PROSECUTORIAL AND JURY DECISION-MAKING IN POST-*FURMAN* TEXAS CAPITAL CASES

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INTRODUCTION

Prosecutors' decisions to charge homicide offenders with capital murder should be based on legally relevant considerations.[1] Juries' decisions[2] to sentence defendants in capital murder trials to death should also be based on legal criteria.[3] However, empirical studies have consistently shown that both decisions are often based on factors that are not legally relevant.[4] These extra-

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1. *See, e.g.*, McClesky v. Kemp, 481 U.S. 279, 309 n.30 (1987) ("prosecutorial discretion cannot be exercised on the basis of race"); *see also* United States v. Batchelder, 442 U.S. 114, 125 (1979) ("Selectivity in the enforcement of criminal laws is, of course, subject to constitutional restraints.").

2. This study focuses on the role of jury discretion in the sentencing process because Texas law provides that the sentencing determination of the jury is final. *See infra* text accompanying notes 36-39; *cf.* Proffitt v. Florida, 428 U.S. 242 (1976) (upholding constitutionality of Florida sentencing scheme, in which jury's sentencing determination is advisory and judge may impose death despite a jury's recommendation of life imprisonment).

3. *See, e.g.*, Maynard v. Cartwright, 486 U.S. 356, 362 (1988) ("the channeling and limiting of the sentencer's discretion in imposing the death penalty is a fundamental constitutional requirement for sufficiently minimizing the risk of wholly arbitrary and capricious action").

4. *See generally infra* Part III (discussing the literature).

legal factors include offender and victim characteristics such as race, age, and sex. The purpose of this study is to determine the influence of both legally relevant and extra-legal factors on prosecutorial and jury decisions in Texas capital cases from 1974 to 1988.

The Article begins with a discussion of the judicial abolition of capital punishment and its reimplementation by state legislatures during the 1970s. The statutes which have emerged during the post-*Furman v. Georgia*[5] period of capital punishment reimplementation are discussed with special emphasis on the Texas statute enacted in 1973. Scholarly evidence of prior discrimination in capital punishment is then summarized. Next, the Methods and Analysis sections set forth the procedures used in this study to determine the effects of various legal and extra-legal factors on prosecutorial and jury decision-making.

Findings from this study indicate that the following legal factors increased the likelihood that a prosecutor would prosecute a homicide arrestee for capital murder:[6] 1) the presence of multiple homicide victims; 2) homicides involving rape; and 3) homicides of strangers.[7] The extra-legal factor of the victim's race was also found to influence the decision to prosecute capital murderers with the result that homicide cases involving white victims were more likely to result in conviction.[8] In addition, juries sentenced convicted capital murderers to death more often when the murderer had prior criminal convictions and had killed multiple victims.[9] In less serious cases, the race of victims and offenders was found neither to exert any influence upon sentencing nor to increase in influence upon conviction and sentencing.[10]

I.
JUDICIAL ABOLITION AND LEGISLATIVE RE-IMPLEMENTATION

The first substantive challenge to capital punishment based upon racial discrimination occurred in 1971.[11] In California, as in other death penalty states, juries were not given instructions as to when the death penalty should be imposed. Instead, judges accorded juries broad discretion to impose the death penalty or some lesser sentence in first-degree murder trials.[12] Petitioners in *McGautha* contended that this discretion violated the due process clause of the fourteenth amendment.[13] In a 6-3 decision, the United States Supreme

5. 408 U.S. 238 (1972).

6. This study finds that the enumerated legal factors increased a homicide arrestee's chance of being convicted of capital murder. Conviction can be used as a rough measure of prosecutorial discretion since it is rare that persons charged with capital murder are not convicted. *See infra* p. 758.

7. *See infra* pp. 767.

8. *See id.*

9. *See infra* pp. 772-74.

10. *See infra* pp. 772.

11. McGautha v. California, 402 U.S. 183 (1971).

12. *Id.* at 185.

13. *Id.* at 196.

Court decided that any attempt to guide this discretion by identifying and specifying death cases before trial was impossible; each case presented unique circumstances.[14] Writing for the majority, Justice Harlan stated:

> We find it quite impossible to say that committing to the untrammelled discretion of the jury the power to pronounce life or death in capital cases is offensive to anything in the Constitution.[15]

During the same time period, however, the death penalty was declared unconstitutional in two other cases. First, in 1970, the Fourth Circuit held that the death penalty was a "disproportionate" sentence to the crime of rape and, therefore, cruel and unusual in violation of the eighth amendment.[16] Second, in 1972, the California Supreme Court held that capital punishment violated "evolving standards of decency," thus constituting cruel and unusual punishment.[17]

Finally, in the 1972 case *Furman v. Georgia*,[18] three of the majority justices from the *McGautha* court altered their conclusions. In this 5-4 decision, which elicited nine separate opinions, Justices White, Stewart, and Douglas, the three swing justices, concluded that capital punishment did not violate the eighth amendment per se. Nevertheless, they found that the failure to guide jury discretion led to arbitrary and discriminatory sentencing, making capital punishment as then imposed unconstitutional in violation of the eighth and fourteenth amendments.[19] Justice Stewart concluded that "the Eighth and Fourteenth Amendments cannot tolerate the infliction of a sentence of death under legal systems that permit this unique penalty to be so wantonly and freakishly imposed."[20] Justice Douglas echoed this sentiment and stated "[u]nder these laws, no standards govern the selection of the penalty."[21] Justices Brennan and Marshall, the two other justices who made up the majority, reasoned on eighth amendment grounds that the death penalty was cruel and unusual, because it violated the "evolving standards of decency" in a "maturing society."[22]

Following *Furman*, state legislatures introduced new death penalty statutes, often without adequate regard for constitutional issues.[23] By 1976, thirty-five states had re-enacted capital punishment.[24] Two types of statutes

