed the punitiveness of each circuit -- a surveillance index and an imprisonment rate. The surveillance index, the mean sentence length given to offenders straight or split sentenced to prison, was created by dividing the total sentence length by the number of violent felons for each circuit⁴. The imprisonment rate was used to measure an offender's likelihood of receiving prison incarceration in each circuit. This rate was the ratio of the number of violent felons sentenced to prison to the number of violent felonies known to the police in the prior year, the year interval being an approximation of the period between commission of an offense and sentencing for it.

In order to assess the independent effect of a circuit's punitiveness, it was important to control for the overall seriousness of the cases handled within each circuit. For example, a particular circuit might have employed greater use of incarceration (have a higher imprisonment rate) or imposed longer sentences (have a higher surveillance index) because the cases it handled were more serious than those handled by other circuits. Thus, the mean level of case seriousness for each circuit needed to be held constant. The following three aggregated measures of case seriousness were created to control for circuits' punitiveness levels. Mean level of crime severity was the average seriousness of crimes committed by those straight or split sentenced to prison in a circuit. Mean number of sentences was the average number of sentences per conviction for those split or straight sentenced to prison. Mean level of prior incarcerations was the average level of prior incarcerations for those straight or split sentenced to prison in a district.

Percentage of males, percentage of the population aged 15 to 24, unemployment rate, average household income, and population growth over the preceding year was supplied by Georgia's Department of Community Affairs.⁵ Caseload size, defined as the number of criminal and civil cases filed per judge, came from the Administrative Office of the Courts. Consistent with GDC practice, a circuit was classified as urban if it was located in a Statistical Metropolitan Area.⁶ In order to measure the social, political and judicial environment of each court, we aggregated county variables to the circuit level.

³In order to have a measure of political voting pattern for every year, the 1980 presidential election information served as our measures for 1981 and 1982; 1984 presidential election information served as our measures for 1983, 1984, 1985, 1986; and 1988 presidential election information served as our measures for 1987, 1988, 1989.

⁴We were concerned that the surveillance index, being an aggregation of individual sentence lengths, might be highly correlated with the sentence severity of individuals. To examine this possibility, we assessed the correlation between individual sentence lengths and circuits' surveillance indexes and found it was only .196. This small correlation suggested that the inclusion of the surveillance index in the equation is unlikely to introduce an artificial effect on the prediction of individual sentence lengths (Sprinthall, 1990, p. 208). Because we were also concerned that the life or death sentences given to convicted murders could inflate the punitive level of circuits, sentences of murder cases were not included in the calculation of circuits' mean sentence lengths.

⁵Percentage of blacks was not used in the equation because it was highly correlated with our measure of political voting pattern. The correlations were -.831 for the year of 1984 and -.841 for the year of 1988.

⁶In the GDC's coding guide, Bibb, Chatham, Clarke, Clayton, Cobb, DeKalb, Dougherty, Fulton, Floyd, Muscogee and Richmond counties were categorized as urban counties. Using this categorization, we classified the 11 circuits that had jurisdiction in these counties as urban courts. These included Atlanta, Augusta, Chattahoochee, Clayton, Cobb, Dougherty, Eastern, Macon, Rome, Stone Mountain and Western circuits.

The year variables were dummy coded to allow us to compare the difference of mean sentence lengths between a specific year and a reference year. We selected 1989, the most recent year in our data, as the reference year. This enabled us to compare the mean sentence length of prisoners in a previous year to those of the most recent year. If the measure of the mean difference is positive, it would suggest that the mean sentence length of a specific year is longer than that of 1989. These measures of mean differences were introduced to control for trend effects and for factors operating by year that were not included in the model. Such factors might include changes in sentencing policy, sentencing options available to judges, court litigation, or prison population capacity. Changes that occurred in a specific year may have had an impact on sentence lengths in a single year or over a long period of time. The creation of dummy variables allowed us to identify the specific year or trend effects.

3. Dependent variable

The total number of years each defendant was straight sentenced to prison was our dependent variable. For those inmates sentenced to life or to the death penalty, prison sentence lengths were equated to 45 years.

