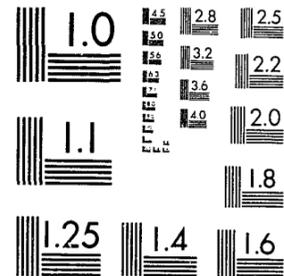


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Criminal Justice Data Analysis and Tracking Project

Final Report

for

Bureau of Justice Statistics

Grant Number: 82-BJ-CX-K022

Prepared by: Larry Bench  
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Salt Lake County  
Attorney's Office

92274

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## INTRODUCTION

From a historical perspective, criminal justice system management has occurred on an ad hoc basis with little or no respect exercised for the integration and intricacy of the various system components. Increasing pressures brought to bear on the American criminal justice system by sky rocketing criminal activity, dwindling financial resources and a perception by the American public that life and home were in jeopardy demanded a more diligent effort on the part of law enforcement officials to control crime.

The last two decades have seen the problem of crime approached from a number of different perspectives some more successful than others. A realization that has surfaced from these efforts is the need for meaningful data on which rational criminal justice system planning can be effectuated.

Data used to test the research hypotheses in this project came from a larger data set collected by the author. Information was collected on 6,632 defendants booked into the Salt Lake County Jail from October 1, 1980 thru March 31, 1981. Since a major portion of the data came from the pre-trial interview records, defendants were excluded from the sample if they were arrested for offenses that precluded a pre-trial "own recognizance" or "supervised" release decision. Defendants arrested for these charges were not eligible for certain pre-trial release options by court order and were, therefore, not interviewed by the Pre-Trial Service Staff. In specific, defendants were not eligible for pre-trial release if they were arrested for AWOL, immigration or city public intoxication charges.

The data employed encompass information pertaining to defendants who were arrested for all levels of offenses which included A, B, and C misdemeanors and first, second and third degree felonies. Specific offenses and punishment classifications are detailed in Appendix A. Ranges of possible

punishments by level of offense as specified by the Utah State Code are detailed in Appendix B. Items of information collected for each defendant are specified in Appendix C. Specific codes and ranges of values for each variable are specified in Appendix D.

The structure, content and comprehensive nature of the data base used for this project afforded a unique opportunity to conduct investigations on three crucial stages of the criminal justice system: arrest, prosecution and sentencing.

The first question addressed by this project focuses on the convictability of the defendant as a function of age and time on force of the arresting officer. The central hypotheses examined is that young inexperienced officers make arrests that are not as convictable as compared to arrests made by older experienced officers. While this hypotheses was not confirmed, results indicated that convictability is a function of offense severity, the particular judge hearing the case, the type of pre-trial release from jail and the number of days elapsed between the defendant's arrest and disposition. Factors were analyzed within the context of sociological and criminological perspectives including: arresting officer characteristics, labeling and conflict theory and organizational theory.

The second part of this project involved a comparison of characteristics of prosecuted vs. non-prosecuted cases. This topic was prompted by the vast expenditures allocated by the criminal justice system to the processing of cases that do not result in conviction of the defendant and are dismissed by the prosecutor. Defendants categorized into prosecuted and not prosecuted groups were compared on 42 factors and analyzed for statistical significance. Results indicated that defendants were significantly different on the following verification of information, jail population on day of arrest, retention

of attorney at time of booking, charge level, violent offense, use of weapon during crime, possession of telephone by defendant, type of defendant residence and type of pre-trial release from jail. Use of the values derived from this study indicated that 75% of the cases can be correctly classified into their respective prosecuted vs. non-prosecuted groups.

The third and final part of this project focused on the sentencing process. Analysis focused on two distinct sentencing options: amount of jail time and amount of fine. Various factors were analyzed in conjunction with the respective sentencing options. Results indicated that the amount of jail time a defendant is sentenced to is significantly influenced by severity of charge, time between arrest and disposition, prior arrests and specific sentencing judges.

Analysis conducted using the amount of fine the defendant was sentenced to indicated statistically significant effects for amount of bail assessed against the defendant, specific sentencing judges, violent offenses, charge severity and marital status. Concern over sentencing disparity is suggested by the significant effects on the respective dependent variables by the amount of time between arrest and disposition, amount of bail, specific sentencing judges, and marital status of the defendant.

No evidence was found that indicated the amount of jail time or fine imposed on the defendant as part of the sentencing process is racially, sexually or economically biased.

Results from the foregoing analyses were produced with the intent and hope of adding to an understanding of the workings of three crucial stages of the criminal justice system. Results for all three parts of this project indicate the need to address questions that were either raised by the various analyses or beyond the scope of this project.

To this extent, the findings, issues and questions identified in this report are offered as a contribution to criminal justice planning and efficient operation.

Chapter 1  
Convictability As A Function Of Arresting  
Officer Characteristics

INTRODUCTION

A necessary component of any comprehensive study of the American criminal justice system is the process of arrest. This component is crucial because an officer's decision to make an arrest subjects a defendant to the American criminal justice system and subsequently related dynamics consequential to the defendant's life experiences. For example, a study conducted by Schwartz and Skolnick investigated the social stigma of a prison sentence on employment opportunities. They concluded that "conviction constitutes a powerful form of 'status degradation' which continues to operate after the time when, according to the generalized theory of justice underlying punishment in our society, the individual's debt to society has been paid" (Schwartz and Skolnick, 1962:138). Guilty or innocent, once the decision to arrest is made, the defendant is required to participate in various successive stages of the criminal justice process (i.e. booking, pretrial release, posting bond, arraignment, preliminary hearing, trial, sentencing).

In addition, due to the austere financial conditions facing the country, the influx of defendants entering the system has caused concern over the costs associated with a rapidly expanding defendant population. Factors associated with a rising crime rate such as jail overcrowding, prosecutor workload, and court congestion underscore the need for accuracy and precision in deciding who is to be arrested. Clearly, the cost of inefficiency in the criminal justice system is staggering. The costs of processing an individual through each stage of the system varies in accordance with the type of offense and area of arrest. Due to the complexity of the criminal justice system, it is difficult to calculate the exact cost of inefficiency. The Joint Economic Committee of congress, however, estimated that approximately 22.7 billion was

used by the criminal justice system in 1976 to process defendants through various stages of the system ("That Costly White Collar Mob", The New York Times, January 2, 1977, Section 3, p. 15).

Theoretically, it is the job of a police officer to arrest an individual if there is probable cause that a crime has been committed by that person. Realistically, however, there are several options other than arrest that are available to a police officer. For instance, rather than make an arrest an officer may choose to issue a warning, make a referral to a social agency or ignore the incident altogether. All too frequently arrests are made that do not result in conviction. That is, arrests that do not result in convictions or result in acquittal, dismissal or a "no complaint" status can be regarded as "invalid arrests" since the accused is not convicted. Arrests made by officers that result in convictions, pleas of guilt or pleas of guilt to reduced charges can be regarded as "valid arrests" since the accused becomes a convicted offender.

If the discretionary process of arrest was free from error, only defendants whose cases resulted in conviction would be arrested. This model of absolute efficiency, however, is not realistically attainable due to such factors as broadness and inflexibility of criminal statutes, ambiguity and vagueness of laws, obsolete and outmoded laws, overcriminalization, financial constraints, public policy, bureaucratic structure and differences in personnel (Robin, 1980:62-63). But this is not to say that the arrest process cannot be better understood and, thereby, made to operate more efficiently than it currently does.

In view of the above considerations, research is conducted in this study to identify factors which influence the arrest-conviction process. In gen-

eral, it is hypothesized that certain characteristics influence the type of arrest made, which in turn affects the convictability of the defendant. More specifically, it is hypothesized that young officers with little work experience on the force are most likely to make arrests where the arrest charges are not fully convictable, while older officers with more experience make arrests that are more convictable. This hypothesis will be investigated by assessing the relative importance of "length of time on force" and age of arresting officer relative to the convictability of the arrest. The effects on convictability of the length of time on force and age of arresting officer will be evaluated in conjunction with variables that are seen as important to convictability in earlier sociological and criminological studies. As subsequently discussed these include (a) defendant's socio-demographic characteristics (as emphasized by the conflict/labeling approach); (b) organization characteristics of the criminal justice system (as specified by the organization approach); and (c) legal factors (as discussed by the legal perspective). A brief discussion of the perspectives evaluated follows.

#### Theoretical Perspectives and Empirical Evidence

##### Officer Characteristics

Traditionally, investigations of the arrest process have approached the subject by studying personality characteristics and attitudes of police officers. Several studies have investigated the hypothesis that people who become policemen have authoritative and prejudiced attitudes; e.g., Preiss and Ehrlich (1966), Niederhoffer (1966), Reid (1979). Other researchers have found contradictory evidence; e.g., McNamara (1967), Balch (1972). However, studies focusing on police attitudes and personality characteristics have

been criticized for being nonempirical and methodologically weak; e.g., Lefkowitz (1975) and Balch (1972).

Lacking in recognition as a formal sociological theory, the officer characteristics perspective maintains that convictability is a function of specific characteristics of the arresting officer. The specific hypothesis of this study is that the characteristics of age of arresting officer and length of time on force significantly influence convictability.

The rationale for this hypothesis is that, due to a maturation process, a change in judgment occurs in a police officer during the transition from a rookie to the time he becomes a "seasoned cop". It is theorized that the young police rookie begins his career with unrealistic understandings about his function.

Sykes argues that the subject of crime is one which many people dramatize into being intriguing and full of excitement and that because of this students are drawn to the study of crime with unrealistic notions. (Sykes, 1968:22-23).

Like the naive student approaching the study of crime, the young police rookie is drawn to this occupation with similar misconceptions about the realities of law enforcement. These are manifested in his tendency to make arrests that do not "stick" in court because they are made without sufficient understanding of the workings of the criminal justice system. This understanding includes, for instance, knowledge of: (a) what constitutes "sufficient evidence"; (b) what are necessary requirements for appropriate arrest practices (e.g., reading of rights); (c) the fit between offenders' illegal behaviors and pertinent crime classifications, and/or (d) the type of cases (e.g., domestic disputes) that, most properly, are settled outside of the justice system's domain.

Empirical treatments of the relationship between officer characteristics and convictability are rare. A study conducted in Washington, D.C. found that fewer than 10% of the police officers made more than 50% of the arrests that resulted in conviction (Reid, 1979). A study entitled "What Happens After Arrest" analyzed 14,865 adult arrests made by the District of Columbia's Metropolitan Police Department and presented for prosecution to the superior court division of the U.S. Attorney's Office in 1974. Data from the Prosecutor's Management Information System (PROMIS) was analyzed to determine if convictability was related to recovery of tangible evidence, the securing of witnesses and the amount of time that elapsed between the offense and the arrest.

The study also focused on differences in conviction rates among officers and the extent to which those differences were influenced by officer characteristics. The study found that "among the 4,505 sworn officers on the force in 1974, 2,418 (54%) made at least one arrest that year. Of those 2,418 officers, 747 (31%) did not make a single arrest that led to conviction. Especially striking is the fact that 368 officers (15% of the arresting officers) made over half of the arrests in 1974 that led to conviction.

With respect to the officer characteristics information included in the data set, the results indicated that none of the characteristics (age, sex, years on force, marital status, and officer residency in the District of Columbia) were strong predictors of an officer's ability to produce arrests that led to conviction. The only factor found to be associated with convictability was experience on force (Inslaw, 1981).

A follow-up study by Inslaw was designed to test the findings of the 1974 investigation using a cross-sectional design comprised of seven par-

ticipating jurisdictions--Cobb County, Georgia; Indianapolis, Indiana; Los Angeles County, California; Manhattan (New York County), New York; New Orleans, Louisiana; Salt Lake City, Utah; Washington, D.C.. Analysis from the second Inslaw study was based on PROMIS data taken from each area. Findings for the second study indicated that the effects of officer characteristics varied across geographical location. Experienced officers had lower conviction rates in Salt Lake City, but higher rates in Washington, D.C.. Work load (as measured by numbers of arrests, which tended to be heavier for more experienced officers in Salt Lake and relatively lighter in Washington, D.C.) tended to be a more consistent predictor of conviction performance. Officers with a heavier work load tended to have a lower proportion of their arrests end in conviction. Thus, Inslaw results suggest that there does not appear to be substantial evidence for attributing variation in conviction rates to officers' personal or demographic characteristics (Inslaw, 1981 V:27).

#### Conflict/Labeling Theory

##### Conflict Theory

Social conflict as opposed to cultural conflict has to do with the incompatible interests, needs, and desires of such diverse groups as business companies versus labor unions, conservative versus liberal political groups, white versus black, etc. (Void, 1958). Viewed from this perspective, the social conflict theorist recognizes criminality as a function of definition rather than explicit behavior. Society is not seen as a state of "harmonious coexistence" and equity, but rather as a variety of social segments with hierarchically arranged social classes that came intact with "rules and the

rules in bureaucratic structure" (Sykes, 1978:51). However the various groups are formed and divided, society is seen as a composite of groups that have different values, goals and normative standards. This results in a constant battle of one group trying to maximize its interests and impose its view of the proper form of social life on the society as a whole.

The apparatus of the state becomes the tool by which those who have control can grant validity to their particular conception of values, goals, norms and the application of certain rules. The definition of what is right or wrong, both in theory and in practice, becomes the prerogative of those in power.

Friedman and Macauley describe the conflict perspective as follows: "In a democracy, theoretically, people make the laws. But no one has ever been so naive as to believe that it is all the people who make all the laws. The very structure of American government presupposed narrower groups representing narrower interests" (Friedman and Macaulay 1969:575).

##### Labeling Theory

Derived from the tenets of symbolic interactionism, deviance is viewed by labeling theorists as the product of an interactive process. There are two critical components to this process: (1) defining or labeling individuals as deviant and (2) the effect of societal reaction on an individual's self concepts and subsequent behavior (McGaghy, 1980). According to labeling theory, there is a logical distinction between committing an act that is illegal, unethical or immoral and the reaction society has to such an act. The essence of deviance for the labeling theorist lies in how society reacts. It is assumed that once an individual has been labeled deviant, his self-concept is altered to conform with the label (Reid, 1979). Thus, the process

becomes a vicious circle or a self-fulfilling prophecy. An individual defined as deviant perceives himself as deviant and acts accordingly. The manifestation of deviance in turn causes a societal reaction which makes the label of deviance even more pronounced. Labeling theory, unlike several traditional theories of deviance, emphasized a "process" rather than "pathology".

Numerous studies have attempted to validate the theoretical postulates of conflict/labeling theory. Several studies have investigated the relationship between socio-economic status and sentence severity. Studies performed by Bedaku (1964, 1965), Nagel (1969), Judson, et. al. (1969) and Thornberry (1973) have found support for this relationship. Other studies (Chiricos and Waldo, 1975; Hagan, 1975b) however, did not directly confirm these findings.

Studies investigating the link between race and sentencing have produced conflicting results. An investigation of capital and non-capital cases found differential treatment based on race (e.g., Garfunkel, 1949; Partington, 1965; Wolfgang and Riedel, 1973; Lowert and Rosenberg, 1948; Bullock, 1961; Nangle 1969). Green (1971), however, found that when offense seriousness, number of charges, and prior convictions are controlled for the relationship between race and sentencing dissolves.