14. *Id.* at 204.
15. *Id.* at 207.
16. Ralph v. Warden, Md. Penitentiary, 438 F.2d 786 (4th Cir. 1970), *cert. denied*, 408 U.S. 942 (1972).
17. People v. Anderson, 6 Cal. 3d 628, 493 P.2d 880, 100 Cal. Rptr. 152 (1972).
18. 408 U.S. 238 (1972).
19. *Id.* at 306 (Stewart, J., concurring); *id.* at 240 (Douglas, J., concurring); *id.* at 310 (White, J., concurring).
20. *Id.* at 310 (Stewart, J., concurring).
21. *Id.* at 253 (Douglas, J., concurring).
22. *Id.* at 257 (Brennan, J., concurring); *id.* at 314 (Marshall, J., concurring).
23. *See* Ehrhardt & Levinson, *Florida's Response to Furman: An Exercise in Futility?*, 64 J. CRIM. L. & CRIMINOLOGY 10 (1973).
24. Gregg v. Georgia, 428 U.S. 153, 179 (1976).

were created to resolve the problem of excessive juror discretion that had resulted in arbitrary and discriminatory death sentences. One type, mandatory statutes, totally eliminated discretion from the sentencing decision. Conviction for a homicide involving particular circumstances (*e.g.*, during the course of a felony; killing of a police officer) carried an automatic death sentence. The Court struck down these statutes because they precluded juries from considering mitigating circumstances and evidence.[25]

The second type of statute provided guided discretion, and was upheld in the 1976 cases of *Gregg v. Georgia*,[26] *Proffitt v. Florida*,[27] and *Jurek v. Texas*.[28] The Court considered the guided discretion statutes as proof that the death penalty did not violate contemporary standards of decency.[29] The Court reasoned that prosecutorial discretion can be guided by the facts of the case and that juror discretion can be limited by carefully drawn statutes so that capital punishment violates neither the fourteenth amendment right to equal protection nor the eighth amendment prohibition against arbitrary punishment.[30]

In Georgia, the new law limits capital punishment to a specified range of offenses. In addition, at least one statutory aggravating factor must exist before a jury can impose a death sentence. The Georgia statute provides for bifurcated trial proceedings to determine guilt and punishment, and an automatic state supreme court review of death sentences to determine if the sentence imposed was arbitrary or disproportionate in comparison to similar cases.[31] In *Proffitt*, the United States Supreme Court relied upon the existence of similar procedures in upholding the Florida capital punishment statute. The Florida statute, however, differs slightly from the Georgia one. In Florida, the jury weighs aggravating and mitigating circumstances and recommends a sentence to the judge. The judge then issues the final sentence, leaving little credence to charges of arbitrariness and discrimination by the jury.[32]

II.
THE "ALMOST" MANDATORY TEXAS CAPITAL STATUTE

Following *Furman*, Texas rushed to enact a new capital punishment statute. To limit unconstitutional levels of discretion, the Sixty-Third legislature passed House Bill 200, which became effective on June 14, 1973.[33] The statute restricts capital punishment to offenders who knowingly or intentionally com-

25. Roberts v. Louisiana, 428 U.S. 325 (1976); Woodson v. North Carolina, 428 U.S. 280 (1976).
26. 428 U.S. 153 (1976).
27. 428 U.S. 242 (1976).
28. 428 U.S. 262 (1976).
29. *Gregg*, 428 U.S. at 179-81 (opinion of Stewart, Powell, and Stevens, J.J.).
30. *Id.* at 193-95.
31. *Id.* at 196-98.
32. *Proffitt*, 428 U.S. at 251-53.
33. *See* Kuhn, *House Bill 200: The Legislative Attempt to Reinstate Capital Punishment in Texas*, 11 HOUS. L. REV. 410 (1974).

mit murder in one of six circumstances.[34] The six circumstances are:

> 1. the person murders a peace officer or fireman who is acting in the lawful discharge of an official duty and who the defendant knows is a peace officer or fireman;
> 2. the person intentionally commits the murder in the course of committing or attempting to commit kidnapping, burglary, robbery, aggravated sexual assault [*i.e.*, forcible rape] or arson;
> 3. the person commits the murder for remuneration or the promise of remuneration or employs another to commit the murder for remuneration or the promise of remuneration;
> 4. the person commits the murder while escaping or attempting to escape from a penal institution;
> 5. the person, while incarcerated in a penal institution, murders another who is employed in the operation of the penal institution; or
> 6. the person murders more than one person: (A) during the same criminal transaction; or (B) during different criminal transactions but the murders are committed pursuant to the same scheme or course of conduct.[35]

Under the statute, when a defendant is found guilty of capital murder and at least one of the circumstances exists, a punishment hearing is held. In the punishment hearing, jurors must address two (or three) questions:

> 1. whether the conduct of the defendant that caused the death of the deceased was committed deliberately and with the reasonable expectation that the death of the deceased would result;
> 2. whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society; and
> 3. if raised by the evidence, whether the conduct of the defendant in killing the deceased was unreasonable in response to the provocation, if any, by the deceased.[36]

If the jury unanimously answers "yes" to all of the questions, the judge must impose a death sentence.[37] A negative answer to any question by a minimum of ten jurors results in automatic life imprisonment.[38] Texas law also provides for a mandatory review by the Court of Criminal Appeals.[39]

In 1976, the United States Supreme Court upheld the constitutionality of the new statute in *Jurek v. Texas*.[40] The Court found that Texas had guided

34. TEX. PENAL CODE ANN. § 19.03 (Vernon 1989).
35. *Id.* The sixth circumstance was added in 1985. *See* 1985 Tex. Gen. Laws ch. 44 § 1.
36. TEX. CODE CRIM. PROC. ANN. § 37.071(b) (Vernon 1981).
37. *Id.* §§ 37.071(d)(1), 37.071(e).
38. *Id.* §§ 37.071(d)(2), 37.071(e).
39. *Id.* § 37.071(f).
40. 428 U.S. 262 (1976).