D. Analytical procedures

Correlation and regression techniques were the primary methods of data analysis. To diagnose the possibility of collinearity⁷ among variables, we computed correlation matrices for individual and contextual variables. The two largest correlations found in the analysis were -.660 (crime rate and circuit location) and .699 (crime rate and average household income). Because both correlations were smaller than the critical point of .80 (Berry and Feldman, 1985, p.43; Carmines and Zeller, 1979, p.51), collinearity should not be a problem in the analysis. Our diagnoses also showed that the two measures of circuit punitiveness and the three aggregate measures of case seriousness were not strongly correlated with the other contextual variables. Our analysis showed that these correlations were below .40. Hence, the inclusion of the aggregate measure of punitiveness in the multivariate analysis should not reduce the independent effects of other contextual variables.

Given the variability in seriousness across types of violent crime, we were interested in assessing the relative effect of individual and contextual variables on sentencing decisions for all violent crimes and then for four groupings: (1) murder, manslaughter, and attempted murder, (2) rape and attempted rape, (3) aggravated assault, attempted aggravated assault, aggravated sodomy, aggravated assault against a police officer, aggravated battery, and aggravated battery against a police officer, and (4) simple robbery, armed robbery, attempted simple robbery, and attempted armed robbery.

IV. RESULTS

Summarized findings from the analyses of individual and contextual determinants of prison sentence lengths are shown in Table 3 through Table 7. Each table displays results of the analysis for a specific type of crime. Only those factors found significant in determining prison sentence lengths are

⁷Collinearity is a condition of high correlation among the independent variables in a multiple regression equation. This situation may lead to underestimation of effects of independent variables on the dependent variable. For example, if crime rate and average household income are highly correlated, their effects on sentence lengths may be confounded. When both variables are included in the equation, the independent effect of one variable on sentence lengths would be underestimated. In our multiple regression analysis of sentence lengths, tolerance tests (Neter, Wasserman and Kutner, 1989, p.411) were conducted to explore the collinearity problem. These tests showed that the problem was minimal.

listed in the tables. Detailed results concerning the effects of all of the individual and contextual variables on prison sentence lengths can be found in the Appendix.

A. All violent crimes

Table 3 presents the results of the regression analyses of significant individual and contextual determinants of the length of prison sentence for all violent felons. As revealed in our analysis (please see the Appendix), types of crime accounted for most of the variation in individual prison sentence lengths. Murder and rape cases received longer sentences than did other violent cases on the average. Table 3 indicates that two additional legally relevant variables, total number of sentences per conviction and prior Georgia incarcerations, were related to the length of sentence. Offenders with prior Georgia prison incarcerations and those with greater numbers of sentences per conviction, compared to those without such characteristics, received longer prison sentences. Gender, marital status, education, age and employment status were related to prison sentence lengths. Specifically, offenders who were male, married, more educated, older, or unemployed received longer sentences.

Table 3 Significant Determinants of Prison Sentence Lengths All Violent Crimes	
Felons Convicted of Violent Crimes Received Longer Sentences if they:	
●	Were convicted of more serious crimes
●	Received more than one sentence
●	Had one or more prior incarcerations in Georgia
●	Had the following individual characteristics
	Male
	Married
	More educated
	Older
	Unemployed
●	Were sentenced in circuits with the following characteristics
	Longer average sentences
	Less serious cases
	Fewer average sentences per conviction

Few contextual variables significantly affected prison sentence lengths. A circuit's punitiveness, as measured by the surveillance index, increased correspondingly with the length of sentence, such that convicted felons sentenced in more punitive circuits received longer sentences. Two aggregate variables describing case seriousness of a circuit were negatively associated with sentence lengths. Results indicate that the length of prison sentence increased as the seriousness of the cases and the average number of sentences per conviction in a circuit decreased. Circuit location, political voting pattern, caseload size, and other contextual variables were not related to sentence lengths, nor was the year of sentencing.

B. Murder and manslaughter

Table 4 presents the significant results of the analysis of prison sentence lengths for those convicted of murder and manslaughter. Severity of homicide was ranked in the following order: murder, attempted murder, and manslaughter. We found crime severity had the largest single effect on sentence lengths, suggesting that the more severe the homicide, the longer the sentence length. The offender's total number of sentences per conviction also had a strong effect, such that those convicted of multiple crimes received longer sentences. Offenders who were male or more educated received longer sentences. It may be that homicides committed by offenders with higher education are more premeditated and planned, and for that reason, they were given longer sentence lengths than those less educated. The circuit's surveillance index (or the mean sentence length) was positively related to the length of sentence, indicating that convicted murderers sentenced in more punitive courts received longer sentences. The index crime rate and caseload size were negatively associated with sentence lengths, such that murderers in circuits with lower crime rates and smaller caseloads received longer sentences. The circuit's location, political voting pattern and economic indicators had no impact on sentence lengths. Two year effects were significant, indicating that sentences for homicides were shorter in 1981 and 1982 than in 1989.