#### Organizational Theory

While few authors have paid attention to the definition of deviance as a function of the bureaucratic structure of the criminal justice system, it is a theory which is gaining increasing attention and importance. Organizational theorists view deviance as a product of certain organizational characteristics. For example, the number of arrests made might be hypothesized to be proportional to the number of police officers on the force. Cases that are prioritized for prosecution might be seen as a function of community pressure

to obtain convictions for offenses related to sexual conduct or convictions may be hypothesized to be proportional to jail population.

The point of each of these examples is that the deviance is seen as a function of the status of various organizational components of the criminal justice system. According to Hagan (1975), "An organizational orientation to criminal justice focuses on operating procedures involved in the decision-making process and the organizational environment in which these decisions are made".

The organizational structure of the American criminal justice system has been the focus of investigation by several contemporary sociologists. Because of its centralized function in the criminal justice system, the court has frequently been the target of study for this perspective (Blumberg, 1967). Sudnow (1965) conducted a study of the guilty plea in processing criminal cases and organizational features of the public defender system. It is Sudnow's contention that guilty pleas are routinely determined by "typical features of offense and defendant characteristics".

Blumberg (1967) stresses the importance of organizational influences in the court structure:

"Sociologists and others have focused their attention on the deprivations and social disabilities of such variables as race, ethnicity and social class as being the source of an accused person's defendant in a criminal court. Largely overlooked is the variable of court organization itself, which processes a thrust, purpose and direction of its own" (19).

A study was conducted by Hagan (1975a) to determine the influence of the probation officer's recommendation to the court as an organizational variable. Hagan hypothesized a direct link between recommendation and final case disposition. Analysis of the data did, in fact, indicate a strong, direct effect between these two variables with recommendation accounting for more than 50% of the variance in final dispositions.

### Legal Perspective

Several empirical treatments have investigated the import of legal offender and offense characteristics (i.e., prior arrests, prior convictions, seriousness of offense) to various phases of the criminal justice process. Evidence for the validity of these factors has been found in several analyses of judicial sentencing (Burk and Turk, 1957; Chiricos and Waldo, 1975; Hagan, 1975b; Clark and Kock, 1976; Bernstein, et. al., 1977a; Talicaro, 1978; Warner and Renner, 1978; Hagan, et. al., 1979; Thornberry, 1979; Uhlman and Walker, 1979, 1980). Other studies which focused on presentencing decision (Carter and Wilkens, 1967; Hagan, 1975a), charge reduction (Vetri, 1964; Bernstein, et. al., 1977a) and decisions to prosecute or dismiss charges (Bernstein, et. al., 1977b) have found support for these factors.

Specific hypotheses treated by this study were:

- I. The likelihood of an officer making arrests that result in conviction for the initial arrest charges increases with the age of the arresting officer and the length of time on force.
- II. Conviction is alternatively a function of the defendant's race, occupation, time in area, sex, age, marital status, time employed, prior arrest, and family and community ties, as specified by the conflict/labeling approach.
- III. Conviction is alternatively a function of factors suggested by the organizational perspective including: attorney type, initial plea, charge reduction, trial judge, amount of time between arrest and disposition.
- IV. Conviction is alternatively a function of factors suggested by the legal perspective including: seriousness of charge, type of pretrial release status.

### METHODOLOGY

#### Sample

Data used to test the research hypothesis in this study come from a larger data set collected by a research team directed by the author. Initial support for this project was provided by the Law Enforcement Association Administration, Law Enforcement Planning Association, Utah Council on Criminal Justice and Salt Lake County Pre-Trial Services.

Information was collected on 6,632 defendants booked into the Salt Lake County Jail from October 1, 1980 through March 31, 1981. Since a major portion of the data are from the pre-trial interview records only, defendants were excluded from the sample if they were arrested for an offense that precluded a pre-trial "own recognizance" or "supervised release" decision. Defendants arrested for these charges were not eligible for certain pre-trial release options by court order and were, therefore, not interviewed by the Pre-Trial Services Staff. In specific, defendants were not eligible for pre-trial release if they were arrested for AWOL, immigration, or city public intoxication charges.

The data employed encompass information pertaining to defendants who were arrested for all levels of offenses which included A, B, and C misdemeanors and third degree felonies.

#### Independent and Dependent Variables

The central objective of this study is to determine the relationship of arresting officer, age and length of time on force to convictability (in relation to offense severity). Another objective is to examine the effects on convictability of: (1) defendant's socio-demographic characteristics (e.g.,

race); (2) legal variables (e.g., defendant's prior arrest record); and (3) organizational factors (e.g., adjudicating judge).

#### Independent Variables

The independent variables that are examined are as follows:

##### ALLCOPS<sup>1</sup>

The age of the arresting officer (in months) and length of time on force (in months) were respectively provided by the Salt Lake County Sheriff's Department and the Salt Lake City Police Department. Officer age and length of time on force (in months) were multiplied together to form the variable ALLCOPS. As later discussed, this multiplication procedure was necessary because the officer age and experience variables were highly correlated with one another, and their simultaneous inclusion in the regression model would generate untenable results due to patterns of multicollinearity. The central hypothesis of this study is that arrests made by older, more experienced officers are more convictable in court.

##### ABATE<sup>2</sup>

Abate is the severity of the final reduced charges before the court prior to the conviction/non-conviction decision. As is later indicated, ABATE is so highly correlated with the severity of initial arrest charges that the latter variable is not included in the regression models of conviction severity.

##### HONORS

A "severity score" for each judge is derived from the computation of a

<sup>1</sup> The officer's age variable (COPAGE) and length of time on force variable (COPTIME) were combined to create the variable ALLCOPS to avoid the problem of collinearity between COPAGE and COPTIME when entered as separate variables in the regression equation.

"severity ratio". This is accomplished by determining the total number of charges each judge adjudicated (between October 1, 1980 and March 31, 1981) that resulted in a finding of guilty or not guilty. The total number of cases resulting in a finding of guilty are then divided by the total number of cases adjudicated by that judge. This ratio was categorized (and coded) as follows: lenient = 1(.00 to .60), moderate = 2(.61 to .80), or severe = 3(.81 to 1.00). The criterion points used are chosen to maximize equivalency in the number of cases in each of the three categories.

##### RELTYPE

The various pre-trial release options from jail are arranged and coded to conform to the requirements of an ordinal level scale code. Release (detain) options are coded on a continuum beginning with the least restrictive form of release and ending with the most restrictive status throughout the pre-trial process. The categories and codes used are as follows: (1) non-booking release, (2) own recognizance, (3) judge's own recognizance, (4) supervised release, (5) bond, (6) cash bail, (7) detained-released own recognizance, (8) detained-released judge's own recognizance, (9) detained-released supervised, (10) detained-released bond, (11) detained-released cash bail, (12) detained

<sup>2</sup> In order to make certain variables (subsequently discussed) amenable to multivariate analysis, the codes assigned to the charges were transformed into an interval level scale and then recoded accordingly. This transformation is based on categories of offenses as specified by Parts I and II, Uniform Crime report (FBI) and levels of offense as specified by the Utah State Code (Appendix B). Charges are first categorized in accordance with categories under Parts I and II offenses and then rank ordered in accordance with the level of offense, as specified in the Utah State Code. A numerical code was then assigned to each charge or group of charges ranging from 1 (lowest category and offense level) to 74 (highest category and offense level). These modifications are employed in the construction of the following variables: ALLCHARGES, ABATE, ALLPLEAS, CONVICT. As subsequently discussed, the effects of two of these variables (ALLCHARGES, ALLPLEAS) on the dependent variable of interest are not estimated due to regressor collinearity.

throughout pre-trial period. Based on prior legal arguments, one would expect that RELTYPE would be positively related to the dependent variable.

#### ALLDAYS

ALLDAYS addresses the length of "processing time" for each defendant's case. It is coded as the accumulated number of days from the day of arrest to the day of final disposition.

#### TIMEAREA

TIMEAREA measures the amount of time the defendant has lived in the Salt Lake County area (defined to include a 40-mile radius of Salt Lake City). TIMEAREA is an indicator of the community ties of defendants.

#### SUPPORT

A defendant is considered to be supporting other family members by providing homemaking services or regular monetary support for the use of his or her family members. "Support" is an indicator of family ties or "social stability" and is coded "0" (for no support) or "1" (for any support).

#### PRIORS

PRIORS measures the occurrence of prior arrests for misdemeanor or felony charges for the defendant since age 18, and is coded "0" (no arrest) or "1" (arrests). If the conflict/labeling arguments discussed earlier are correct, this measure should be positively related to conviction severity.

#### AGE

The age of the defendant is coded in years to the nearest whole year.

#### RACE

Defendants were coded as either "white (scored "1") or "non-white" (scored

"0") on the basis of dichotomous distinctions made by the justice system. White defendants should, relative to non-white defendants, receive less harsh convictions according to the conflict/labeling perspective.

#### SEX

Sex is the gender of the defendant, coded female = "1", male = "0".

#### Dependant Variable

The dependant variable in this study is CONVICT. CONVICT is the severity of the conviction for final reduced charges from the court. A judicial finding of dismissed, not guilty or no complaint is coded "0". Otherwise, the disposition equaled the value of the code of the conviction charges against the defendant as specified in Appendix A.

#### RESULTS

As a preliminary data analysis step, zero-order correlations among all possible independent variables for which data were collected, and between each of them and the dependent convictability variable, were examined. This was done to check for possible problems related to multicollinearity for regression estimation, and to determine whether many independent variables were (due to their high correlations with one another) essentially "proxies" for each other. With this information it was possible to reduce to a manageable set the (originally huge) number of independent variables chosen for analysis.

As it might be expected, the matrix as a whole did not show consistently high zero-order correlations between the dependent and all independent variables. Certain associations did, however, stand out. For instance, the

sum of all charges after any charge reductions showed a moderately strong correlation with the charges for which the defendant was ultimately convicted.

Evidence of collinearity was also found; for example, between: (1) the age of the arresting officer and the officer's length of time on force which necessitated their combination into one variable--ALLCOPS; (2) the "severity of pleas entered by the defendant and severity of the final reduced charges for his/her case; (3) the severity of final reduced charges and (4) pre-trial release recommendations and type of pre-trial release from jail. Since their simultaneous inclusion may have confounded estimation due to multicollinearity problems, on the basis of these bivariate associations many variables were excluded from further consideration (e.g., pretrial release recommendations were excluded; actual type of pre-trial release was included). A list of all independent variables first considered is presented in Table 1. Bivariate associations among them are available from the author upon request.

Tables 2 and 3 respectively display the zero-order correlations, and means and standard deviations for the reduced variable list. Examination of the zero-order correlation matrix indicated that this reduced set of variables minimized problems of collinearity and allowed essential causal patterns to be estimated.

Table 4 shows the results of the regression analysis based on the above list of variables. According to the information presented in Table 4, net of final reduced charges and the other regressors considered, a police officer's age and length of time on the force (these variables again were combined to create the variables ALLCOPS) has no significant effect on the severity of convictions (BETA = .01502) at the  $p \leq .01$  level of statistical significance chosen as the criterion point for this analysis. Thus the central hypothesis of this project must be rejected.

TABLE 1  
Means and Standard Deviations  
for Initial Variable List

Variable	Mean	Standard Deviation
<u>Officer Characteristics</u>		
Age of arresting officer	30.70	5.40
Length of time on force of arresting officer	63.52	60.
<u>Conflict/Labeling (Defendant "Attributes")</u>		
Race	.86	.34
Occupation	4.09	2.41
Income of Defendant	416.52	517.94
Income of Spouse	69.73	229.85
Income from public assistance	38.34	124.97
Other monthly income	30.10	167.88
Defendant's total monthly income	562.77	646.90
Assets - cash	18.67	19.64
Assets - property	5,674.11	19,686.49
Assets - vehicle	1,810.30	4,106.26
Assets - other	351.86	3,755.79
Assets - total	8,097.15	22,309.96
Payments on house/rent	159.74	239.51
Payments on vehicle	62.36	597.88
Payments on loans	43.19	558.73
Payments on child support	18.45	70.82
Payments - other	151.94	152.92
Total monthly payments	469.57	1,728.52
Sex	.12	.33
Employed	.62	.48
Age	28.67	10.42
Marital status	1.77	.84
Time in area	5.46	1.32
Time employed	3.85	1.88
Bail amount	2,296.48	8,538.05
On probation or parole	.11	.32
Prior arrests	.55	.49
Employed	.67	.46
Reference	.90	.29
Provides support	.45	.49
Phone	.70	.45
Number of charges	1.63	.99

TABLE 1 (continued)

Variable	Mean	Standard Deviation
<u>Organizational</u>		
Attorney type	1.11	.44
Initial plea	18.34	18.38
Jail count day of arrest	368.49	35.55
Jail count day of release	362.41	38.34
Time between arrest and disposition	63.52	60.54
Severity of judge	2.25	1.44
<u>Legal</u>		
Seriousness of charge	30.35	25.59
Charge reduction	23.45	18.87
Release recommendation	3.22	2.24
Conviction	18.88	90.56

TABLE 2

Zero-order Correlation for  
Final Subset of Variables

	Convict	Abate	Honors	Reltype	Alldays	Timearea	Support	Priors	Age	Race	Sex	Allcops
Convict	---	.52	.24	.24	.19	-.05	-.03	.04	-.08	.01	-.02	.05
Abate		---	.31	.34	.25	-.02	-.02	.09	-.12	.01	-.02	.07
Honors			---	-.01	.12	.08	-.03	.02	-.14	.04	-.01	.00
Reltype				---	-.04	-.23	-.06	.18	.03	-.13	-.04	.05
Alldays					---	.13	-.08	.04	.06	.11	.02	.01
Timearea						---	.10	.14	-.01	.10	.02	.00
Support							---	.03	.18	-.02	.00	.00
Priors								---	.04	-.06	-.13	.00
Age									---	-.01	.06	-.04
Race										---	-.06	.01
Sex											---	.01
Allcops												---

TABLE 3  
Means and Standard Deviations for  
Final Subset of Variables

Variable	Mean	Standard Deviation
Convict	17.4727	17.0651
Abate	28.1232	23.7726
Honors	1.9211	1.3118
Reltype	4.7834	3.7639
Alldays	48.5384	59.0625
Timearea	5.2394	1.4585
Support	.4224	.4440
Priors	.6035	.4430
Age	29.1026	10.7985
Race	.8312	.3675
Sex	.1313	.3363
Allcops	2328.0159	2602.6244

TABLE 4  
Regression Results of Final Subset  
of Variables

Variable	Multiple R	R Square	RSQ Change	B	BETA
Allcops	.54058	.29223	.00023	.00009	.01502
Abate	.52179	.27227	.27227	.31347	.43668*
Honors	.52797	.27875	.00648	1.22598	.09424*
Reltype	.53368	.28481	.00606	.40360	.08902*
Alldays	.53788	.23932	.00451	.02278	.07884*
Timearea	.53952	.29109	.00177	-.47589	-.04067
Age	.54009	.29170	.00062	-.03165	-.02003
Support	.54037	.29200	.00030	-.67627	-.01759
Race	.54077	.29243	.00020	.60467	.01302
Priors	.54086	.29253	.00010	-.46072	-.01196
Sex	.54097	.29265	.00012	-.57181	-.01127
(Constant)				6.58682	

\* Signifies statistical significance at .01 level.

This finding supports the results of a study conducted by Inslaw in which age of the arresting officer was determined not to be significantly related to convictions.