juror discretion by limiting the class of murders punishable by death.[41] However, the Texas statute differs from the Georgia and Florida statutes in one important respect: while jurors in Georgia and Florida are explicitly instructed to consider any mitigating factors, jurors in Texas are not. However, the Court held that Question Two, regarding future dangerousness, allows jurors to consider mitigating factors.[42] The Court also dismissed the claim that it is impossible to predict future behavior and that Question Two is so vague as to be meaningless, noting:

> Prediction of future criminal conduct is an essential element in many of the decisions rendered throughout our criminal justice system. The task that a Texas jury must perform in answering the statutory question in issue is thus basically no different from the tasks performed countless times each day throughout the American system of criminal justice.[43]

Justice White in his concurrence noted that,

> The issues posed in the sentencing proceeding have a common-sense core of meaning and that criminal juries should be capable of understanding them.[44]

Question Two has evoked much concern and legal opinion. First, observers have contended that the language of the statute encourages the use of expert psychiatric witnesses to predict future dangerousness.[45] For example, in *Barefoot v. Estelle* a psychiatrist testified that he was able to predict "within reasonable psychiatric certainty" or "one hundred percent and absolute certainty" that the defendant would commit criminal acts of violence that would constitute a continuing threat to society.[46] In ruling on an appeal based in part upon the potentially prejudicial effect of such testimony, the United States Supreme Court concluded that this psychological testimony might un-

41. *Id.* at 268-76 (opinion of Stewart, Powell, and Stevens, J.J.).

42. *Id.* at 272-73.

43. *Id.* at 275-76.

44. *Id.* at 279 (White, J., concurring).

45. *See* Applebaum, *Hypotheticals, Psychiatric Testimony, and the Death Sentence*, 12 BULL. AM. ACAD. PSYCHIATRY & L. 169 (1984) (criticizing the ability of psychiatrists to predict future dangerousness without having examined the defendant); Bonnie, *Psychiatry and Death Penalty: Emerging Problem in Virginia*, 66 VA. L. REV. 167 (1980) (analyzing the uses and limits of psychiatric testimony in capital cases); Dix, *Expert Prediction Testimony in Capital Sentencing: Evidentiary and Constitutional Considerations*, 19 AM. CRIM. L. REV. 1 (1981) (discussing the inaccuracy of psychiatric predictions of future dangerousness); Ewing, *"Dr. Death" and the Case for an Ethical Ban on Psychological Predictions of Future Dangerousness in Capital Sentencing Proceedings*, 8 AM. J.L. & MED. 407 (1983) (discussing ethical considerations of psychiatric predictions of future dangerousness); Gordon, *Crystal-balling death?*, 30 BAYLOR L. REV. 35 (1978) (criticizing psychiatric testimony in Texas capital cases); Worrell, *Psychiatric Prediction of Dangerousness in Capital Sentencing: The Quest for Innocent Authority*, 5 BEHAV. SCI. & L. 433 (1987) (stating that the acceptance of predictions of future dangerousness by legislatures and courts is an inadequate attempt to satisfy society's desire for expert authority in capital cases).

46. Barefoot v. Estelle, 463 U.S. 880, 922 (1983).

fairly influence jurors, but the Court was not persuaded that the testimony was "almost entirely unreliable."[47] The Court upheld the death sentence even though the state's psychiatrist had never actually examined the defendant. Instead, the state's psychiatrist used a "hypothetical" which involved the psychiatrist making a determination from the prosecutor's reading of the defendant's prior record and details of the instant offense.[48]

This type of expert testimony is common in Texas capital trials, where psychiatrists often make determinations of future dangerousness based solely upon hypotheticals. One psychiatrist, Dr. Grigson (the psychiatrist who testified in *Barefoot* and has earned the nickname of "Dr. Death"), has testified in an estimated one-third of the Texas capital trials under the new sentencing scheme. His testimony reads like a script from case to case and there is a growing entourage of Grigson-like psychiatrists acting as hired guns for the state.[49]

Second, commentators have noted the inability of Question Two to adequately allow for the consideration of mitigating factors, making the statute constitutionally infirm in violation of the eighth and fourteenth amendments.[50] The Supreme Court recognized that juries are unable to "consider and give effect to all" mitigating evidence by answering the special questions.[51] Thus, the Supreme Court has stated that juries must be allowed to consider mitigating factors such as mental retardation and childhood abuse.[52] At the same time, the judge is not required to instruct the jury to consider mitigating circumstances (*e.g.*, good prison behavior) outside of Questions One and Two.[53] The Texas statute is considered "almost mandatory" because Ques-

47. *Id.* at 899.

48. *See* Curran, *Uncertainty in Prognosis of Violent Conduct: The Supreme Court Lays Down the Law*, 310 NEW ENG. J. MED. 1651 (1984) (criticizing *Barefoot v. Estelle*); Green, *Capital Punishment, Psychiatric Experts, and Predictions of Dangerousness*, 13 CAP. UNIV. L. REV. 533 (1984) (discussing the unreliability of psychiatric testimony in capital cases); Levine, *The Adversary Process and Social Science in the Courts:* Barefoot v. Estelle, 12 J. PSYCHOLOGY & L. 147 (1984) (arguing that the adversarial process increases the unreliability of psychiatric testimony, despite the Court's contrary findings in *Barefoot v. Estelle*).

49. Marquart, Ekland-Olson & Sorensen, *Gazing Into the Crystal Ball: Can Jurors Accurately Predict Future Dangerousness in Capital Cases?*, 23 LAW & SOC. REV. 449 (1989) [hereinafter *Gazing Into the Crystal Ball*].