Table 4
Significant Determinants of Prison Sentence Lengths
Homicides

Felons Convicted of Homicide Received Longer Sentences if they:

- Were convicted of more serious homicides
- Received more than one sentence
- Had the following individual characteristics
 - Male
 - More educated
- Were sentenced in circuits with the following characteristics
 - Longer average sentences
 - Lower index crime rates
 - Smaller caseloads
- Were sentenced in years other than 1981 and 1982

C. Rape

Results of the analysis for the significant determinants of sentence lengths for those convicted of rape are presented in Table 5. Two legal variables, the severity of the crime and total number of conviction charges, were related to the length of sentence, indicating that more serious rapes and rapists convicted of more crimes received longer sentences. No individual-level demographic and economic variables were related to sentence lengths. At the contextual level, the surveillance index was related to the sentence length, such that rapists sentenced in more punitive circuits received longer sentences. Court location, political voting pattern, caseload size, and seriousness of the cases in the circuit did not

influence sentence length, although the average number of sentences per conviction and the average level of prisoners' prior incarcerations in Georgia were negatively related to the sentence length. Year effects were not significant.

Table 5
Significant Determinants of Prison Sentence Lengths
Rape and Attempted Rape

Felons Convicted of Rape or Attempted Rape Received Longer Sentences if they:

- Were convicted of more serious rapes
- Received more than one sentence
- Were sentenced in circuits with the following characteristics
 - Longer average sentences
 - Fewer average sentences per conviction
 - Felons with fewer prior Georgia incarcerations

D. Aggravated assault

Table 6 presents the significant effects from the analysis of prison sentence lengths for those convicted of aggravated assault.

Table 6
Significant Determinants of Prison Sentence Lengths
Assault and Attempted Assault

Felons Convicted of Assault Received Longer Sentences if they:

- Were convicted of more serious assaults
- Received more than one sentence
- Had the following individual characteristics
 - Male
 - More educated
 - Older
- Were sentenced in circuits with the following characteristics
 - Longer average sentences
 - Less serious cases

Consistent with the findings previously presented, the two legally relevant variables -- severity of the crime and total number of conviction charges -- were related to sentence lengths. These results suggest that assailants convicted of more serious crimes or a greater number of crimes received longer sentences than did those having less serious charges and fewer convictions. Felons who were male, more educated, and older received longer sentences than did those without such attributes. Two contextual variables, the surveillance index and circuit's case seriousness, significantly influenced sentence lengths.

E. Robbery

Table 7 reports the significant determinants of sentence lengths for those convicted of robbery. All legal variables (crime severity, total number of conviction charges, and prior Georgia incarcerations) were related to the length of sentence. Convicted robbers who were male, married, and older received longer sentences than did those who were female, unmarried, and younger. The surveillance index was positively related to the length of sentence, such that robbers sentenced in more punitive courts received longer sentences. The three measures of a circuit's case seriousness (mean level of crime severity, mean number of sentences per conviction, and mean level of prior Georgia prison incarcerations) were negatively related to sentence lengths. This means that robbers who were convicted in circuits characterized by cases containing lower levels of crime severity, fewer numbers of sentences per conviction, and lower levels of prior prison incarcerations in Georgia received longer sentences. Court location, political voting pattern, caseload size, and economic indicators of court had no influence on sentence lengths. Three year effects, 1984, 1986, and 1987, were positive, suggesting that violent offenders sentenced in those years received longer sentences than did those sentenced in 1989. Further research needs to be conducted to investigate those factors that might contribute to these year effects.