It is arguable that the relationship between these variables do not emerge due to the lack of gradation in constructing the ALLCOPS measure. Possibly, these coding distinctions are too fine and hamper the demonstration of relationship between these variables. Aggregate scores based on age and experience in years may have better explained differences in the likelihood of officers making arrests that "stick" in court. Alternatively, ALLCOPS may not be linearly related to CONVICT. It is possible that older more experienced officers may suffer from "burn out" which inevitably effects the relationship between arrest and convictability. Because of the absence of effects on the dependent variable (CONVICT), and missing values problems associated with the inclusion of this variable (which significantly reduced the overall number of cases for analysis), the regression analysis was repeated without the ALLCOPS variable.

Tables 5 and 6 respectively present the zero-order correlations and means and standard deviations for the subset of variables used in the final analysis with the variable ALLCOPS excluded. These are included for those who may wish to replicate the results presented here.

Table 7 shows the results of the regression analysis for the final subset of variables. According to Table 7, four variables, ABATE (combined charges after charge reductions), HONORS (overall severity of decisions for each judge), RELTYPE (type of pre-trial release from jail, and ALLDAYS (amount of time between arrest and disposition for all charges combined) were statistically significant in their effects on CONVICT. As can be seen from the results of the regression analysis, ABATE was the strongest predictor of

TABLE 5

Zero-order Correlations For Final Subset of Variables  
(with "ALLCOPS" variable excluded)

	Convict	Abate	Honors	Reltype	Alldays	Timearea	Support	Priors	Age	Race	Sex
Convict	---	.54	.20	.23	.20	-.04	-.02	.04	-.07	.01	-.02
Abate		---	.21	.35	.27	-.03	-.01	.08	-.10	.00	-.02
Honors			---	-.05	.14	.08	.00	.01	-.10	.08	-.04
Reltype				---	-.08	-.22	-.06	.17	-.02	-.09	-.05
Alldays					---	.12	.06	.03	.03	.09	.01
Timearea						---	.12	.13	.01	.10	.02
Support							---	.04	.21	-.03	.02
Priors								---	.04	-.06	-.14
Age									---	-.01	.04
Race										---	-.06
Sex											---

TABLE 6  
Means and Standard Deviations for  
Final Subset of Variables  
(with "ALLCOPS" variable excluded)

Variable	Mean	Standard Deviation
Convict	17.97	18.27
Abate	27.75	26.90
Honors	2.28	1.44
Reltype	3.90	2.44
Alldays	50.11	61.03
Timearea	5.28	1.42
Support	.44	.44
Priors	.59	.44
Age	28.67	10.46
Race	.86	.33
Sex	.13	.33

TABLE 7  
Regression of Final Subset of Variables on Convict  
(with "ALLCOPS" variable excluded)<sup>1</sup>

Variable	Multiple R	R Square	RSQ Change	B	BETA
Abate	.54110	.29279	.29279	.32579	.47959*
Honors	.54872	.30110	.00831	1.23578	.09768*
Reltype	.55248	.30523	.00414	.48747	.06526*
Alldays	.55504	.30836	.00283	.01821	.06081*
Timearea	.55565	.30874	.00068	-.29789	-.02316
Support	.55586	.30898	.00023	-.52064	-.01273
Priors	.55598	.30912	.00014	-.52394	-.01277
Age	.55607	.30922	.00010	-.01757	-.01006
Sex	.55610	.30925	.00003	-.31601	-.00580
(Constant)				5.99054	

\* Signifies statistical significance at .01 level.

<sup>1</sup> RACE effects were so minimal that the F-level for its effects was insufficient for computation by the SPSS package program used.

severity of conviction (BETA = .49799). More severe final reduced charges result in more severe convictions. Since final reduced charges are also essentially a proxy for initial charges, it is safe to assume that had the initial charge severity variable been included (and ABATE omitted) it would have been almost identically related to CONVICT. This finding is consonant with results reported in earlier treatments and add further credence to the legal perspective. The implications of this finding are not clear and may be seen from different perspectives. Alternatively, this effect most likely shows the expected correspondence between offense severity and the likelihood of severe conviction. It may in part also mean that the efforts of the criminal justice system are directed towards those accused of more serious offenses. That is, the police, prosecutors and judges scrutinize such cases, pay more attention to detail, and invest more time and effort convicting those charged with serious offenses. The rationale supporting such a position is that rape, robbery and aggravated assault are more important than peccadillos such as public drunkenness, loitering and unpaid traffic tickets.

The second most influential variable was HONORS (severity of decisions by individual judge). The results indicated significance beyond the .01 level (BETA = .09224). This finding supports the popular notion of the "hanging judge". The more "severe" the judge, the more likely is a severe conviction for the defendant independent of reduced (or its omitted equivalent, initial) charges and other factors such as prior arrests, type of pre-trial release and socio-demographic characteristics of the defendant (e.g., gender, age, family, and community ties).

This finding will probably come as no surprise to organizational theorist or to trial lawyers who make an art out of selecting the appropriate judge to hear a particular case. This result suggests a pressing need for future

research that attempts to identify those factors that account for the substantial variations among judges in the nature of their judicial decisions.

The third most influential variable was RELTYPE (type of pre-trial release). Included in the RELTYPE measure are those defendants who were released and those who were detained in jail throughout the pre-trial period.

As was the case with the previous variables RELTYPE is statistically significant beyond the .01 level (BETA = .06526). The results indicate that a severity of conviction is more likely, as the type of release becomes more punitive or restrictive. Those defendants who are detained are most likely to receive the most severe conviction, net of all statistically controlled factors.

Since reduced ("initial") charges are controlled for, this finding strongly suggests that there is an inherent bias in the criminal justice system that equates certain forms of pre-trial release with guilt. The implicit assumption of release prior to trial is that defendants are entitled to be free from confinement if appearance for future court dates can be assumed. Apparently this assumption has been distorted. The regression results suggest that the release type has become an indicator of guilt. The underlying assumption guiding this "rule of thumb" must be something in the order of "guilty people are not released".

Most of the prior research concerning this variable has focused on pre-trial issues related to the administration of bail and the use of pre-trial detention (Beeley, 1927; Morse & Beattie, 1932; Foote, 1954; Alexander, et. al., 1958; Thomas, 1976; Goldcamp, 1979). Traditionally, prior research has examined the characteristics of detained defendants versus defendants not detained. Very little effort has been devoted to determining the influence

of release type on factors that are not directly related to bail administration issues.

There has been a considerable amount of discussion in the last decade about whether the constitution guarantees pre-trial release as implied by the eighth amendment. The finding of this study suggests that this issue is indeed crucial to the defendant's final case disposition and underscores the need for recognizing the importance of this variable.

The fourth and last significant variable demonstrating a statistically significant effect on CONVICT is ALLDAY (BETA = .06081) (amount of time between arrest and disposition). The regression results suggest that the greater the amount of time that elapses between day of arrest and final disposition the more likely is conviction.

This finding supports the organizational perspective and similar research conducted by McCarthy and Wahl (1965). Their results indicated that the shorter the pre-trial stay in jail the more likely was it that the case against the defendant would be dropped, the longer the defendant was detained the more likely was conviction.

The significance of the amount of time between arrest and disposition may be due to a built-in level of intolerance operating in the criminal justice system. Perhaps after a given amount of time has elapsed the court begins to lose patience with various legal maneuvers and motions by the defense which cause delays in reaching final disposition. To seek delays after this threshold has been reached is to prod the system into finding of guilt. Conversely, the results may indicate that dismissals, filings of "no complaint" and findings of not guilty tend to occur early on in the adjudication process. From an efficiency standpoint, it seems that the court

disposes of non-critical cases first so that time and attention can be devoted to matters requiring extended deliberations.

Variables that were found not to be significantly related to CONVICT are also worthy of mention. The results indicated that the following variables were not statistically significant in their effects: TIMEAREA (amount of time in immediate area), SUPPORT (responsible for support of other family members), PRIORS (prior arrests), AGE (age of defendant), SEX and RACE (white, non-white). Many of these variables have been touted by advocates of the conflict/labeling perspective as being major determinants of dispositions in the criminal justice system (e.g., arrest, type of attorney, charge reduction, sentence)--see Chambliss and Seidman (1971). The fact that most of the socio-economic variables were not related in negative but not statistically significant fashion to CONVICT raises a serious questions as to the validity of the conflict/labeling perspective.

Beyond the initial research issue, an objective pursued by this study was the examination of specific theoretical explanations which account for the occurrence of convictions. The data suggests that convictions can be explained by the legal perspective, as substantiated by the findings related to ABATE and RELTYPE, and the organizational perspective as substantiated by the findings related to HONORS and ALLDAYS. Results from this study did not, however, lend any support for the conflict/labeling perspective.

#### SUMMARY

No evidence was found for the hypothesis that the amount of time a police officer has been on the force or the age of the police officer is related to conviction. Hypothesis 1 must therefore be rejected.

No evidence was found for the Hypothesis that variables included in the conflict/labeling hypothesis are related to conviction. Hypothesis II must therefore be rejected.

Statistically significant evidence was found for specific variables included under the organizational perspective. Hypothesis III is therefore confirmed.

Statistically significant evidence was found for specific variables included under the legal perspective. Hypothesis IV is therefore confirmed.

## Chapter 2

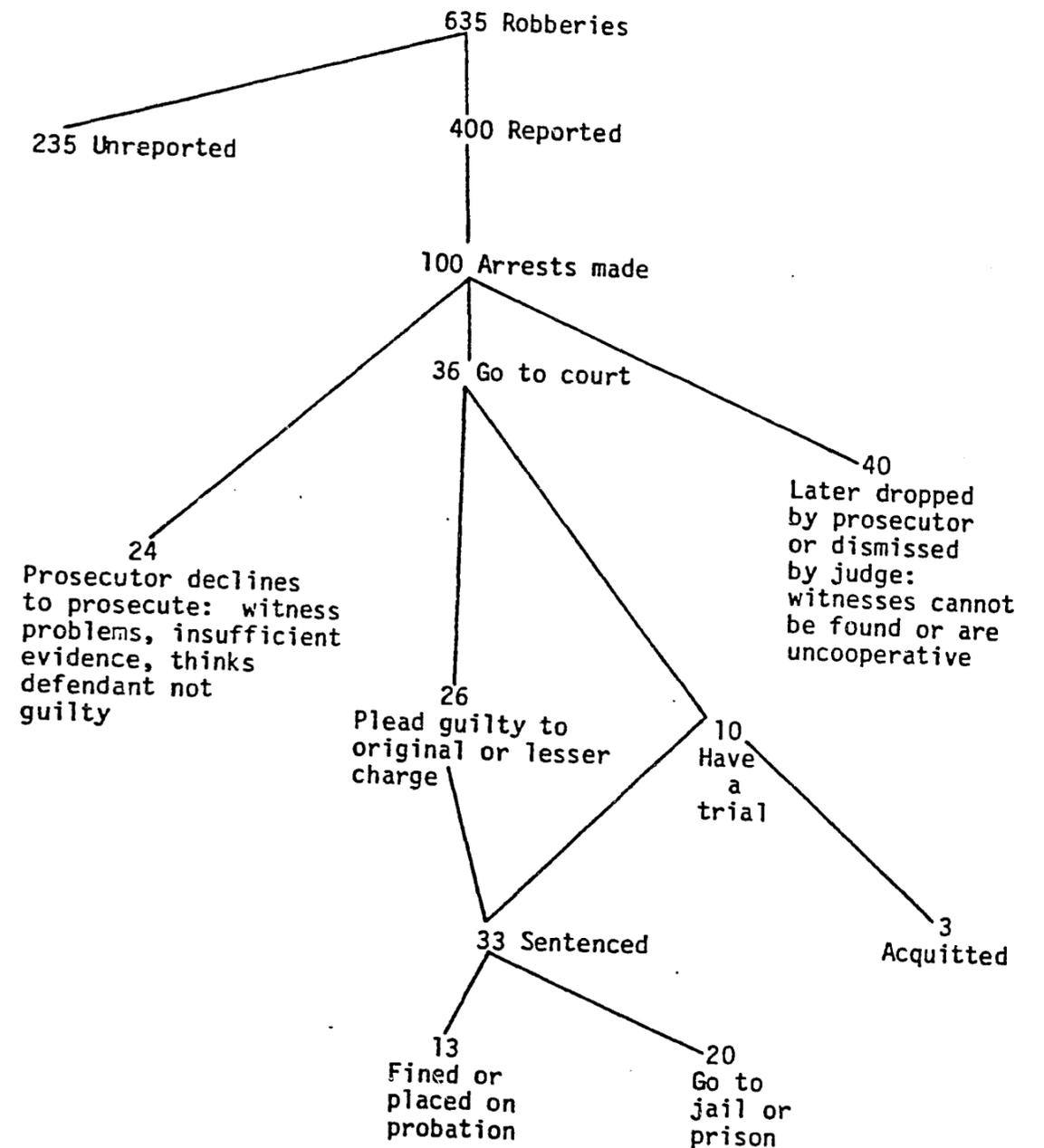
### Defendant Characteristics of Prosecuted vs. Non-prosecuted Cases

One of the most pressing problems currently facing the criminal justice system is the steadily increasing volume of defendants flowing through the various components of the system on a day to day basis. Prior investigations of the criminal justice process have shown that a high percentage of criminal cases are summarily ejected from court ending in either an order of dismissal or a recommendation by the prosecutor that charges be dropped.

This attrition of defendants at various stages in the criminal justice process has been likened to a "filtering system". Defendants that are arrested and then not fully prosecuted consume time, money and space in a process that is overwhelmed beyond reasonable limitations. Figure 1 traces the crime of robbery for a given period of time in Washington D.C. The fact that 64% of those arrested had cases that did not result in ultimate conviction and were terminated prior to trial exemplifies the severity of this problem.

The importance of this issue is underscored by the fact that many areas cannot afford to continue the routine practice of making arrests that do not result in full prosecution or conviction. Problems such as increased prosecutor and defender workloads, jail overcrowding and court congestion are only aggravated by a process that is predicated on as high as 64% of the cases being terminated.

To this end, the objective of this research project is to explore the characteristics of prosecuted vs. cases not fully prosecuted in order to determine if cases from each group can be predicted on the basis of certain factors. This information can then be used to decipher between cases that would be most profitable to pursue for prosecution vs. those cases lacking prosecutable merit. More specifically, the task to be undertaken is to



Source: Adapted from National Criminal Justice Information and Statistics Service, Criminal Victimization Surveys in 13 American Cities. (Washington, D.C.: U.S. Department of Justice), p. 250.

Figure 1. Estimation of case disposition for every 635 robberies in Washington, D.C.

compare fully prosecuted cases with cases disposed of by either dismissal or termination based on prosecutor recommendation. The objective of this comparison is to determine if (1) a statistical difference between these groups exists and (2) identification of the factors that account for this difference. Information from this investigation can potentially be used to improve the overall quality and efficiency of the criminal justice system by aiding in the identification of factors associated with defendants for which prosecution would end in early termination. Assuming that the groups do differ significantly on certain factors, this information can then be used to construct a predictive scale comprised of the respective weights of each factor. Pragmatically applied, favorable results would yield an increased accuracy in the classification of cases which would result in a savings of time, money and space to the criminal justice process.