50. *See* Black, *Due Process for Death:* Jurek v. Texas *and Companion Cases*, 26 CATH. U.L. REV. 1 (1976) (consideration of future dangerousness is vaguely worded in statute); Davis, *Texas Capital Sentencing Procedures: The Role of the Jury and the Restraining Hand of the Expert*, 69 J. CRIM. L. & CRIMINOLOGY 300 (1978) (jurors are not properly guided in determining future dangerousness and in taking mitigating factors into consideration); Dix, *Administration of the Texas Death Penalty Statute: Constitutional Infirmities Related to the Prediction of Dangerousness*, 55 TEX. L. REV. 1343 (1977) (jury is not adequately guided in considering dangerousness issue and may take into account factors not related to dangerousness); Scofield, *Due Process in the United States Supreme Court and the Administration of the Texas Capital Murder Statute*, 8 AM. J. CRIM. L. 1 (1980) (whether defendant should live or die rests on Question Two, which is ambiguous).

51. Penry v. Lynaugh, 492 U.S. 302, 322 (1988).

52. *Id.* at 323.

53. Franklin v. Lynaugh, 487 U.S. 164, 177-80 (1988).

tion Two is the only one allowing for individualized consideration.

Studies have shown Question Two to be the difference between life and death, since Questions One and Three are rarely answered in the negative.[54] One study found that of the 126 convicted capital murderers receiving life sentences at the punishment phase of Texas capital trials from 1974-1988, the jury answered Question One affirmatively in 76% of the cases, finding the acts to be deliberate. Question Three, whether the killing was an unreasonable response to victim provocation, was raised in only one-fourth of the cases, and answered affirmatively in all but three. Question Two was answered affirmatively in only nineteen of the 126 cases (15%), while the jury answered negatively in eighty-five cases (67%) and deadlocked in twenty-two cases (17%). The life-death decision in Texas rests squarely on Question Two, future dangerousness.[55]

While Question Two offers juries the ability to consider mitigating and aggravating factors, this discretion is not structured. The discretion allowed by Question Two also raises the possibility that the discretion will be abused and that jury decisions may be arbitrary or discriminatory.

In addition, the Texas death penalty statute may permit a level of discretion on the part of state prosecutors that violates the Constitution. For example, in one case, a prosecutor charged the defendant with capital murder (he has since been executed) but offered the defendant's companion probation in return for her testimony against the defendant.[56] The United States Supreme Court declined to grant certiorari, but Justices Brennan and Marshall dissented from the Court's decision not to review the case, stating:

> The selection process for the imposition of the death penalty does not begin at trial; it begins in the prosecutor's office. His decision whether or not to seek capital punishment is no less important than the jury's. . . . [T]he decisions whether to prosecute, what offense to prosecute, whether to plea bargain or not to negotiate at all are made at the unbridled discretion of individual prosecutors.[57]

The present study seeks to determine the effects of several legal and extralegal factors on prosecutors' decisions to seek death sentences and juries' decisions to impose death or life sentences in Texas. Many legally relevant factors, such as the defendant's prior record and the killing of multiple victims, which could be expected to influence the punishment decision, are considered. Factors not legally relevant to the case include individual characteristics, such as race or gender, of the offender and victim. If prosecutors' and juries' decisions were not made on the basis of legally relevant factors, it may be concluded

54. Crump, *Capital Murder: The Issues in Texas*, 14 HOUS. L. REV. 531, 555 n.128 (1977); *Gazing Into the Crytal Ball*, *supra* note 49, at 451.

55. *Gazing Into the Crystal Ball*, *supra* note 49, at 451.

56. DeGarmo v. Texas, 474 U.S. 973 (1985) (denying certiorari).

57. *Id.* at 975 (Brennan, J., joined by Marshall, J., dissenting from the Court's denial of certiorari).

that the death penalty was imposed arbitrarily. If decisions were based on extra-legal factors, it may be concluded that the punishment was imposed discriminatorily. Finally, if the decisions were consistently based on identifiable legal factors, the conclusion may be drawn that death sentences were fairly and equitably imposed.

The consideration of extra-legal factors may also vary from case to case. In cases where the evidence is strong and the facts support a severe sentence, juries can decide solely upon the evidence. However, in less clear-cut cases, jurors are "liberated" from the evidence of the case to subjectively consider extra-legal factors. First articulated by Harry Kalven and Hans Zeisel,[58] the proposed relationship between the consideration of legal and extra-legal factors is referred to as the "liberation hypothesis." Thus, in the most serious and brutal homicide cases, juries may sentence on the basis of legally relevant factors, but in less serious death penalty cases, juries may consider extra-legal factors such as the race of the victim. This "liberation" perspective has also been expanded to prosecutorial discretion to seek capital punishment.

III.
PRIOR RESEARCH

Since 1974, researchers have extensively analyzed the role of discrimination in capital sentencing. Many studies include lengthy reviews of the death-sentencing literature, usually divided by state[59] or by year of publication.[60] The rationale for dividing by year of publication is that each study builds upon previous ones, creating a division by complexity. A more practical way to separate the mass of literature is by stages of the criminal justice process. Most studies do not concern sentencing, but instead involve pre-sentence or post-sentence disparity.[61] These studies can be divided into three categories: 1) pre-sentencing; 2) sentencing; and 3) post-sentencing.