Table 7
Significant Determinants of Prison Sentence Lengths
Robbery and Attempted Robbery

Felons Convicted of Robbery Received Longer Sentences if they:

- Were convicted of more serious robberies
- Received more than one sentence
- Had a prior incarceration in Georgia
- Had the following individual characteristics
 - Male
 - Married
 - Older
- Were sentenced in circuits with the following characteristics
 - Longer average sentences
 - Lower crime severity of the cases
 - Fewer average sentences per conviction
 - Felons with fewer prior Georgia incarcerations
- Were sentenced in 1984, 1986 and 1987

V. Discussion and Conclusion

Our analysis revealed that legal variables, such as crime severity and number of sentences per conviction, had the most impact on prison sentence lengths. However, even after controlling for legally relevant and contextual variables, demographic variables such as gender, marital status, age, and education level significantly influenced prison sentence lengths. Specifically, felons who were male, married, older, and more educated received longer sentences than did those without such attributes. Few contextual variables significantly affected the length of prison sentences. The surveillance index, a measure of punitiveness of a circuit, had a strong positive effect on prison sentence lengths for all types of violent crime. Measures of the seriousness of cases within a circuit (crime severity level and average number of sentences per conviction) were negatively associated with prison sentence length. For the most part, the remaining contextual variables, such as court location, political voting pattern, caseload size, and unemployment rate had no influence on the length of prison sentence. Few year effects were found to be significant. Murderers sentenced in the early 1980s received shorter sentences than did those sentenced in 1989, and robbers sentenced in the mid 1980s received longer sentences than did those sentenced in 1989.

Our findings that demographic variables retained a significant influence, even after controlling for legal and contextual variables, contradict findings of prior research which found that for more serious crimes, judges have less freedom to consider non-legal factors for their decisions in incarceration and the sentence length (Unnever & Hembroff, 1988; Walsh, 1991). Walsh's (1991) study, specifically, showed no significant racial effect on prison sentence lengths. Yet, we found that such demographic variables as gender, marital status, and age did influence sentence lengths. The findings suggest that judges considered both legally relevant and extra-legal variables when deciding on the appropriate length of prison sentence.

Consistent with prior research, we found the offender's race did not directly affect the length of sentence (Spohn, Gruhl & Welch, 1981). However, this does not preclude the possibility that race influenced earlier decision points in the criminal justice system not examined here, such as pre-trial release and type of counsel (Goldkamp, 1980; Spohn, Gruhl & Welch, 1981).

Results from the current study suggest that two contextual features of the court, the punitiveness of the circuit and the comparative level of seriousness of the cases in a circuit, influenced sentence lengths. Neither of these two contextual factors had been examined in previous research. Our findings indicated that the surveillance index, measured as the average sentence length imposed by a circuit, was positively related to sentence lengths across all types of violent crime. This suggests that there is some consistency in sentencing patterns within a circuit. Our finding that case seriousness in a circuit had a negative effect on sentence lengths was unexpected. We found that circuits with more serious cases were less likely to impose long prison sentences. One explanation for the unexpected relationship between the seriousness of a circuit's cases and individual prison sentence lengths may be that judges are comparing present cases to prior cases they have considered. Social judgment theory suggests that the order in which criminal cases are considered can affect judgments regarding the appropriate punishment (Pepitone & DiNubile, 1976). Specifically, the first case in a sequence acts as a reference or anchor to which subsequent cases are compared. If subsequent cases are more severe than the reference category, then the punishments recommended are more severe than if those same cases had followed an initial very serious crime. Hence, a sentencing decision in an individual case is impacted by the similarity or

dissimilarity of it to the cases preceding it, and this may well be operating in circuits with very serious crimes on the average.

In sum, it appears that prison sentence lengths imposed by judges are influenced not only by the offender's criminal history but also by certain demographic variables. Given the constitutional and political questions involved in using individual attributes in sentencing decisions, it is important that court officials be cognizant of the role that these factors may play in their decisions. Future research on sentencing decisions might look for those contextual factors that make the use of individual attributes more or less likely. In addition to examining the sentencing decision, it would also be important for future research to investigate whether and how these individual attributes, together with legal variables, affect the actual amount of time served.

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Appendix
Individual and contextual determinants of straight prison sentence lengths