#### PRIOR RESEARCH

The prosecutorial decision process while not as salient as other components of the criminal justice system such as arrest and trial is one of the most crucial steps in determining the final outcome to a defendant's case. From an administrative point of view, the decision process of deciding whether to pursue criminal charges against a defendant is couched in a mix of competing interests (Mellon, et. al., 1981). Since most prosecutors are elected officials they have an official obligation to vigorously pursue conviction for as many defendants as possible. At the same time, prosecutors are expected to be sensitive to criminal justice conditions such as jail and prison overcrowding, court congestion, financial constraints, rehabilitation demands etc. Thus, the prosecutor is frequently placed in the role of a mediator where the art of diplomacy is mandatory (Cole, 1970; Skolnick, 1967).

A study conducted by Mellon, et. al., (1981) and Jacoby, et. al., (1979) which investigated prosecutor charging practices concluded that the decision to prosecute is encapsulated in the following four objectives: (1) substantiation of charge by evidence, (2) probability of winning the case if it goes to trial, (3) a system efficiency model which encourages early disposition of a large volume of cases, (4) diversion of defendants suitable for rehabilitation. It seems likely that an accurate model of the decision process would reflect an interaction of the above categories as opposed to being limited to falling into any specific category. What is noticeably absent from this investigation is consideration given to the possible influence of "legal factors" such as level of offense, prior arrest record, weapon/non-weapon offense, violent nonviolent offense etc. Obviously a serious charge such as murder would be evaluated with different objectives in mind than a minor offense such as public intoxication. Categories 1 and 2 would be more likely to apply to the consideration of whether to proceed with a murder trial where as categories 3 and 4 would be more likely to apply to minor offenses such as public intoxication.

Other studies have pointed to the importance of defendant characteristics in prosecutorial decision-making (Jacob, 1963; Sudnow, 1965). Studies focusing on decision-making at various stages in the criminal justice process reveal the influential nature of gender of the defendant (Kruttschnitt, 1979; Temin, 1980). Williams (1975) found that women tend to be arrested less often than men and tend to "fare better" at various stages of the criminal justice process (Kritzer and Uhlman, 1976). For example, their research reveals that women are less likely to be the target of prosecution than men. If women are prosecuted, there is a greater probability that they will be found not guilty than men (Hagan, et. al., 1979), and if found guilty, more

likely to receive a lenient sentence than their male counterparts (Hart, 1973; Austin, 1978).

Research investigating the relationship between the age of the defendant and the decision to prosecute reveals that certain "age groups" are more likely to be the target of prosecution (Bernstein, et. al., 1977a). Young and old defendants tend to fare better in the criminal justice process than defendants in a mid-age group and are more likely to receive "stiffer" sentencing alternatives (Burke and Turk, 1975; Wheeler, et. al., 1982).

Studies focusing on the relationship between prosecution and defendant socio-demographic characteristics point to the importance of certain factors from this area. One of the most frequently used measures of this area is the defendant's occupation, usually operationalized by a prestige-ranking scale. Studies utilizing this measure indicate that the higher the ranking on the occupation scale, the less likely is prosecution and the less severe the sanctioning decision (Austin, 1978; Lizotte, 1978; Carter and Clellan, 1979; Unnever, 1982). Similar studies using income rather than occupational prestige-ranking indicate similar results (Carter and Wilkins, 1967; Clarke and Koch, 1976; Thornberry, 1979). Additional studies investigating other factors such as the defendants educational level, employment history, marital status father's occupation parallel the findings of studies using defendant's occupation or income (Hall and Simkus, 1975; Gerty, 1976; Kelly and Doyle, 1977b; Labeff, 1978; Talarico, 1978; Kruttschnitt, 1979; Meyers and Hagan, 1979; San Marco, 1979; Thornberry and Fransworth, 1982).

The prosecutorial decision-making process has also been the focus of factors from the "legal perspective". A study which investigated the relationship between the decision to prosecute as a function of charge severity and number of charges filed against the defendant found that the probability

for prosecution increased with the charge severity and number of charges (Hagan, 1975; Meyers and Hagan, 1979; Wheeler, et. al., 1982). A recent study by Bynum (1982) underscored the importance of legal factors in the decision to prosecute defendants under a recent law passed in Michigan requiring a mandatory two year prison sentence for defendants who had possession of a firearm during the commission of a felony. Bynum's results reveal that "number of prior felony convictions" was a crucial factor in the decision to prosecute.

#### METHODOLOGY

Data used for this analysis was based on 6,632 defendants booked into the Salt Lake County Jail from October 1, 1980 thru March 31, 1981. Data was collected on 129 variables per defendant and included information on the following categories: socio-economic status, demographic characteristics, financial status and past and present legal involvement.

The statistical technique used to conduct the investigation was discriminant analysis. This particular technique is used to determine the contribution of certain factors in distinguishing between groups. For example, Klecka (1980) notes that discriminant analysis has been used by political scientists to study voting behavior among citizens and legislators in attempting to isolate variables which will help predict whether they will vote Democratic or Republican.

As an initial step of investigation, and as a means of dealing with the large number of variables for initial consideration, a pool of variables was selected based on the following considerations: (1) prior research results, (2) appropriateness for research objective, (3) theoretical importance, (4) use of a variable that was representative of similar variables and concepts.

Means and standard deviations were computed for each variable in the initial list as presented in Table 1. An examination of this data indicated that all variables were within expected limitations and suitable for further analysis.

A zero-order correlation matrix was constructed for the initial list of variables and examined for evidence of relationships that could distort further statistical results. In view of the fact that no problems were apparent, the initial list of variables was then broken down into smaller subsets and a series of discriminant analysis tests were conducted to identify those variables which proved to be the strongest discriminators between the fully prosecuted and not fully prosecuted groups. A final subset of variables was then selected on (1) the criteria specified above, (2) results from the zero-order correlation matrix and (3) discriminant analysis tests. A list of the final subset of variables with group standard deviations is presented in Table 2. Explanations and variable names are attached.

A zero-order correlation matrix was then constructed for the final subset of variables as presented in Table 3. An examination for the final subset of variables indicated some high but not unexpected correlations between CHARGE and OFFENSE (.85), CHARGE and VIOLENT (.40), CHARGE and WEAPON (.39), OFFENSE and VIOLENT (.38), OFFENSE and WEAPON (.39), VIOLENT and WEAPON (.51), RELTYPE and VERIFIES (-.56) and REFER nad VERIFIED (.46). Discriminant analysis was then conducted employing this final subset of variables.

## RESULTS

### Group Discrimination

As represented in Table 4 the final discriminant analysis test indicated that the difference between the groups is statistically significant at the ( $p < .00$  level). This finding solidly confirms the primary hypothesis under

TABLE 1  
Means and Standard Deviations  
for Initial Variable List

Variable	Mean	Standard Deviation
Race	.86	.34
Occupation	4.09	2.41
Income of Defendant	416.52	517.94
Income of Spouse	69.73	229.85
Income from public assistance	38.34	124.97
Other monthly income	30.10	167.88
Defendant's total monthly income	562.77	646.90
Assets - cash	18.67	19.64
Assets - property	5,674.11	19,686.49
Assets - vehicle	1,810.30	4,106.26
Assets - other	351.86	3,755.79
Assets - total	8,097.15	22,309.96
Payments on house/rent	159.74	239.51
Payments on vehicle	62.36	597.88
Payments on loans	43.19	558.73
Payments on child support	18.45	70.82
Payments - other	151.94	152.92
Total monthly payments	469.57	1,728.52
Sex	.12	.33
Employed	.62	.48
Age	28.67	10.42
Marital status	1.77	.84
Time in area	5.46	1.32
Time employed	3.85	1.88
On probation or parole	.11	.32
Prior arrests	.55	.49
Reference	.90	.29
Provides support	.45	.49
Phone	.70	.45
Type of residence	.931	.920
Information verified	.720	.449
Support provided	.454	.498
Attorney type	1.11	.44
Jail count day of arrest	368.49	35.55
Jail count day of release	362.41	38.34
Charge reduction	23.45	18.87
Release recommendation	3.22	2.24
Bail amount	2,296.48	8,538.05
Number of charges	1.63	.99
Offense level	2.453	1.108
Violent charge	.90	.287
Weapon charge	.049	.217

TABLE 2  
Group Standard Deviations for  
Final Subset of Variables

Group Standard Deviations

CMPLAINT	CHARGE1	TIMEAREA	PRIORS	RACE
1	18.99691	1.20146	.45506	.35557
2	16.28530	1.19320	.49331	.31435
TOTAL	17.57057	1.19492	.48714	.32517

CMPLAINT	VIOLENT1	WEAPON	PHONE	TYPERES
1	.41445	.33709	.45312	.69598
2	.24515	.19676	.42564	.76977
TOTAL	.30277	.24163	.43291	.75321

CMPLAINT	VERIFIED	POPIN	ATTORNEY	OFFENSE1
1	.61381	371.20263	1.52174	2.82701
2	.77202	363.33553	1.37942	2.34313
TOTAL	.73350	365.25087	1.41407	2.46094

CMPLAINT	EMPLOYED	RELTYPE	REFER
1	.62523	4.82642	.91304
2	.66522	3.71093	.93086
TOTAL	.65548	3.98254	.92653

CMPLAINT - Represents the dichotomy between prosecuted vs. non-prosecuted cases. CMPLAINT1 = not prosecuted, CMPLAINT2 = fully prosecuted.

CHARGE1 - The specific charge against the defendant (as defined by the Utah State Code).

TIMEAREA - Amount of time defendant lived in Salt Lake Area.

PRIOR - Prior arrests/no prior arrests.

RACE - Race of defendant.

VIOLENT - Violent/non-violent offense.

WEAPON - Weapon or non-weapon charge.

PHONE - Possession of telephone by defendant.

TYPERES - Type of residence by household composition where defendant lives.

VERIFIED - Information verified by Pre-Trial Services at time of booking.

POPIN - Population of jail on day of arrest.

ATTORNEY - Services of attorney available at time of booking.

OFFENSE1 - Level of offense charged.

EMPLOYED - Defendant employed/not employed.

RELTYPE - Type of pre-trial release from jail (own recognizance, cash bail, bond, etc.)

REFER - Defendant did/did not provide references at time of pre-trial interview.

TABLE 3  
Zero-order Correlation Matrix for  
Second Subset of Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	---	-.05	.07	.02	.85	.40	.39	-.13	-.10	-.05	-.11	.25	-.04	-.04	-.29	-.01
2.		---	.18	.11	.00	-.01	.00	-.01	.25	.08	.16	-.24	.34	.06	.29	.01
3.			---	.10	.08	.02	.05	-.05	-.07	-.05	-.02	.17	.01	-.06	-.12	.00
4.				---	.06	.04	.02	-.07	.13	.10	.10	-.05	.09	.07	.05	.02
5.					---	.38	.39	-.14	-.07	-.02	-.08	.24	-.01	-.01	-.29	-.01
6.						---	.51	-.08	-.06	-.03	-.02	.11	-.04	-.05	-.13	.00
7.							---	-.06	-.07	-.03	-.02	.12	-.02	-.06	-.15	.00
8.								---	-.02	.00	.00	-.03	.08	-.03	.08	-.03
9.									---	.23	.16	-.15	.23	.17	.29	.02
10.										---	.04	-.07	.05	.06	.09	.02
11.											---	-.12	.15	.08	.18	-.03
12.												---	-.27	-.05	-.56	.00
13.													---	.09	.46	.03
14.														---	.11	-.04
15.															---	-.01
16.																---

- 1. CHARGE
- 2. TIMEAREA
- 3. PRIORS
- 4. ATTORNEY
- 5. OFFENSE
- 6. VIOLENT
- 7. WEAPON
- 8. COMPLAINT
- 9. PHONE
- 10. TYPERES
- 11. EMPLOYED
- 12. RELTYPE
- 13. REFER
- 14. TACE
- 15. VERIFIED
- 16. POPIN

TABLE 4

## Discriminant Functions

Function	Eigenvalue	Chi-squared	D.F.	Significance
1*	.12809	192.41	15	.0000

\*Marks the 1 canonical discriminant function(s) to be used in the remaining analysis.

examination which is that there is a significant difference between cases that are fully prosecuted as compared to cases that are not fully prosecuted.

#### Independent Variables

While the finding regarding the significant difference between groups is useful and important information the more interesting issue is the identification of individual factors which account for this difference. Table 5 represents the final list of independent variables with accompanying F-values. The F-value represents the status of each factor in the statistical distinction between the fully prosecuted vs. not fully prosecuted groups. A tally of the significant variables indicates that 80% of the variables tested were significant at ( $p < .05$  and  $p < .01$  levels) combined. The "p-value" associated with each factor indicates the probability of the F-value of that factor occurring by chance. Thus, a p-value of .05 indicates that there is less than 5 chances in 100 that the F-value occurred by chance. The fact that such a high percentage of variables were found to be significant suggests that prior discriminant tests used primarily to reduce the larger variable list down to a more manageable size were successful in isolating strong discriminating variables that could maintain their power when combined together.

Assessed in accordance with the level of statistical significance, those variables significant at the ( $p < .01$  level) include: CHARGE (specific offense), PRIORS (prior arrests), VERIFIED (information verified), POPIN (jail population on day of arrest), ATTORNEY (at time of booking), OFFENSE (level), VIOLENT (charge type), WEAPON (charge involving weapon, and RELTYPE (type of pretrial release). The most striking point that emerges from this group of variables is that they are all legal or extra-legal in nature. This finding

TABLE 5

F-Ration for Final Subset of Variables

VARIABLE	F
CHARGE1	3.1137***
TIMEAREA	.2258
PRIORS	2.1994***
RACE	1.4108*
VERIFIED	2.3874***
POPIN	2.1364**
ATTOREY	1.9632**
OFFENSE1	2.5833***
VIOLENT1	2.8227***
WEAPON1	2.4201***
PHONE	1.4236*
TYPERES	1.4076*
EMPLOYED	1.2121
RELTYPE	2.3935***
REFER	1.1379

- \* Signifies statistical significance at .05 level.  
 \*\* Signifies statistical significance at .01 level.  
 \*\*\* Signifies statistical significance at .001 level.

not only reinforces the findings of previous studies but underscores the importance of conducting further studies using variables that are legal or extra-legal in form.

Those variables significant at the ( $p < .05$  level) included RACE, PHONE (defendant has access to phone) and TYPERES (type of residence of defendant). The fact that these variables are demographic/socio-economic in nature implies that, contrary to earlier trends and assumptions by sociologists and criminologists, the overall importance of variables of this type does not appear to be overwhelming. This contention is further reinforced by the fact that the remaining variables in the analysis, REFER (did defendant have a reference), EMPLOYED (yes/no), and TIMEAREA (amount of time defendant lived in area) are demographic/socio-economic in nature and failed to achieve statistical significance.

#### Classification

Once the predictive power of each factor is determined, the derived values are then "tested" against actual cases in order to determine the ability of the variables considered as a group to correctly classify cases in the respective fully prosecuted vs. not fully prosecuted groups. This process is accomplished by taking the derived discriminant scores for each variable and predicting group membership on the basis of this information. Predicted group membership is then compared to actual group membership for an assessment of predictive validity. As Table 6 indicates, the overall number of cases correctly predicted based on the derived scores is 76.71%. This finding can be interpreted to mean that the variables employed in analysis will accurately predict which group a case falls into approximately 75% of the time.