The main purpose of pre-sentencing studies is to examine prosecutorial decisions to indict or charge defendants with capital murder. It is during this stage that prosecutors determine the charge and whether or not to enter into a plea agreement. Indictment studies have found discrimination on the basis of the victim's race (cases involving white victims being indicted more often) or on the basis of offender/victim racial combinations (cases involving black offenders and white victims being indicted most often) in Florida[62] and New

58. H. KALVEN & H. ZEISEL, THE AMERICAN JURY 164-67 (1966).

59. *See* Gross & Mauro, *Patterns of Death: An Analysis of Racial Disparities in Capital Sentencing*, 37 STAN. L. REV. 27 (1984); Vito & Keil, *Capital Sentencing in Kentucky: An Analysis of the Factors Influencing Decision Making in the Post-*Gregg *Period*, 79 J. CRIM. L. & CRIMINOLOGY 483 (1988) [hereinafter *Capital Sentencing in Kentucky*].

60. *See* Bienen, Weiner, Denno, Allison & Mills, *The Reimposition of Capital Punishment in New Jersey: The Role of Prosecutorial Discretion*, 41 RUTGERS L. REV. 27 (1988).

61. Radelet & Vandiver, *Race and Capital Punishment: An Overview of the Issues*, 25 CRIME & SOC. JUST. 94 (1986).

62. *See* Bowers & Pierce, *Arbitrariness and Discrimination Under Post-*Furman *Capital Statutes*, 26 CRIME & DELINQ. 563, 611 (1980) [hereinafter *Arbitrariness & Discrimination*]

Jersey,[63] but have failed to find evidence of racial disparity in North Carolina.[64] Charging studies have found victim or offender/victim discrimination in Florida,[65] Kentucky,[66] New Jersey,[67] and South Carolina,[68] while a North Carolina study found discrimination on the basis of the offender.[69] One Florida study found no evidence of discrimination at this stage of the process.[70]

Sentencing research considers conviction and punishment decisions. These studies frequently compare the characteristics of those sentenced to death with Supplemental Homicide Report (SHR) arrest data.[71] Researchers

(examining arbitrariness and discrimination under capital statutes in Florida, Georgia, Texas, and Ohio, and finding gross disparities in the treatment of potentially capital offenders by race of both offender and victim, present at both pre-sentencing and sentencing stages in Florida from effective date of post-*Furman* statute through 1977); Bowers, *The Pervasiveness of Arbitrariness and Discrimination Under Post-*Furman *Capital Statutes*, 74 J. CRIM. L. & CRIMINOLOGY 1067, 1073 (1983) [hereinafter *Pervasiveness of Arbitrariness*] (examining the factors which may affect the ability of prosecutors to obtain first-degree murder indictment in Florida from 1976-1977); Foley, *Florida After the* Furman *Decision: The Effect of Extra-Legal Factors on the Processing of Capital Offense Cases*, 5 BEHAV. SCI. & L. 457, 461 (1987) (investigating discrimination in the imposition of the death penalty in Florida after 1972, and finding differential treatment in conviction offense, trial outcome, and imposition of the death penalty based on race and sex of the victim as well as by county); Radelet, *Racial Characteristics and the Imposition of the Death Penalty*, 46 AM. SOC. REV. 918, 922 (1981) [hereinafter *Racial Characteristics*] (finding that the Florida statutes enacted after 1972 have not eliminated disparities on the basis of the race of the victim).

63. Bienen, Weiner, Denno, Allison & Mills, *supra* note 60, at 234-42.

64. B. NAKEL & K. HARDY, THE ARBITRARINESS OF THE DEATH PENALTY 125 (1987).

65. *See Arbitrariness & Discrimination*, *supra* note 62, at 611; Radelet & Pierce, *Race and Prosecutorial Discretion in Homicide Cases*, 19 LAW & SOC. REV. 587, 598-609 (1985) (studying prosecutorial discretion in Florida by focusing on disparities between the initial police assessment and the prosecutor's assessment, and finding disparirities based on the victim and defendant's race).

66. Keil & Vito, *Race, Homicide Severity, and Application of the Death Penalty: A Consideration of the Barnett Scale*, 27 CRIMINOLOGY 511, 520 (1989) [hereinafter *Race, Homicide Severity*] (finding under the Barnett scale of severity (used to establish that racial disparity in Georgia sentencing was due to the fact that whites were disproportionately the victims of homicide, ranking highest on the scale) that, when the severity of the crime is controlled for, prosecutors were more likely to seek the death penalty and juries were more likely to choose the death sentence in cases where the offender was black and the victim was white); *Capital Sentencing in Kentucky*, *supra* note 59, at 500-01.

67. *See* Bienen, Weiner, Denno, Allison & Mills, *supra* note 60, at 230.

68. Jacoby & Paternoster, *Sentencing Disparity and Jury Packing: Further Challenges to the Death Penalty*, 73 J. CRIM. L. & CRIMINOLOGY 379, 383 (1982); Paternoster, *Race of the Victim and Location of Crime: The Decision to Seek the Death Penalty in South Carolina*, 74 J. CRIM. L. & CRIMINOLOGY 754, 776 (1983); Paternoster, *Prosecutorial Discretion in Requesting the Death Penalty: A Case Study of Victim-Based Racial Discrimination*, 18 L. & SOC'Y. REV. 437, 465 (1984); Paternoster & Kazyaka, *Racial Considerations in Capital Punishment: The Failure of Evenhanded Justice*, in CHALLENGING CAPITAL PUNISHMENT 124-25 (K. Haas & J. Inciardi eds. 1988) [hereinafter *Failure of Justice*].

69. B. NAKELL & K. HARDY, *supra* note 64, at 139-44.

70. Foley & Powell, *The Discretion of Prosecutors, Judges, and Juries in Capital Cases*, 7 CRIM. JUST. REV. 16, 18 (1982) (finding that prosecutors' decisions to try cases were influenced by the sex of the offender, types of attorneys, and the existence of accomplices; that judges and juries were influenced by the sex of the offender; and that judges were influenced by the race of the victims).