Variable	<u>Violent Crime</u>	<u>Homicide</u>	<u>Rape</u>	<u>Aggravated Assault</u>	<u>Robbery</u>
	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>
Individual factors (crime types)					
MURDER	.849***	-	-	-	-
MANSLAUG	-.076**	-	-	-	-
ATMURDER	-.197***	-	-	-	-
RAPE	.103***	-	-	-	-
ATRAPE	-.026**	-	-	-	-
AGGASSLT	-.215***	-	-	-	-
ATAGGASS	-.013	-	-	-	-
SODOMY	-.001	-	-	-	-
ARMROB	-.119***	-	-	-	-
ATARMROB	-.051***	-	-	-	-
ATSIMROB	-.052***	-	-	-	-
SEVERITY	-	.952***	.152***	.274***	.272***
Individual (legal) factors					
SENTOT	.139***	.019**	.343***	.157***	.231***
PRIGAINC	.046***	.011	.073	-.015	.118***
Individual (demographic and economic) factors					
NW	-.008	-.007	-.054	-.020	.036
MALE	.025***	.026***	-	.066*	.048*
MARRIED	.027***	.002	.036	.046	.056**
EDU	.024**	.027***	.057	.085*	-.025
AGESEN	.039***	-.009	.002	.078*	.125***
SES	-.005	.002	.066	-.029	-.017
UNEMPL	.017*	-.007	.054	.042	.038
Contextual factors					
RURALCT	.011	-.015	-.063	.020	.059
VOTE	.001	-.014	-.011	.079	.057
SURV	.161***	.025*	.380***	.362***	.283***
IMPRATE	.012	-.001	.094	-.002	.014
CASEL	.001	-.017*	.036	.073	-.019
CRIMET	-.020	-.040*	-.104	-.103	.065
UNEMPR	-.010	.018	-.106	.007	.063
CAVGH	.028	.011	.021	.172	.051
PGROWTH	.010	.010	-.018	-.033	.006
MALEPCT	-.002	.011	-.085	.022	.004
PCT1524	-.004	-.011	.029	.001	-.008
MMSEVER	-.049***	-.006	-.087	-.107**	-.086***
MSENTOT	-.043***	-.007	-.133**	-.021	-.098***
MPRIINC	-.016	.011	-.108*	.037	-.053*
Year factors					
YYEAR81	-	-.028*	-	-	-
YYEAR82	-	-.033*	-	-	-
YYEAR84	-	-	-	-	.063*
YYEAR86	-	-	-	-	.055*
YYEAR87	-	-	-	-	.051*
(All other Betas for YYEAR81 to YYEAR88 were not significant)					
R square	.724	.929	.320	.388	.299
N	4720	1511	530	711	1968

* p ≤ .05 ** p ≤ .01 *** p ≤ .001

Appendix (continued)
Symbols, definitions and codings

<u>Variables</u>	<u>Codings</u>
<u>Crime types</u>	
MURDER - murder	
MANSLAUGH - manslaughter	
ATMURDER - attempted murder	
RAPE - rape	
ATRAPE - attempted rape	
AGGASSLT - aggravated assault	
ATAGGASS - attempted aggravated assault	
SODOMY - aggravated sodomy	
ARMROB - armed robbery	
ATARMROB - attempted armed robbery	
ATSIMROB - attempted simple robbery	
criticon variable in effect coding - simple robbery	
<u>Individual variables</u>	
NW - Race	0 White 1 Non-white
MALE - Gender	0 Female 1 Male
MARRIED - Marital status	0 Single 1 Married
EDU - Years of education	Interval scale (1-13)
AGESEN - Age at sentence	Interval scale (15 - 75)
SES - Economic status	0 Annual household income < \$7500 or on welfare 1 Annual household income > \$7500
UNEMPL - Employment status	0 Employed full or part time 1 Unemployed
SENTOT - Total number of sentences for convicted charges	Interval scale (1-25)
PRIGAINC - Prior Georgia incarceration	0 No prior incarceration 1 At least one prior incarceration
SEVERITY - crimes ranked by the midpoint of the range of imprisonment in years stipulated in the criminal code	Ordinal scale (1 - 9)
<u>Contextual variables</u> (All variables are in interval scale except RURALCT)	
RURALCT - Circuit of conviction	0 Urban circuit 1 Rural circuit
VOTE - Percent of citizens who voted for the Republican candidate in presidential elections	
SURV - Surveillance index, mean sentence length of a circuit	
IMPRATE - Imprisonment rate	
CASEL - Number of criminal and civil cases filed per judge	
CRIMET - Total index crime rate per 1000 inhabitants	
UNEMPR - Unemployment rate	
CAVGH - Average household income	
PGROWTH - Population growth over the previous year	
MALEPCT - Percent of males	
PCT1524 - Percent of population between ages 15-24	
MMSEVER - Mean level of crime severity of a circuit	
MPRIINC - Mean level of prior incarcerations of inmates of a circuit	
MSENTOT - Mean number of sentences per conviction of a circuit	