Perhaps the most intriguing feature of the classification results is the direction of the error of prediction. An examination of the respective cells

TABLE 6  
 Classification Results Utilizing  
 Final Subset of Variables

Actual Group	No. of Cases	Predicted Group Membership	
		1	2
Group 1	391	86 22.0%	305 78.0%
Group 2	1215	69 5.7%	1146 94.3%

Percent of 'Grouped' cases correctly classified: 76.7%

in the classification table indicate that only 22% of group 1 cases were correctly classified while 94% of the group 2 cases were correctly classified. This finding strongly suggests that it is much easier to identify cases that are prosecutable and very difficult to predict cases that should not be prosecutable. This finding urges additional research that focuses on a consideration of factors not covered by this study that would seek to clarify this relationship. The issue that emerges from the classification analysis is the difficulty of predicting cases that fall into the not prosecuted category.

SUMMARY

Defendant cases not fully prosecuted were compared to cases fully prosecuted to determine the nature and extent of significance between groups. Analyses indicated that an overall significant difference existed between groups and, more specifically, the groups differed significantly on the following factors: CHARGE, PRIORS, VERIFIED, POPIN, ATTORNEY, OFFENSE, VIOLENT, WEAPON, RELTYPE, RACE, PHONE, and TYPERES. Results of the classification cells did, however, indicate that prediction success declines substantially for predicting cases that fall into the "not prosecuted group". In addition, the analysis suggest the need for additional studies that focus attention on variables from legal and extra-legal categories.

Chapter 3

Sentencing Disparity: An Empirical Evaluation of Factors Influencing  
Jail-Time and the Amount of Fine Sentencing Decisions

Introduction

The cornerstone of the American jurisprudence is equity of treatment of all. No stage of the criminal justice system stresses the pursuit of this objective more than does the sentencing process. It is at this stage that the court must decipher what consequence is to follow from a specific offense or offenses guided by such notions as due process, punishment to fit crime, justice for all etc. The shift in emphasis from meting out punishment based solely on the offense to protecting society through reforming, deterring or incapacitating the offender suggest the necessity of evaluating the sentencing decision process. Decisions made at this stage not only determine the course of immediate action but have important implications for punishment or treatment of the offender as well (Hogarth, 1967). Additionally, the extent to which legitimate sentencing disparity exists serves as an evaluation of how successfully courts dispense just decisions. Concerned with arbitrariness with which the sentencing process can assume, Judge Frankel (1978:5) urges the adaptation of measures to "regulate the almost wholly unchecked and sweeping powers we give judges in the fashioning of sentences". Judge Frankel states:

The sentencing powers of the judges are, in short, so far unconfined that, except for frequently monstrous maximum limits, they are effectively subject to no law at all. Everyone with the least training in law would be prompt to denounce a statute that merely said the penalty for crimes "shall be any term the judge sees fit to impose".

A regime of such arbitrary fiat would be intolerable in a supposedly free society, to say nothing of being involved under our due process clause. But the fact is that we have accepted unthinkingly a criminal code creating in effect precisely that degree of unbridled power.

Evidence of sentencing disparity does not in and of itself raise cause for concern. The American criminal justice system is structured so as to allow a certain amount of disparity in sentencing. It comes as no surprise

to anyone that a defendant with an extensive history of offenses will be treated differently than a defendant with no prior criminal involvement. Emerson's (1919) study of New York judges examined which 155,000 defendants arrested for local ordinances and sentenced between 1914 and 1916 by 42 magistrates, found marked variations in the way sentences were meted out. Emerson, however, failed to take into account (control) crucial factors such as type of offense and prior record. Without controlling for factors such as these the finding of sentencing disparity becomes meaningless. The crucial component to determining sentencing disparity is equivalency of conditions. Disparity only becomes a concern when defendants with similar or identical characteristics and backgrounds arrested for the same offense receive different sentences.

Among the chief causes cited for alleged sentencing disparity is the weight and consideration given by judges to ethically irrelevant or discriminatory factors as grounds for their sentencing decisions (Stretcher and Sparks, 1982). Hewitt (1975) maintains that the following three conditions have given rise to the consideration of sentencing disparity: (1) greater discretion given to judges, (2) as a consequence of the civil rights movement of the 1950's and 1960's, (3) system overcrowding including court congestion, jail overcrowding and prison overcrowding.

Given the concerns listed above, it should come as no surprise that sentence disparity has been the focal point of interest for criminological and sociological investigations. The present study will determine to what extent sentencing disparity exist using various multivarious techniques while controlling for an extensive list of variables.

#### Prior Research

Sentencing disparity has been the subject of investigation for many groups including legal scholars, sociologists, criminologists, psychologists and practitioners. Past investigation have focused on the role of the judge, geographic location of the place of offense and court of adjudication, defendant characteristics and legal system variables. While the topic of research was the same, prior investigations of sentencing disparity differed widely in methodological technique and soundness.

A number of investigations have focused on the influence of the judge in sentencing disparity. The underlying objective of this line of research is to explain sentencing disparity as a function of individual differences between judges. One of the earliest investigations using this approach is a study conducted by Morse and Beatie (1932). The analysis was conducted on 582 cases heard in an Oregon Circuit Court. Their findings showed that (1) judges did not vary to any great extent in the proportion of suspended sentences, (2) judges did differ among themselves as to the sentences imposed for each type of crime and (3) significant variation was noted for successive sentences which each judge imposed for the same type of crime.

A study conducted by Gaudet, Harris and St. John (1933) analyzed 7,442 cases occurring over a nine year span of time. Their findings revealed a significant difference in the number of defendants placed on probation by different judges. While no significant difference was identified among the judges for sentence length, they observed that the sentencing tendency of a judge was determined before the judge was appointed to the bench.

Frankel (1940) conducted a replication of Gaudet's research in an examination of 4,029 cases disposed of by four judges. While Frankel found differences between different sentencing options (jail, fine, county per-

itentiary, state penitentiary) none of these proved to be statistically significant.

An analysis conducted by Sanit, Tanenhaus and Wilkie (1960) of more than two million defendants handled by New York judges between 1915 and 1930 revealed considerable variability among judges in imposing sentences for similar offenses. They found that from 1.0 percent to 79.0 percent of speeding cases were dismissed while from 1.3 percent to 73.0 percent of intoxication cases were dismissed. They concluded from their investigation that these appeared to be variability both between and within judges' decisions. The findings of this study should be viewed with caution since unsophisticated data collection technology might have seriously impaired data validity.

Baab and Furgeson (1967) analyzed 1,720 felony cases using a multiple regression model. Their results indicated the judge was a significant factor in explaining sentencing disparity. The disparity was attributed to conflicting penal philosophies, social backgrounds, personalities and backgrounds.

Hogarth (1971) conducted an investigation of Ontario magistrates which investigated the relationship between individual characteristics of judges and sentencing. Hogarth found that the most punitive magistrates tended to be young, well educated and from rural areas.

An analysis conducted by Cargan and Coates (1974) of 841 felony cases handled by the Common Pleas Court of Montgomery County found a considerable amount of variation among judges' sentencing habits. As a group judges tended to be more severe in sentencing for crimes against property than for crimes against persons.

A second line of research on sentencing disparity has focused on characteristics of the defendant. One of the most frequently investigated

factors from this area is race of the defendant. A frequent claim of the last two decades has been that black defendants are more likely to be treated more harshly than white defendants. The most frequently cited study in this area was conducted by Bullock (1961) in which he investigated the relationship between race of the defendant and length of sentence. Bullock's results indicated that the race of the defendant was significantly associated with the length of sentence. Bullock concluded that those "who enforce the law conform to norms of their local society concerning racial prejudices, thus denying equality before the law".

A study conducted by Green (1961) in the same year found results inconsistent with Bullock's. Green observed that the relationship between race and sentence drops out when the defendants prior record, age and severity of the offense are included in the analysis. Other studies, however, have found results consistent with Bullock's (Chiricos, Waldo and Marstan, 1974; Thornberry, 1974).

Hagan (1974) reanalyzed 17 separate studies which included race as a factor in sentencing disparity. Hagan found evidence for differential treatment with respect to race for capital cases but found no relationship for race being a significant factor in non-capital cases. A list of other studies have found no link between race and adjudication outcomes (Baab and Furgeson, 1967; Greenwood, et. al., 1973; Burke and Turk, 1974; Clarke and Koch, 1976; Bernstein, et. al., 1977b; Gibson, 1978; Labeff, 1978; Carter and Clelland, 1979; Bailey, 1981; Klecka, 1981).

Another factor that has attracted the interest of sentencing research is gender of the defendant. More specifically, several studies have investigated the hypothesis that women receive less severe sentences than men. Baab and Furgeson (1976) found evidence to suggest that women received

lighter sentences than men while holding the effect of offense constant. A study of sentence options conducted by Nagel (1969) revealed that women were more likely to receive probation or a suspended sentence than their male counterparts.

Other studies, however, suggest no direct connection between sex of the defendant and sentence severity. Separate studies conducted by Martin (1934) and Green (1961) revealed that sex of the defendant was of only minor importance in the caliber of sentence received by the defendant.

Age of the defendant has recently been at the forefront of attention in discussions of the cause of criminality. Several contemporary criminologists maintain that a criminal activity occurs within age groups of approximately 18-32 years old and then drops off sharply as cohort groups approach mid-30's. While the age may be a dominant factor associated with criminality its value in explaining sentencing disparity seems marginal. A study conducted by Martin (1934) found no significant effect of age on sentencing. Baab and Furgeson (1967) and Green (1961) evaluated the value of age while holding the influence of specific legal variables constant (prior record, offense). The results of both studies indicated that age was not statistically significant in relation to sentencing disparity. Hagan's (1974) reanalysis of 17 studies found no statistical significance between age and sentencing disparity for either capital or non-capital cases.

The one study that did show age as being statistically related to sentencing was conducted by Burke and Turk (1974). Defendants under 25 were more likely to be sent to prison than older defendants. The results indicated that those defendants between 25 and 35 were more likely to receive a fine as opposed to prison sentences.

Extensive efforts have been taken in the last two decades to ensure equal treatment under the law for defendants with low socio-economic status. Previous studies which have examined this measure indicate that a high ranking on this variable is associated with a disinclination for prosecution and a less severe sanctioning decision (Austin, 1978; Lizotte, 1978; Carter and Clelland, 1979; Unnever, 1982). Nagel's (1969) survey of court statistics revealed that the poor are less likely to receive suspended sentences and are more likely to receive prison sentences. Thornberry's (1974) study of juvenile court dispositions confirmed Nagel's finding on socio-economic status (SES). Thornberry's results indicated that juveniles with lower SES status received more severe sentences even while the influence of offense and number of prior arrests were held constant.

Marital status of the defendant as a factor of sentencing disparity has been considered by two studies. Martin (1934) found that the court was more lenient with married men over single men and widowed persons over divorced persons. It should be noted, however, that the influence of legally relevant variables were not held constant. A multivariate analysis conducted by Baab and Furgeson (1967) support the findings of Martin. Their results indicated that the court had a tendency to favor married persons over single persons and, additionally, seemed to grant even greater favor to divorced and separated offenders. Their hypothesis for this finding is that the court tends to view whatever crime the divorced or separated defendant committed as being the result of marriage difficulties rather than criminal propensities (Baab and Furgeson, 1967:495-497).

The analysis conducted by Baab and Furgeson also included an evaluation of the educational level of the defendant. Their analysis did not find any significant relationship between education and case disposition.

In summary, prior investigations of sentencing disparity are diverse in methodology and selection of factors evaluated. Results are inconsistent with regard to the identification of factors that account for sentencing disparity. This may be due to the failure of earlier studies to consider the influence of legal variables such as prior arrests and severity of charge. The present study will evaluate a host of factors while controlling for legally relevant variables.

#### Methodology

Data used for this analysis was based on 6,632 defendants booked into the Salt Lake County Jail between October 1, 1980 and March 31, 1981. Data was collected on 129 variables per defendant and includes information on the following categories: socio-economic status, demographic characteristics, financial status and past and present legal involvement. Since the SPSS program eliminates defendants from the analysis that are missing information on any one of the factors entered for analysis the final sample size for the respective groups evaluated was: 229 (using jail time as dependent variable) and 698 (using amount of fine as dependent variable).

Regression analyses were used to conduct the examination. This particular technique was selected because of its suitability to the scaling of the dependent variables and because it permits investigation of each independent variable while controlling for the influence of the other independent variable considered. The results of many earlier studies on sentencing disparity are open to suspicion because statistical techniques were not available that controlled for the influence of independent variables.

The conceptualization of the dependent variable in sentencing disparity research is crucial to theoretical clarity and interpretation of study re-

sults. There are two problems which must be faced in constructing the dependent variable: (1) deciding which of the many sentencing options to choose and (2) how to scale the selected options. For example, the present data set contains information on eight sentence categories: fine, probation, jail, prison, restitution, work project, suspended sentence, other. At face value, no inherent problem is apparent since all categories can be conceived of in terms of interval scaling. The success of this methodology is contingent on a defendant receiving a sentence that is limited to one and only one sentence category (i.e. jail but not jail, fine and probation). The problem does not lie in the number of sentencing options but in ranking the options in a meaningful manner. For example, the present data set includes over 94 different sentencing combinations. As an illustration it is unclear as to whether a sentence of 30 days in jail and a fine of \$500 is more severe than a sentence of 15 days in jail and a fine of \$1,000.00.

In order to overcome this problem, the present study focuses on two categories: days of actual jail sentenced and fine amount. Each factor was used as a separate dependent variable and applied to a common list of independent variables. A brief explanation of independent and dependent variables follows:

#### Independent Variables

ALLDAYS - Addresses the length of "processing time" for each defendant's case. It is coded as the accumulated number of days from the day of arrest to the day of final disposition.

VIOLENT - Refers to violent (coded 1) or non-violent (coded 0) nature of charge against the defendant as suggested by the Uniform Crime Report (FBI).

NCHARGES - Refers to total number of charges defendant was arrested for at time of jail booking.

WEAPON - Refers to weapon related offense (coded 1) or non-weapon offense (coded 0).

POPIN - Population of jail on day of arrest.

ONPP - Refers to defendant's probation or parole status at time of arrest (coded 1 if currently on probation or parole, coded 0 if not on probation or parole).

PRIORS - Measure the occurrence of prior arrests for misdemeanor or felony charges for the defendant since age 18 (coded 1 for arrest, coded 0 for no arrests).

TIMEAREA - Measures the amount of time the defendant has lived in the Salt Lake area (defined to include a 40 mile radius of Salt Lake City).

RELTYPE - The various pre-trial release options from jail are arranged and coded to conform to the requirements of an ordinal level scale. Release (detain) options are coded on a continuum beginning with the least restrictive form of release and ending with the most restrictive status throughout the pre-trial process. The categories and codes used are as follows: (1) non-booking release, (2) own recognizance, (3) judge's own recognizance, (4) supervised release, (5) bond, (6) cash bail, (7) detained-release, (8) detained-released own recognizance, (9) detained-released supervised, (10) detained-released bond, (11) detained-released cash bail, (12) detained throughout pre-trial period.

BAIL - Amount of bail assessed against defendant at time of booking.

F1, F2, J1, J2, J3 - Ranking of judges by groups based on severity of punishment scores for the respective defendant variables. Judge groupings were determined by conducting a series of analysis of variance tests. Results indicated that there was statistically significant differences between judges in reference to the amount of jail time and fine amount meted out by individual judge ( $p < .000$ ) and ( $p < .000$ ). Mean jail times and fine amount given out by the respective judges were computed. Each judge was then assigned to a group based on this score. Group membership was then dummy coded for the purpose of regression analysis.