71. SHR data are compiled by local police agencies and sent to the FBI. They include

consider it to be evidence of discrimination if higher proportions of black offenders or white victims are found among the death-sentenced cases than are present in overall homicide arrests. This analytic method provides a cumulative measure of discrimination occurring during the pre-sentence and sentencing stages. Studies using this analytic method have found evidence of victim or offender/victim racial discrimination in Arkansas,[72] Florida,[73] Georgia,[74] Illinois,[75] Louisiana,[76] Mississippi,[77] North Carolina,[78] Ohio,[79] Oklahoma,[80] Texas,[81] Virginia,[82] and the entire United States[83]

Two other sentencing studies using nationwide data arrived at different conclusions from each other. The first study completed after *Furman* found that the racial make-up of death row populations had not changed significantly from 1971 to 1976, and concluded that discrimination still existed.[84] In fact, a higher proportion of non-white offenders who killed white victims was on death row in 1976 than in 1971.[85] In contrast, the second study compared racial proportions of death row inmates to homicide arrestees nationwide from 1967 to 1978. The author found that the race of offenders sentenced to death during this period did not significantly differ from SHR arrests. This result suggests that sentencing was not discriminatory.[86]

Studies of conviction — guilt versus innocence — found evidence of dis-

information on the circumstances of the homicide and, in most cases, offender and victim characteristics.

72. Gross & Mauro, *supra* note 59, at 92-98 & app. at 130-44.

73. *Arbitrariness & Discrimination, supra* note 62, at 593-600; Gross & Mauro, *supra* note 59, at 54-56; Lewis, Mannle, Allen & Vetter, *A Post-*Furman *Profile of Florida's Condemned — A Question of Discrimination in Terms of Race of the Victim and a Comment on* Spinkellink v. Wainwright, 9 STETSON L. REV. 1, 30-35 (1979) (race of the victim influences sentencing); Radelet, *Rejecting the Jury: The Imposition of the Death Penalty in Florida*, 18 U.C. DAVIS L. REV. 1409, 1416 (1985) [hereinafter *Rejecting the Jury*]; Zeisel, *Race Bias in the Administration of the Death Penalty: The Florida Experience*, 95 HARV. L. REV. 456, 458-66 (1981) (victim's race makes a difference in likelihood of receiving a capital sentence).

74. *Arbitrariness & Discrimination, supra*, note 62, at 593-600; Gross & Mauro, *supra* note 59, at 54-66.

75. Gross & Mauro, *supra* note 59, at 92-98 & app. at 130-45.

76. Smith, *Patterns of Discrimination in Assessment of the Death Penalty: The Case of Louisiana*, 15 J. CRIM. JUST. 279, 281-83 (1987) (finding that race of the victim and race of offender influnce sentencing).

77. Gross & Mauro, *supra* note 59, at 92-98 & app. at 130-45.

78. *Id.*

79. *Arbitrariness and Discrimination, supra* note 62, at 593-600.

80. Gross & Mauro, *supra* note 59, at 92-98 & app. 130-45.

81. *Arbitrariness and Discrimination, supra* note 62, at 593-600; Ekland-Olson, *Structured Discretion, Racial Bias, and the Death Penalty: The First Decade After* Furman *in Texas*, 69 SOC. SCI. Q. 853, 859-65 (1988).

82. Gross & Mauro, *supra* note 59, at 92-98 & app. at 130-45.

83. Baldus, Pulaski & Woodworth, *Arbitrariness and Discrimination in the Administration of the Death Penalty: A Challenge to the State Supreme Courts*, 15 STETSON L. REV. 133, 158-65 (1986) [hereinafter *Challenge to State Courts*].

84. Riedel, *Discrimination in the Imposition of the Death Penalty: A Comparison of Offenders Sentenced Pre-*Furman *and Post-*Furman, 49 TEMP. L.Q. 261 (1976).

85. *Id.* at 275-83.

86. Kleck, *Racial Discrimination in Criminal Sentencing: A Critical Evaluation of the Evi-*

crimination by juries (victim or racial combinations) in Florida,[87] Illinois,[88] and North Carolina.[89] Other researchers in Illinois and in Florida did not find evidence of discrimination at this stage.[90] Another Florida study concluded that no discrimination existed at the conviction stage even though the findings were statistically insignificant.[91]

Studies of the punishment decision — death penalty versus life imprisonment — have found evidence of discrimination based upon the race of the victim or the racial combination of the offender and victim in Florida,[92] Georgia,[93] Illinois,[94] and Kentucky.[95] Other punishment studies have not found definitive evidence of discrimination in Florida,[96] Georgia,[97] Kentucky,[98]

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dence with Additional Evidence on the Death Penalty, 46 AM. SOC. REV. 783, 797-801 (1981) (analyzing execution rates from 1930-1937 and death sentencing rates from 1967-1978).

87. *Arbitrariness and Discrimination*, *supra* note 62, at 609, 611; *Pervasiveness of Arbitrariness*, *supra* note 62, at 1079-80.

88. Murphy, *Application of the Death Penalty in Cook County*, 73 ILL. B.J. 90, 91 (1984).

89. B. NAKELL & K. HARDY, *supra* note 64, at 144-46.

90. Foley, *supra* note 62, at 463 (Florida); Murphy, *supra* note 88, at 92 (Illinois) (finding that race of defendant and victim had no effect on likelihood of plea bargain or conviction, but influenced both the state's decision to move for a death hearing and the ultimate sentence).

91. Note, *Discrimination and Arbitrariness in Capital Punishment: An Analysis of Post-*Furman *Murder Cases in Dade County, Florida, 1973-1976*, 33 STAN. L. REV. 75, 86-90, 90 n.94 (1980) (authored by Steven D. Arkin) (finding evidence of selectivity and arbitrariness, but not of discrimination in application of Florida's death penalty statute in 350 murder cases).

92. *Arbitrariness & Discrimination*, *supra* note 62, at 609, 611; *Pervasiveness of Arbitrariness*, *supra* note 62, at 1085; Foley, *supra* note 62, at 461; Foley & Powell, *supra* note 70, at 18-21 (finding that race of the victim influenced judges' decisions to impose the death penalty, but did not have statistically significant effects on jury recommendations).

93. Baldus, Pulaski & Woodworth, *Comparative Review of Death Sentences: An Empirical Study of the Georgia Experience*, 74 J. CRIM. L. & CRIMINOLOGY 661, 707-10, 710 n.132 (1983) [hereinafter *Comparative Review*] (finding that the procedures of the Georgia Supreme Court for comparative sentence review in capital cases failed to eliminate disproportionality in the imposition of the death penalty, primarily because the court failed to compare cases under review with similar cases that resulted in life sentences); *Challenge to State Courts*, *supra* note 83, at 175-98; Baldus, Woodworth & Pulaski, *Monitoring and Evaluating Contemporary Death Sentencing Systems: Lessons From Georgia*, 18 U.C. DAVIS L. REV. 1375, 1399-1402 (1985) [hereinafter *Lessons From Georgia*] (analyzing Georgia death penalty data using a computerized method of measuring case culpability, and finding that half of the death sentences are comparitively excessive and a race-of-victim effect among cases which fall in the middle-range of culpability); Barnett, *Some Distribution Patterns for the Georgia Death Sentence*, 18 U.C. DAVIS L. REV. 1327, 1347-1352 (1985) (exploratory re-analysis of data collected by Baldus, Pulaski, and Woodworth, devising a classification scheme that describes death sentencing patterns in Georgia, and determining that offender's death risk is influenced by the certainty that she deliberately killed, the victim's relationship with the offender, and the heinousness of the crime).

94. Murphy, *supra* note 88, at 92-93.

95. *Race, Homicide Severity*, *supra* note 66, at 523-28.

96. Foley & Powell, *supra* note 70, at 18-21; *Rejecting the Jury*, *supra* note 73, at 1414-15; *Racial Characteristics*, *supra* note 62, at 924-26; Note, *supra* note 91, at 86-90.

97. Heilbrun, Foster & Golden, *The Death Sentence in Georgia, 1974-1987: Criminal Justice or Racial Injustice?*, 16 CRIM. JUST. & BEHAV. 139, 146-50 (1989) (finding that although imposition of the death penalty is imbalanced depending on the race of the victim, it is not motivated by racial bias, but by the greater criminal dangerousness of those receiving the death penalty).

98. *Capital Sentencing in Kentucky*, *supra* note 59, at 501.

North Carolina,[99] and South Carolina.[100]

Research into post-sentencing disparities has had mixed results. These studies focus mainly on appellate decisions and whether cases involving black offenders or white victims are more likely to be reversed than cases without those characteristics. Some of the studies specifically analyze whether appellate review actually rectifies disproportionate sentencing. These studies also evaluate whether disproportionate sentencing is based on the race of the offender or of the victim. One study of appeals in Georgia and Florida found no evidence of discrimination regardless of offender or victim's race,[101] while another study of appeals in Florida found evidence of discrimination on the basis of the offender's race.[102] However, surveys show that state supreme courts fail to rectify disparities occurring in the pre-sentencing and sentencing stages in Georgia,[103] Florida,[104] and Texas.[105] One recent study of commuted sentences in Texas found no evidence of discrimination.[106]

In the post-*Furman* era, capital punishment research has become increasingly sophisticated, as each study addresses issues not considered in earlier works. A comprehensive analysis of the methodologies of these studies would be a massive undertaking considering the number, variety, and complexity of the research conducted in recent years. However, it is possible to make the following general observations about recent death penalty research.

First, research continues to be regionally and temporally limited. For example, only two of the empirical studies cited specifically focus on states outside the South: New Jersey[107] and Illinois.[108] Similarly, research in the South has focused primarily on only two states: Georgia and Florida. The data sets in Florida are further limited temporally to the period 1973-1977 and geographically to selected counties. In many other southern states, only one data set has been analyzed.

Second, most post-*Furman* research is not limited to one stage of the criminal justice process. Studies of pre-sentence discrimination often note bias against killers of whites, especially against blacks who kill whites. This discrimination probably results from a process of "case typification" in which prosecutors charge those cases that they believe will most likely result in conviction. Typically, cases involving black victims are less likely to result in

99. B. NAKELL & K. HARDY, *supra* note 64, at 147.

100. *Failure of Justice*, *supra* note 68, at 127.

101. *Arbitrariness & Discrimination*, *supra* note 62, at 620-22.

102. Radelet & Vandiver, *The Florida Supreme Court and Death Penalty Appeals*, 74 J. CRIM. L. & CRIMINOLOGY 913, 919-24 (1983).

103. *Comparative Review*, *supra* note 93, at 710-12; *Challenge to State Courts*, *supra* note 83, at 141-46; Gross & Mauro, *supra* note 59, at 83-92.

104. Gross & Mauro, *supra* note 59, at 83-92.

105. Dix, *Appellate Review of the Decision to Impose Death*, 68 GEO. L.J. 97, 142-51 (1979).

106. Ekland-Olson, *supra* note 81, at 867-88.

107. Bienen, Weiner, Denno, Allison & Mills, *supra* note 60, at 27.

108. Murphy, *supra* note 88, at 91.

conviction. In contrast, cases involving white victims, especially if the offender is black, are those which are thought to strike fear in the hearts of predominantly white juries. While perhaps not consciously discriminating, prosecutors may be quicker to categorize a white-victim case as one which is more likely to result in a conviction. This process of selecting for trial cases involving white victims while declining to prosecute cases involving black victims is known as black devaluation. Murderers of white victims are seen as more deserving of capital punishment than murderers of black victims.