CHARGE1 - Scaled in accordance with categories under Parts I and II offenses (Uniform Crime Report) and their rank ordered in accordance with the level of offense, as specified in the code. A numerical code was then assigned to each charge or group of charges ranging from 1 (lowest category and offense level) to 74 (highest category and offense level).

RACE - Defendant's race as determined by jail staff. Coded 1 for white and 0 for non-white.

AGE - Defendant's age in years at time of arrest.

SEX - Gender of defendant. Coded 0 for male and 1 for female.

MARITAL - Marital status of defendant at time of arrest. Coded 1 for single, 2 for divorced, separated or widowed and 3 for married.

GROSSPAY - Monthly gross pay of defendant as reported by the defendant during the pre-trial interview. Values range from \$0 to \$20,060.00.

Dependent Variables

JAIL - Days of jail defendant was sentenced to.

FINE - Amount of fine defendant was ordered to pay.

Results

Table 1 represents the initial list of factors with accompanying means and standard deviations considered for the analysis. The zero-order correlations between all independent and dependent variables was examined for evidence of multicollinearity which would distort further statistical results. Since no such problems were apparent, the next procedure was to reduce the extensive list of variables down to a more manageable size. This was accomplished by identifying variables that would serve as proxies for other variables and identifying factors that represent certain theoretical underpinnings.

The final subset of variables with accompanying means and standard deviations is presented in Table 2. The zero-order correlations for the final variables list together with the variable "JAIL" (used as the dependent variable in the subsequent analysis) are presented in Table 3. An examination of the matrix revealed that none of the variable pairs showed correlation coefficients that indicated multicollinearity problems.

Regression analysis was employed on the final subset of variables using the amount of jail time the defendant was sentenced to (JAIL) as the dependent variable. Each of the variables was evaluated for its predictive and explanatory value in relation to the dependent variable.

Table 4 presents the results of the regression analysis. The results show that four of the variables have a statistically significant effect on the amount of time a defendant is sentenced to.

CHARGE (what a defendant was charged with) had the most influence on the amount of time a defendant was sentenced to jail (BETA = .34045). This finding can be interpreted to mean that the amount of time a defendant is sentenced to increases with charge severity. The fact that this factor is

TABLE 1  
Means and Standard Deviations  
for Initial Variable List

Variable	Mean	Standard Deviation
Race	.86	.34
Occupation	4.09	2.41
Income of Defendant	416.52	517.94
Income of Spouse	69.73	229.85
Income from public assistance	38.34	124.97
Other monthly income	30.10	167.88
Grosspay	459.790	502.528
Assets - cash	18.67	19.64
Assets - property	5,674.11	19,686.49
Assets - vehicle	1,810.30	4,106.26
Assets - other	351.86	3,755.79
Assets - total	8,097.15	22,309.96
Payments on house/rent	159.74	239.51
Payments on vehicle	62.36	597.88
Payments on loans	43.19	558.73
Payments on child support	18.45	70.82
Payments - other	151.94	152.92
Total monthly payments	469.57	1,728.52
Sex	.12	.33
Employed	.62	.48
Age	28.67	10.42
Marital status	1.77	.84
Time in area	5.46	1.32
Time employed	3.85	1.88
Bail amount	2,296.48	8,538.05
On probation or parole	.11	.32
Prior arrests	.55	.49
Employed	.67	.46
Reference	.90	.29
Provides support	.45	.49
Phone	.70	.45
Number of charges	1.63	.99

TABLE 1 (continued)

Variable	Mean	Standard Deviation
Attorney type	1.11	.44
Initial plea	18.34	18.38
Popin	368.49	35.55
Popout	362.41	38.34
Alldays	63.52	60.54
Charge	30.35	25.59
Charge reduction	23.45	18.87
Reltype	3.22	2.24
Conviction	18.88	90.56
Jail	47.607	73.545
Fine	189.989	299.356
Violent	.098	.283
Weapon	.057	.232
J1	.611	.489
J2	.233	.417
J3	.070	.255
F1	.297	.457
F2	.234	.423

TABLE 2

Means and Standard Deviations  
for Final Variable List  
with "JAIL" as the Dependent Variable

Variable	Mean	Standard Deviation
ALLDAYS	44.943	52.095
VIOLENT	.089	.283
NCHARGES	1.803	1.048
WEAPON	.057	.232
POPIN	3.738	1.454
ONPP	.165	.336
PRIORS	.710	.419
TIMEAREA	5.094	1.613
RELTYPE	6.633	4.302
BAIL	5.148	2.133
J1	.611	.489
J2	.223	.417
J3	.070	.255
CHARGE	27.105	16.297
JAIL	47.607	73.545
RACE	.780	.414
AGE	29.311	10.468
SEX	.100	.301
MARITAL	1.672	.781
GROSSPAY	459.790	502.528

TABLE 3

Zero-order Correlation for Final Subset of  
Variables with "JAIL" as Dependent Variable

	ALLDAYS	VIOLENT	NCHARGES	WEAPON	POPIN	ONPP	PRIORS	TIMEAREA	RELTYPE	BAIL
ALLDAYS	---	.10	.05	.08	.00	.13	.11	.26	-.16	.40
VIOLENT	.10	---	-.04	.45	-.02	-.06	-.01	-.06	.16	.21
NCHARGES	.05	-.04	---	-.04	.04	-.01	-.03	.08	-.18	-.05
WEAPON	.08	.45	-.04	---	.04	-.04	-.07	-.07	.17	.25
POPIN	.00	-.02	.04	.04	---	-.04	-.15	-.06	-.06	.05
ONPP	.13	-.06	-.01	-.04	-.04	---	.26	.13	.09	.15
PRIORS	.11	.01	-.03	-.07	-.15	.26	---	.256	.06	.17
TIMEAREA	.26	-.06	.08	-.07	-.06	.13	.25	---	-.36	.11
RELTYPE	-.16	.16	-.18	.17	-.06	.09	.06	-.36	---	.15
BAIL	.40	.21	-.05	.25	.05	.15	.17	.11	.15	---
J1	-.05	-.01	.00	.00	.15	-.01	.04	.05	.02	.08
J2	-.03	.02	-.03	.05	-.04	-.02	-.02	.00	.07	-.02
J3	.19	.03	.11	-.06	-.08	.12	.09	.03	-.14	.05
CHARGES	.22	.38	-.20	.44	.00	.09	.08	-.14	.40	.53
JAIL	.33	.17	-.06	.18	.04	.07	.22	.15	.10	.33
RACE	.09	-.18	.02	-.01	.02	.08	-.05	.06	-.05	.15
AGE	-.09	-.06	-.11	-.07	.02	-.01	.05	.11	.40	-.09
SEX	.00	.00	.16	-.08	.15	-.08	-.16	.01	-.05	-.09
MARITAL	.15	-.04	-.05	-.03	.12	.19	.07	.18	-.20	.00
GROSSPAY	.12	-.11	.06	-.09	.12	.01	.02	.21	-.37	-.08

TABLE 3 (Continued)

	J1	J2	J3	CHARGE	JAIL	RACE	AGE	SEX	MARITAL	GROSSPAY
ALLDAYS	-.05	-.03	.19	.22	.33	.09	-.09	-.01	.15	.12
VIOLENT	-.01	.02	.03	.38	.17	-.18	-.06	.00	-.04	-.11
NCHARGES	.00	-.03	.11	-.20	.06	.02	-.11	.16	-.05	.06
WEAPON	.00	.05	-.06	-.06	.18	-.01	-.07	-.08	-.03	-.09
POP IN	.15	-.04	-.08	.00	.04	.02	.02	.15	.12	.12
ONPP	-.01	-.02	.12	.09	.07	.08	-.01	-.08	.19	.01
PRIORS	.04	-.02	.09	.08	.22	-.05	.05	-.16	.07	.02
TIMEAREA	.05	.00	.03	-.14	.15	.06	.11	.01	.18	.21
RELTYPE	.02	.07	-.14	.40	.10	-.05	.04	-.05	-.20	-.37
BAIL	.08	-.02	.05	.53	.33	.15	-.09	-.11	.00	-.08
J1	---	-.67	-.34	.00	-.01	.03	.01	-.03	.05	.02
J2	-.67	---	-.14	.00	.11	.05	.05	-.03	-.02	-.02
J3	-.34	-.14	---	.09	.03	-.10	-.02	.13	.01	.00
CHARGES	.00	.00	.09	---	.40	.00	-.21	-.08	-.14	-.24
JAIL	-.01	.11	.03	.40	---	.08	.03	-.11	.01	-.05
RACE	.03	.05	-.10	.00	.08	---	-.05	-.13	.00	-.04
AGE	.01	.05	-.02	-.21	.03	-.05	---	-.04	.25	.30
SEX	-.03	-.03	.13	-.07	-.11	-.13	-.04	---	.01	.07
MARITAL	.05	-.02	.01	-.14	.01	.00	.25	.01	---	.37
GROSSPAY	.021	-.02	.00	-.24	-.05	-.04	.30	.07	.37	---

TABLE 4

Regression Results for Final Subset of  
Variables with "JAIL" as the Dependent Variable

Variable	MULTR	RSQ	RSQCH	B	BETA
CHARGE	.4062	.1650	.1650	1.5364	.34045
ALLDAYS	.4786	.2291	.0640	.34423	.24383
PRIORS	.4975	.2489	.0198	25.66546	.14607
J2	.5105	.2627	.0138	20.75223	.11766
(CONSTANT)				-72.98834	

significant in predicting "jail time" is well within the realm of what would be expected. One would expect sentenced length to increase in accordance with the severity of the charge.

The second most influential variable on the amount of jail time sentenced to is ALLDAYS (the amount of time that occurred between arrest and disposition) (BETA = .24383). The fact that this variable is significant in its effect on the amount of jail time a defendant is sentenced to indicates that longer jail sentences are associated with longer amounts of processing time that occur between arrest and final disposition.

The reason why this particular time interval should make a significant difference to the amount of jail time sentenced to is unclear. One interpretation of this finding is that cases in which the defendant pleads not guilty which ends in a finding of guilty receive harsher sentences because of the extra court time required to process the case.

Another interpretation of this finding is that the court views the amount of time it takes to process a case as a reflection of the severity of the offense the defendant is being tried for. Thus, serious charges take a longer time to process and defendants are sentenced accordingly.

Whatever the meaning of this finding is, it is apparent that a defendant undertakes a substantial risk in prolonging the adjudication process. Defense counselors would be well advised to move their clients through the system as soon as possible in order to avoid sentencing penalties associated with lengthy case processing time intervals.

The third most influential factor associated with the amount of time a defendant is sentenced to is PRIORS (BETA = .14607). This finding indicates that defendants with prior criminal involvement receive longer jail sentences than defendants without prior criminal involvement. It appears that the

court goes beyond the immediate offense and looks at past criminal justice history in establishing an appropriate sentence for the current offense. While this finding shows that prior arrests are a consideration in amount of jail time sentenced to, the present analysis did not include an evaluation of what type of prior arrests are the most influential in jail sentencing time. One would reasonably expect that the closer the current charge resembles the past criminal involvement the harsher the current sentence would be. However, if the nature of past criminal involvement charges were unrelated to the present case, this would suggest that the court has a tendency to "label" the defendant. This finding points to the need for further research that would clarify the relationship between specific offense history and sentencing.

The fourth most influential variable was J2 (BETA = .11766). This finding indicates that this particular group of judges were significantly related to the amount of jail time defendants are sentenced to. More specifically, this finding indicates that longer amounts of jail time are associated with this particular group of judges. The ultimate meaning of this finding becomes more problematic when considered with the other two groups of judges (J1 and J3) that did not show statistical significance. Since judges were assigned to the respective groups based on the mean jail time they sentenced defendants to, it was expected that those judges with the highest mean jail time scores (J3) would have been most likely to be significantly related to the amount of jail time served. The fact that only the J2 group of judges was significantly related to the amount of jail time defendants were sentenced to may be due to a lack of consistency in the amount of jail time respective judges met out to defendants. In other words, mean jail time may not be an adequate measure of sentencing severity and thus an inappropriate index to base group assignment on. In the absence of data that

clarifies this finding, the most obvious explanation for this finding is that judges do not differ markedly in the amount of jail time defendants are sentenced to. This finding suggests further that whether the process is formal or informal, judges in Salt Lake County adhere to sentencing consistency in the amount of jail time defendants are sentenced to.

As presented in Table 4, the  $R^2$  values indicate that the variables considered as a whole account for .2627 of the variance in the jail sentencing process. Most of the explained variation is due to the CHARGE variable which accounts for .1650 of the variance. While only approximately one fourth of the variation is explained by these variables, the results suggest the importance of variables from the legal and organizational perspectives. The results did not indicate that socio-demographic variables such as age, race sex and income play any significant part in the jail sentencing process.

The second phase of the analysis measures the effects of the final subset of variables on the amount of fine paid by the defendant. The means and standard deviations for the final set of variables using "FINE" as the dependent variable are presented in Table 5. The zero-order correlations for the final subset of variables together with the "FINE" variable are presented in Table 6. An examination of the matrix revealed that none of the variable pairs showed correlation coefficients that indicated multicollinearity and would thus distort further statistical analysis. Table 7 presents the results of the regression analysis using "FINE" as the dependent variable. The results indicate that five of the variables had a statistically significant effect on the amount of fine the court imposed on the defendant.

The most influential variable on the fine amount imposed on the defendant was the amount of bail assessed against the defendant (BAIL) (BETA = .26443). This finding indicates that defendants with high bail amounts pay proportion-

TABLE 5  
Means and Standard Deviations  
for Final Variable List  
with "FINE" as the Dependent Variable

Variable	Mean	Standard Deviation
ALLDAYS	50.987	60.109
VIOLENT	.057	.230
NCHARGES	1.950	1.203
WEAPON	.038	.189
POPIN	3.812	1.445
ONPP	.089	.247
PRIORS	.577	.469
TIMEAREA	5.315	1.410
RELTYP	4.002	2.969
BAIL	4.858	1.987
WEIGHT	8.431	2.678
F1	.297	.457
F2	.234	.423
CHARGE	22.052	14.528
FINE1	189.989	299.356
RACE	.825	.378
AGE	28.105	10.423
SEX	.140	.348
MARITAL	1.719	.809
GROSSPAY	627.923	733.836

TABLE 6

Zero-order Correlations for  
Final Subset of Variables with  
"FINE" as the Dependent Variable

	ALLDAYS	VIOLENT	NCHARGES	WEAPON	POPIN	ONPP	PRIORS	TIMEAREA	RELTYPE	BAIL
ALLDAYS	---	.04	.01	.08	.05	.02	.07	.07	.06	.34
VIOLENT	.04	---	-.03	.44	.03	-.06	-.05	-.11	.13	.22
NCHARGES	.01	-.03	---	-.06	-.01	.01	.14	.11	-.00	-.05
WEAPON	.08	.44	-.06	---	.07	-.00	.03	-.09	.18	.27
POPIN	.05	.03	-.01	.07	---	-.02	-.03	.04	-.06	.01
ONPP	.02	-.06	.01	-.00	-.02	---	.24	.08	.15	.11
PRIORS	.07	-.05	.14	.03	-.03	.24	---	.15	.15	.11
TIMEAREA	.07	-.11	.11	.08	.04	.08	.15	---	-.29	.02
RELTYPE	.06	.13	-.00	.18	-.06	.15	.15	-.29	---	.32
BAIL	.34	.22	-.05	.27	.01	.11	.11	.02	.32	---
F1	-.10	-.10	.03	-.04	.05	-.06	.01	.06	-.08	-.06
F2	.23	.11	-.12	.12	-.05	.05	-.03	-.09	.19	.21
CHARGE	.22	.30	-.16	.34	-.01	.11	.09	-.13	.41	.55
FINE	.20	-.00	-.03	.02	-.03	.12	.07	.01	.19	.34
RACE	.07	-.12	.02	-.07	.00	-.00	-.04	.10	-.08	.06
AGE	.07	-.05	-.08	-.01	.01	-.05	.05	.05	-.07	.00
SEX	-.03	.00	.04	-.05	.02	-.11	-.16	-.00	-.08	-.10
MARITAL	.06	.05	-.01	-.06	.03	.02	.04	.06	-.09	.02
GROSSPAY	.08	-.04	.02	-.03	.10	-.06	-.00	.11	-.20	-.02

TABLE 6 (continued)

	F1	F2	CHARGE	FINE	RACE	AGE	SEX	MARITAL	GROSSPAY
ALLDAYS	-.10	.23	.22	.20	.07	.07	-.03	.06	.08
VIOLENT	-.10	.11	.30	-.00	-.12	-.05	.00	.05	-.04
NCHARGES	.03	-.12	-.16	-.03	.02	-.08	.04	-.01	.02
WEAPON	-.04	.12	.34	.02	-.07	-.01	-.05	-.06	-.03
POP IN	.05	-.05	-.01	-.03	.00	.01	.02	.03	.10
ONPP	-.06	.05	.11	.12	-.00	-.05	-.11	.02	-.06
PRIORS	.01	-.03	.09	.07	-.04	.05	-.16	.04	-.00
TIMEAREA	.06	-.09	-.13	.01	.10	.05	-.00	.06	.11
RELTYPE	-.08	.19	.41	.19	-.08	-.07	-.08	-.09	-.20
BAIL	-.06	.21	.55	.34	.06	.00	-.10	.02	-.02
F1	---	-.35	-.16	-.07	.03	.04	-.01	.00	.08
F2	-.35	---	.30	.29	-.02	-.03	.02	.02	-.07
CHARGE	-.16	.30	---	.28	-.04	-.09	-.03	-.03	-.12
FINE	-.07	.29	.28	---	.05	.01	-.05	.08	-.01
RACE	.03	-.02	-.04	.05	---	.00	-.05	-.01	.01
AGE	.04	-.03	-.09	.01	.00	---	.03	.34	.24
SEX	-.01	.02	-.03	-.05	-.05	.03	---	.07	.03
MARITAL	.00	.02	-.03	.08	-.14	.34	.07	---	.28
GROSSPAY	.08	-.07	-.12	-.01	.01	.24	.03	.28	---

**CONTINUED**

**1 OF 2**

TABLE 7

Regression Results for Final Subset  
of Variables with "FINE" as the Dependent Variable

Variable	MULTR	RSQ	RSQCH	B	BETA
BAIL	.3475	.1207	.1207	39.8306	.26443
F2	.4126	.1702	.0495	150.4853	.21283
VIOLENT	.4240	.1798	.0096	-162.8803	-.12504
CHARGE	.4341	.1867	.0096	2.3429	.11371
MARITAL	.4392	.1929	.0062	29.3270	.07924
(CONSTANT)				-131.5293	

ately higher fines. This is not an unexpected finding since defendants with the most severe charges would concomitantly have high bail amounts. On the other hand, the court may equate a high bail amount met by the defendant as evidence of financial security and assess the fine amount accordingly. This interpretation seems unlikely, however, in view of the fact that the defendant's monthly income was included in the analysis and was not significantly related to the amount of fine the defendant was sentenced to pay. As previously noted, BAIL did not have a statistically significant effect on the amount of jail time imposed on a defendant.

The second most influential variable associated with FINE was F2 (judge group 2). (BETA = .21283). F2 represents judges that had the highest mean score fine amounts. This finding indicates that this particular group of judges meted out harsher fines to defendants as compared to the other respective judge groups. Also implied by this finding is that the other group of judges evaluated (F1) had no statistical effect on amount of the fine levied against the defendant. As noted with the previous finding using JAIL as the dependent variable, the fact that only a single judge group was found to be significant muddles the interpretive meaning of this result. Again, this finding may have resulted from the criteria used to group the judges. The mean fine amount, as similarly considered with the judge variable using JAIL as the dependent variable, may not be an appropriate criteria to group judges by.

The third most influential variable that effected the fine amount was VIOLENT (BETA = -.12504). The negative sign associated with the Beta value indicates that defendants sentenced on non-violent offenses were more likely to receive higher fine amounts than those defendants accused of violent offenses. Intuitively, one might expect just the opposite finding - namely

that higher fines would be given to defendants sentenced for violent (more severe) offenses. This finding may have emerged from the possibility that defendants sentenced on violent offenses are not routinely fined and are thereby more likely to be incarcerated than fined. Thus an analysis of defendants receiving only fines, as is the case with the present analysis, would be most likely to include defendants convicted of non-violent offenses.

The fourth most influential factor in fines received by defendants was CHARGE (BETA = .11371). This finding can be interpreted to mean that the amount of the fine imposed on the defendant increases with the severity of the charge. This finding is not unexpected since the fine schedule is intentionally designed to reflect the severity of the charge. While CHARGE also proved to be a statistically significant factor when JAIL was used as dependent variable, the overall influence of CHARGE was markedly reduced in the sentencing decision when FINE was used as the dependent variable.

The fifth most influential factor in FINE was MARITAL (marital status of the defendant) (BETA = .07924). This finding indicates that greater fine amounts are more likely to be imposed on defendants that are married than defendants that are divorced, separated or single. The imposition of greater fine values on married defendants may reflect the courts tendency to assess the level of fine with perceived ability to pay. Perhaps the court assumes that married defendants have whatever income their spouse's have available and are thus in a position to pay higher fines. In view of this finding, it is interesting to note that neither age or income of the defendant had statistically significant effects on FINE.

No statistically significant effects were found for the following variables: ALLDAYS, NCHARGES, WEAPON, POPIN, ONPP, PRIORS, TIMEAREA, RELTYPE, F1, RACE, AGE, SEX, and GROSSPAY. As noted in the first phase of the analysis

using JAIL as a dependent variable, factors that have traditionally been suspected of having an impact on the sentencing decision such as age, race, sex, and income failed to demonstrate any significant effect on the fine amount imposed on defendants. This analysis should then be considered as evidence against the frequently assumed position that the sentencing process is racially, sexually or economically biased.

R<sup>2</sup> values as presented in Table 7 indicate that the variables considered as a whole account for .1929 for the variance in the fine sentencing process. Most of the explained variation is due to the influence of BAIL (R<sup>2</sup> = .1207) and F2 (R<sup>2</sup> = .0495). The foregoing findings indicate that the factors that are most influential in the sentencing process are predominantly legal and organizational in nature and are not, contrary to past speculation, socio-demographic in nature.

#### SUMMARY

Analyses were conducted to test for evidence of sentencing disparity by using amount of jail time and amount of fine as dependent variable and evaluated with factors from socio-demographic, organizational, legal and extra-legal dimensions.

Results for the analysis using amount of jail time as the dependent variable indicated statistically significant effects for CHARGE, ALLDAYS, PRIORS and J2. No evidence was found to support the notion that the sentencing process is racially, sexually or economically biased. Results for the analysis using the amount of fine as the dependent variable indicated statistically significant effects for BAIL, F2, VIOLENT, CHARGE and MARITAL. As found in the analysis using amount of jail time as the dependent variable, no evidence was found that would support the notion that the sentencing process is racially, sexually or economically biased.

Results indicated that further research is needed to clarify the relationships and interpretation of the following factors to the sentencing process: ALLDAYS (time between arrest and disposition), judges from specific groups (J2, F2), VIOLENT (violent/non-violent offenses) and MARITAL (marital status of the defendant). Overall findings of this sentencing disparity evaluation indicate the need to explore and evaluate non-traditional factors.

Appendix A:

Offenses Included in Data Set

Code Number	Crimes Against Person	Punishment Classification
0105	Murder, 2nd	1 Felony
0110	Manslaughter	2 Felony
0125	Attempted Murder	1 or 2 Felony
0200	Aggravated Kidnapping	Capital or 2 Felony
0205	Kidnapping	3 Felony
0210	Custodial Interference	B Misdemeanor
0215	Unlawful Detention	B Misdemeanor
0300	Sexual Abuse	3 Felony
0310	Forcible Sodomy	2 Felony
0311	Forcible Sodomy/Victim Under 14	1 Felony
0340	Unlawful Sexual Intercourse	1 Felony
0340	Aggravated Sexual Assault	1 Felony
0350	Rape	2 Felony
0351	Rape, Victim Under 14	1 Felony
0355	Attempted Rape	3 Felony
0365	Forcible Sexual Abuse	3 Felony
0450	Aggravated Robbery	1 Felony
0455	Robbery	2 Felony
0470	attempted Robbery	3 Felony
0545	Aggravated Assault by Prisoner	2 Felony
0550	Aggravated Assault	3 Felony
0554	Assault (Battery)	B Misdemeanor
0555	Assault by Prisoner	3 Felony
0576	Harassment	C Misdemeanor
0580	Terror Threat, Felony	3 Felony
0585	Terror Threat, Misdemeanor	B Misdemeanor
0654	Assault on Police Officer	A Misdemeanor
0850	Arson	3 Felony or C Misdemeanor
0855	Aggravated Arson	2 Felony
0865	Causing a Catastrophe	2 Felony or A Misdemeanor
0870	Criminal Mischief	3 Felony or C Misdemeanor
0940	Aggravated Burglary of Dwelling	1 Felony
0945	Burglary of Dwelling	2 Felony

Code Number	Crimes Against Person	Punishment Classification
0950	Burglary of Building	B Misdemeanor
0955	Burglary of Vehicle	A Misdemeanor
0960	Possession of Burglary Tools	B Misdemeanor
0965	Attempted Burglary (Dwelling)	3 Felony
0970	Attempted Burglary (Other)	A Misdemeanor
0975	Attempted Vehicle Burglary	B Misdemeanor
1050	Criminal Trespassing of Dwelling	B Misdemeanor
1055	Criminal Trespassing of Building	A Misdemeanor
1060	Criminal Trespassing	Infraction
1110	Theft (Obtain), Under \$100	B Misdemeanor
1111	Theft (Obtain), Over \$100	A Misdemeanor
1112	Theft (Obtain), Over \$1,000	2 Felony
1113	Theft (Obtain), Over \$250	3 Felony
1114	Theft (Obtain), Firearm	2 Felony
1115	Theft (Obtain), Motor Vehicle	2 Felony
1116	Theft, 2nd Shoplifting	3 Felony
1117	Theft (Obtain), Felony	3 Felony
1119	Other Theft	2 Felony
1220	Theft (Deception), Misdemeanor	B Misdemeanor
1221	Theft (Deception), Felony	2 or 3 Felony
1227	Attempted Theft (Deception), Misdemeanor	A Misdemeanor
1331	Theft (Extortion), Felony	2 or 3 Felony
1440	Theft (Lost Property), Misdemeanor	B Misdemeanor
1441	Theft (Lost Property), Felony	2 or 3 Felony
1550	Theft (Receiving), Under \$100	B Misdemeanor
1551	Theft (Receiving), Over \$100	A Misdemeanor
1552	Theft (Receiving), Over \$1,000	2 Felony
1553	Theft (Receiving), Over \$250	3 Felony
1554	Theft (Receiving), Firearm	2 Felony
1555	Theft (Receiving), Motor Vehicle	2 Felony
1660	Theft (Services), Misdemeanor	B Misdemeanor
1771	Theft (Rental Agreement), Felony	2 or 3 Felony
1850	Forgery (Check), Under \$100	3 Felony
1851	Forgery (Other Writings)	2 Felony
1852	Possession of Forged Writing/Device	A Misdemeanor
1853	Forgery (Check), Over \$100	2 Felony
1854	Attempted Forgery (Check), Over \$100	3 Felony
1855	Attempted Forgery (Check), Under \$100	A Misdemeanor
1856	Forgery (Non-Check)	A Misdemeanor
1861	Fraud, Felony	3 Felony
1950	Bad Check (Under \$100)	B Misdemeanor

Code Number	Crimes Against Person	Punishment Classification
1951	Bad Check (\$100 to \$250)	A Misdemeanor
1952	Bad Check (\$250 to \$1,000)	3 Felony
1953	Bad Check (Over \$1,000)	2 Felony
2050	Fraud Use Credit Card (Under \$1,000)	B Misdemeanor
2051	Fraud Use Credit Card (\$100-\$250)	A Misdemeanor
2052	Fraud Use Credit Card (\$250-\$1,000)	3 Felony
2053	Fraud Use Credit Card (Over \$25,000)	2 Felony
2054	Attempted Fraud Credit Card, Misdemeanor	A Misdemeanor
2055	Attempted Fraud Credit Card, Felony	3 Felony
2056	Theft, Possession of Stolen Credit Card	A Misdemeanor
2098	Fraud Insurance Claim	2 Felony or B Misdemeanor
2110	Possession C/S by Misrepresentation	3 Felony
2111	Make/Utter Forged Script	3 Felony
2120	Possession C/S (Other)	B Misdemeanor
2121	Possession C/S Marijuana	B Misdemeanor
2122	Possession C/S Heroin	B Misdemeanor
2131	Dis/Value C/S Marijuana	3 Felony
2132	Dis/Value C/S Other	3 Felony
2170	Manufacture/Produce/Cult.	B Misdemeanor
2180	Other C/S Act Violation	B Misdemeanor
2250	Bigamy	3 Felony
2260	Criminal Non-Support	3 Felony or A Misdemeanor
2315	Lewdness	B Misdemeanor
2330	Incest	3 Felony
2450	Prostitution	B Misdemeanor
2455	Patronizing Prostitute	C Misdemeanor
2465	Exploiting a Prostitute	3 Felony
2611	Disorderly Conduct	C Misdemeanor
2613	Failure to Dispurse	C Misdemeanor
2650	Telephone Harassment	B Misdemeanor
2705	Allow Vicious Animal at Large	3 Felony or B Misdemeanor
2950	Public Intoxication	C Misdemeanor
3050	Loitering	C Misdemeanor
3250	Distributing Pronographic Materials	A Misdemeanor
3325	Abuse Psychotoxic Chemicals	B Misdemeanor
3510	Unlawful Handling of Explosives	B Misdemeanor

Code Number	Crimes Against Person	Punishment Classification
3610	Possession of Dangerous Weapon/ Restricted Person	3 Felony or A Misdemeanor
3651	Carry Concealed Dangerous Weapon	3 Felony or B Misdemeanor
3655	Carry Loaded Firearm in Vehicle	B Misdemeanor
3660	Threatening Use in Fight	B Misdemeanor
3670	Discharge Firearm From Vehicle	B Misdemeanor
3680	Other Weapons Offense	B Misdemeanor
4130	Other Liquor Law Violations	B Misdemeanor
4152	Prohibited Sale of Alcohol	A Misdemeanor
4153	Illegal Possession of Liquor	B Misdemeanor
4255	Non-Moving Violation (Traffic)	B Misdemeanor
4275	Other Traffic Offense	B Misdemeanor
4280	Failure to Stop at Command, Evading	A Misdemeanor
4351	Driving Under the Influence	B Misdemeanor
4450	Tampering with Motor Vehicle	B Misdemeanor
4454	Possession of Stolen Motor Vehicle	3 Felony
4455	Depriving the Owner	B Misdemeanor
4710	Interference with Public Serv.	B Misdemeanor
4750	Interference with/In Arrest	B Misdemeanor
4760	Obstruction of Justice	2 Felony or B Misdemeanor
4770	Failure to Aid Police Officer	B Misdemeanor
4802	Escape From Prison	2 Felony or
4805	Escape From Jail	B Misdemeanor
4810	Aiding Escape	2 Felony or A Misdemeanor
4820	Providing Contraband to Person in Custody	3 Felony
4825	Fugitive From Justice	2 Felony
4880	Failure to Appear (Traffic)	B Misdemeanor
4885	Failure to Appear (Criminal)	B Misdemeanor
4920	Making Profit of Public Monies	3 Felony
4940	Doing Business Without a License	B Misdemeanor
5015	False/Inconsistent Statement	B Misdemeanor
5020	Written False Statement	B Misdemeanor
5030	False Name to Police	C Misdemeanor
5035	Tampering With Witness	3 Felony
5045	False/Altering Government Record	B Misdemeanor
5050	Impersonating of Officer	B Misdemeanor
5410	Other Criminal Violation	3 Misdemeanor
5510	Contributing to Delinquency of Minor	3 Misdemeanor

## APPENDIX B:

Ranges of Possible Punishment  
by Levels of OffensesSentencing

76-3-201. Sentences or combination of sentences allowed - Civil penalties.

1. Within the limits prescribed by this chapter, a court may sentence a person adjudged guilty of an offense to any one of the following sentences or combination of such sentences:

- A. To pay of fine; or
- B. To removal from and/or disqualification of public or private office; or
- C. To probation; or
- D. To imprisonment; or
- E. To death.

2. This chapter shall not deprive a court of authority conferred to law to forfeit property, dissolve corporation, suspend, or cancel a license or permit removal of a person from office, cite for contempt, or impose any other civil penalty. A civil penalty may be included in a sentence.

76-3-203. Felony conviction - Indeterminate term of imprisonment - Increase of sentence if firearm used. A person who has been convicted of a felony may be sentenced to imprisonment for an indeterminate term as follows:

1. In the case of a felony of the first degree, for a term at not less than five years and which may be for life; but if the trier of fact finds a firearm or a facsimile or the representation of a firearm was used in the commission or furtherance of the felony, the court shall additionally sentence the person convicted for a term of one

- year to run consecutively and not concurrently; and the court may additionally sentence the person convicted for an indeterminate term not to exceed five years to run consecutively and not concurrently.
2. In the case of a felony of the second degree, for a term at not less than one year nor more than 15 years; but if the trier of fact finds a firearm or a facsimile or the representation of a firearm was used in the commission or furtherance of the felony, the court may additionally sentence the person convicted for a term of one year to run consecutively and not concurrently; and the court may additionally sentence the person convicted for an indeterminate term not to exceed five years to run consecutively and not concurrently.
  3. In the case of a felony of the third degree, for a term not to exceed five years; but if the trier of fact finds a firearm or a facsimile or the representation of a firearm was used in the commission or furtherance of the felony, the court may additionally sentence the person convicted for an indeterminate term not to exceed five years to run consecutively and not concurrently.
  4. Any person who has been sentenced to a term of imprisonment for a felony in which a firearm was used or involved in the accomplishment of the felony shall, in addition to any other sentence imposed, be sentenced to an indeterminate term to be not less than five nor more than ten years to run consecutively and not concurrently.

76-3-204. Misdemeanor conviction - Term of imprisonment. A person who has been convicted of a misdemeanor may be sentenced to imprisonment as follows:

1. In the case of a class A misdemeanor, for a term not exceeding one year.

2. In the case of a class B misdemeanor, for a term not exceeding six months.
3. In the case of a class B misdemeanor, for a term not exceeding ninety days.

76-3-205. Infraction conviction - Fine, forfeiture and disqualification.

1. A person convicted of an infraction may not be imprisoned but may be subject to a fine, forfeiture, and disqualification or any combination.
2. Whenever a person is convicted of an infraction and no punishment is specified, the person may be fined as for a class C misdemeanor.

76-3-206. Capital felony - Death or life imprisonment.

1. A person who has been convicted of a capital felony shall be sentenced in accordance with Section 76-3-207, and sentence shall be death or life imprisonment as the court of jury, in accordance with this section, shall determine.
2. The judgment of conviction and sentence of death shall be subject to automatic review by the Utah Supreme Court within 60 days after certification by the sentencing court of the entire record unless time is extended an additional period not to exceed 30 days by the Utah State Supreme Court for good cause shown. Such review by the Utah Supreme court shall have priority over all other cases and shall be heard in accordance with rules promulgated by the Utah Supreme Court.

76-3-301. Fines of persons. A person who has been convicted of an offense may be sentenced to pay a fine not exceeding:

1. \$10,000 when the conviction is of a felony of the first degree or second degree.
2. \$5,000 when the conviction is of a felony of the third degree.
3. \$1,000 when the conviction is of a class A misdemeanor.
4. \$299 when the conviction is of a class B or C misdemeanor or infraction.
5. Any higher amounts specifically authorized by statute.

This section shall not apply to a corporation, association, partnership, government or government instrumentality.

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Appendix C:  
Information Contained in the Data Set

The following list reflects broad categories of variables within the data set which were collected from the following data sources:

- A Bookin sheet
- B Jail Docket
- C Pre-trial Interview
- D Court Records (supplied by Justice of Peace courts, Fifth Circuit Court and Third District Court)
- E Local Police Departments
- F Utah State Criminal Cide
- G Bureau of Criminal Identification, Federal Bureau of Investigation, Salt Lake County Sheriff's Department, and Salt Lake City Police Department
- H U.S. Post Office

Demographics:

<u>Variable</u>	<u>Source</u>
Race	A
Sex	A
Date of Birth	A
Marital Status	C
Student/Non-Student Status	C
Years of Education	C
Occupation of Defendant	C
Supporting Anyone; if yes whom	C
Weight	A
Height	A

Local Residency:

<u>Variable</u>	<u>Source</u>
Time in Area	C
Zipcode of Home Address	H
Length of Time at Address	C
Phone	C
Type of Residence	C
Defendant Lives With	C
Defendant Employed	C
Length Employed	C
Reference Listed	C
Information Verified	C

Arrest Information:

<u>Variable</u>	<u>Source</u>
Date of Arrest	A
Time Booked in the Jail	B
Date of Release	B
Time Booked Out of the Jail	B
Agency of Arrest (25 Agencies)	A
Arresting Officer's Name	A
Age of Arresting Officer	E
Length of Time on Force	E
Head Count of Jail Population of Date of Arrest	B
Head Count of Jail Population of Date of Release	B

Legal Characteristics:

<u>Variable</u>	<u>Source</u>
Attorney Type	C
Charge (C Misd. thru 1st degree felony)	A
Level of Offense	F
Violent/Non-violent Crime	F
Weapon/Non-weapon Crime	A
Number of Current Charges	A
Currently of Probation or Parole	C
Open Cases Pending	C
Prior Arrests	G
Number of Prior Misdemeanor Arrests	G
Number of Prior Felony Arrests	G
Number of Prior Failures to Appear	G
Number of Prior Weapons Charges	G
Number of Pre-trial Interview Points	G
Decision by Pre-Trial Services	C
Amount of Bail	A

Financial Information:

<u>Variable</u>	<u>Source</u>
Monthly Income:	C
Defendant	
Defendant's Spouse	
Public Assistance	
Other	
Total	

Variable

Source

Assests:	C
Cash/Bank	
Property Value	
Vehicle Value	
Other	
Total	
Monthly Payments:	C
House/Rent	
Vehicle(s)	
Loan(s)	
Alimony/Child Support	
Other Bills	
Total	
Balance Owing:	C
House/Rent	
Vehicle(s)	
Loan(s)	
Alimony/Child Support	
Other Bills	
Total	

Dispositional Information:

<u>Variable</u>	<u>Source</u>
Charge Reduced to	D
Plea	D
Judge Identification	D
Final Disposition	D
Date of Final Disposition	D

Sentencing Information:

<u>Variable</u>	<u>Source</u>
Sentence	
If fine, amount	D
If fine suspended, amount suspended	
If probation, how many months	
If probation suspended, how many months suspended	
If jail, how many years	
If jail suspended, how many days suspended	
If prison, how many years	
If prison suspended, length in years suspended	
If restitution, how much	
If work project, how many days	

Appendix D

Codes and Range of Values for Variables in Data Set

Variable	Description	Range
		Min.---Max.
NAME ID	Identification Number of Defendant	
RACE	Race 0 = Non-White 1 = White	0-----1
SEX	Sex 0 = Male 1 = Female	0-----1
DOB	Date of Birth	1900-----1963
MARITAL	Marital Status 1 = Never married 2 = Divorced, Separated, Widowed 3 = Married	1-----3
ATTORNEY	Attorney 1 = Does Not Have One 2 = Public Defender 3 = Private Attorney	1-----3
CHARGE	Charge (see attached sheet for codes)	105-----5020
OFFENSE	Level of Offense 1 = C Misd. 2 = B Misd. 3 = A Misd. 4 = 3 Felony 5 = 2 Felony 6 = 1 Felony 7 = Capital	1-----7
VIOLENT	Charge Is: 0 = Non-Violent 1 = Violent	0-----1
WEAPON	Charge Is: 0 = Non-Weapon 1 = Weapon	0-----1
NCHARGES	Number of Charges	1-----13

Variable	Description	Range
		Min.---Max.
ONPP	On Probation/Parole 0 = No 1 = yes	0-----1
OPENCASE	Open Case(s) 0 = No 1 = yes	0-----1
PRIORS	Prior Arrests 0 = No 1 = Yes	0-----1
MISDARR	Number of Prior Misdemeanor Arrests	0-----32
FELARR	Number of Prior Felony Arrests	0-----12
FTAS	Number of Prior Fail to Appears	1-----14
WEAPARR	Number of Prior Weapon Charges	1-----16
TIMEARR	Time in Area 1 = 1-15 days 2 = 16 days-3 months 3 = 4-6 months 4 = 7-9 months 5 = 10-12 months 6 = 12 months or more	1-----6
ZIPCODE	Zipcode of Home Address	81101-----84901
TIMEADD	Length of Time at Address 1 = 0-15 days 2 = 16 days-3 months 3 = 4-6 months 4 = 7-9 months 5 = 10-12 months 6 = 12 months or more	1-----16
PHONE	Phone 0 = No 1 = Yes	0-----1
TYPRES	Type of Residence 0 = Renting 1 = Owns or Buying 2 = Living With	0-----1

Variable	Description	Range
		Min.---Max.
LIVES	Defendant Lives With 0 = No One; Lives Alone 1 = Spouse 2 = Other	0-----2
EMPLOYED	Defendant Employed 0 = No 1 = Yes	0-----1
LEMPLOY	Length Employed 1 = 1-15 days 2 = 16 days-3 months 3 = 4-6 months 4 = 7-9 months 5 = 10-12 months 6 = 12 months or more	1-----6
STUDENT	Defendant Is a Student 0 = No 1 = yes	0-----1
LSTUD	If Student, What Level	10-----17
JOB	Occupation of Defendant 1 = Clerical and Related Workers 2 = Craftsmen, Foremen and Related 3 = Laborers 4 = Operatives and Related 5 = Private Household Workers 6 = Professional and Technical 7 = Proprietors, Managers & Officials 8 = Sales Workers 9 = Service Workers 10 = Other (see attached sheet for description)	1-----10
SUPPORT	Supporting Anyone Other Than Yourself 0 = No 1 = Yes	0-----1
SUPWHOM	If Yes, Whom 1 = Spouse 2 = Children 3 = Both Spouse and Children 4 = Other	1-----4
REFER	Reference Listed 0 = No 1 = Yes	0-----1

Variable	Description	Range
		Min.---Max.
VERIFIED	Information Verified 0 = No 1 = Yes	0-----1
POINTS	Number of Points Earned On Pre-trial Release	10-----13
DECPTS	Decision by Pre-Trial Services 1 = No Release 2 = Own Recognizance 3 = Supervised Release 4 = Pending 5 = Judge's Release 6 = Divert	1-----6
BAIL	Amount of Bail	\$0-----\$100,000
DOARR	Date of Arrest	10/01/80 - 3/31/81
BOODEDIN	Time Booked In	0001-----2356
DOREL	Date of Release	10/01/80 - 8/31/81
BOOKOUT	Time Booked Out	0001-----2359
AGENCY	Agency of Arrest	1-----15
POLICE	Arresting Officer's Name ID	1001-----25002
RELTYPE	Type of Release 1 = Own Recognizance 2 = Bond 3 = Cash Bail 4 = Judge's OR 5 = Nonbooking Release 6 = Detained 7 = Supervised Release 8 = Detain OR 9 = Detain Bond 10 = Detain Cash 11 = Detain Judge's OR 12 = Detain Supervised Release	1-----12
POPIN	Head Count of Jail Population Date of Arrest	287-----450
POPOUT	Head Count of Jail Population Date of Release	287-----450

Variable	Description	Range
		Min.---Max.
INCOMDEF	Monthly Income of Defendant (all amounts rounded to nearest dollar)	0-----9,500
INCOMSPO	Monthly Income of Defendant's Spouse	0-----6,000
INCOMPUB	Monthly Income From Public Assistance	0-----1,673
INCOMOTH	Monthly Income From Other Sources	0-----20,000
INCOMTOT	Total Family Monthly Income	0-----32,000
ASCAH	Cash/Bank Assets	0-----80,000
ASPROR	Assets - Property Value	0-----330,000
ASVEH	Assets - Vehicle Value	0-----135,000
ASOTH	Assets - Other	0-----85,000
ASTOT	Total Value of Assets	0-----50,737
PAYHOUSE	Monthly Payments on House/Rent	0-----55,000
BALOHR	Balance Owning on House/Rent	0-----100,000
PAYVEH	Monthly Payments on Vehicle(s)	0-----1,600
BALOVEH	Balance Owning on Vehicle(s)	0-----62,000
PAYLOANS	Monthly Payments on Loan(s)	0-----18,200
BALOLOAN	Balance Owning on Loans(s)	0-----74,000
PAYCHILD	Monthly Payment on Alimony/Child Support	0-----1,050
BALCHILD	Balance Owning on Alimony/Child Support	0-----12,000
PAYOTH	Monthly Payments on Other Bills	0-----2,000
BALOTH	Balance Owning on Other Bills	0-----40,000
PAYTOT	Monthly Payments - Total	
BALTOT	Balance Owning - Total	

Variable	Description	Range
		Min.---Max.
REDUCED	Charges Reduced To (see attached codes)	110-----4880
PLEA	Plea on Charge 1 = Nolo Contendere 2 = Not Guilty 3 = Guilty 4 = COP to Not Guilty 5 = COP to Guilty	1-----5
JUDGE1	Judge Identification Number of Last Court Appearance (see attached code sheet)	1-----99
DATE1	Date of Final Disposition on First Charge	1/01/80 - 9/30/81
DISPOS	Final Disposition 1 = Dismissed 2 = Not Guilty/Acquitted 3 = Guilty 4 = No complaint 5 = Plead to Reduced Charge 6 = Diverted 7 = FTA 8 = MIA 9 = No Action 0 = Continued	0-----9

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**END**