Sentencing studies have generally found less evidence of discrimination, suggesting that discrimination by jurors is not as rampant as that by prosecutors. Moreover, most authors agree that the bulk of discrimination occurs in the pre-trial stages.[109] Although discrimination is more likely to occur early in the criminal justice process, studies comparing death-sentence cases to SHR arrests and studies analyzing post-sentencing discrimination show that disparities occurring in the pre-sentencing stage are not rectified during later stages of case processing.

Third, most post-*Furman* studies use sophisticated statistical techniques to control for many legal and extra-legal variables. Previous studies lacked these control variables, and, when legal factors were not controlled, discrimination was more likely to be reported (*e.g.*, if the killing occurred during the commission of another felony or if the offender and victim were strangers). Prior to *Furman*, the only control techniques that were used were implimented during early comparisons of SHR data with death-sentenced cases. The use of the post-*Furman* control methods, however, creates new and different problems. Often, the assumptions necessary to employ these techniques are violated. For example, authors commonly overload variables into regression equations (OLS and logistic), thus violating assumptions of additivity and adequate cell size.

Fourth, results are often misinterpreted due to small sample sizes. Multiple regression analysis (both OLS and logistic) is sensitive to small sample sizes. When too many variables are included in an equation, estimates of the influence of factors such as race may become exaggerated. Some researchers base arguments of racial disparity on a sample size of less than twenty death-sentenced persons. Cell sizes become extremely small or empty when racial combinations are considered under these circumstances, making accurate conclusions difficult. In these cases, results must be interpreted cautiously and regarded as inconclusive.

IV.
METHODS

Data for this study were gathered on three groups of Texas capital mur-

109. *See, e.g.*, Bienen, Weiner, Denno, Allison & Mills, *supra* note 60.

derers: those sentenced to death; those sentenced to life imprisonment; and death-eligible arrestees.

A. Death-Sentenced Persons

Offenders sentenced to death in Texas are transferred directly from county jails to death row at the Ellis I Unit of the Texas Department of Corrections (TDC) located in Huntsville, Texas. During 1974-1988, 421 prisoners were on death row. Upon arrival, each inmate receives an execution number. The numbering system began in 1924 when the first death-sentenced inmate arrived and was assigned the number "1." Since that time, all death row prisoners have been assigned sequential numbers.

Case information was gathered from death row files, numbers 507-928, maintained in the TDC classification office. Death row files include: (1) offender and victim characteristics; (2) offense information; and (3) the offender's criminal history. These data are collected by TDC classification personnel in an admission interview and collated into a social summary. In addition, the files contain criminal history information obtained from the Texas Department of Public Safety (DPS) and the Federal Bureau of Investigation (FBI). Court documents, commitment papers, and newspaper clippings provided additional information on offenders, their victims, and the circumstances of their offenses. The coding process for this study began in the spring of 1987 and was completed in July 1989.

B. Life-Sentenced Persons

No ready-made list existed to identify life-sentenced prisoners. Prosecutors do not file notice to try capital cases at the state level, and life-sentence cases are not automatically appealed. A list was obtained, however, through a computerized search of TDC offense codes of "new receives" admissions for each year, during the period 1974-1988. This population includes only those found guilty of capital murder and received at TDC. The "lifers" do not include plea-bargained cases or those tried and found innocent of capital murder. Also excluded from the list were eight offenders convicted of capital murder who were fifteen or sixteen years old at the time of their offense. Texas law stipulates that these offenders, if found guilty of capital murder, be automatically sentenced to life. No punishment hearing is held.[110] The final pool included 126 offenders who received a sentence of life imprisonment from a jury in a capital trial from 1974 to 1988. Data were gathered from these files in a similar manner as the data for those prisoners sentenced to death.

C. Death-Eligible Arrestees

Data for the second comparison group were gathered from the Supplemental Homicide Reports (SHR) maintained by the Texas DPS. These data

110. *See Gazing into the Crystal Ball, supra* note 49, at 453.

include the age, sex, and race/ethnicity of offenders and victims, the relationship between offenders and victims, the number of offenders and victims involved in a homicide, the weapon used, and the type of murder (*e.g.*, lovers' quarrel, robbery-murder).

The scope of the study is limited to a narrowly drawn time period. The analysis begins in 1980, because that is the first year that the SHR recorded information about ethnicity, a primary focus of the study, and ends in 1986. Also, homicides involving offender/victim racial combinations other than white, black, or Hispanic were excluded from the analysis because the small number of such cases precludes findings that would be statistically reliable. These data of death-eligible arrestees are being compared to the pool of convicted capital offenders (both those sentenced to death and life imprisonment) who were arrested and sentenced from 1980 to 1988.

Other factors further limited the comparison group. Only those murders categorized by police as involving rape, robbery, or burglary were included, since these are the only categories explicitly defined in the SHR for which a person could be sentenced to death.[111] Furthermore, since a person may only be sentenced to death if age seventeen or older at the commission of the offense, all those under age seventeen were excluded from the analysis. Females were also excluded from the analysis because they are rarely involved in, and sentenced to death for, these types of murders.

V.
ANALYSIS

Two types of analyses are conducted. The first is a comparison of persons eligible for capital murder to persons convicted of capital murder. This analysis provides a rough measure of prosecutorial discretion. The second comparison is of persons sentenced to life versus those sentenced to death among convicted capital murderers. This analysis provides a measure of jury discretion.

A. Prosecutorial Discretion

To obtain a complete picture of prosecutorial discretion, a researcher would have to analyze all death-eligible offenders from arrest through sentence. However, Texas does not record such information. The next best strategy is to analyze all offenders convicted of capital murder, excluding acquittals. The rationale for this approach is that: (1) few capital cases result in acquittals (for example, this happened only once in Harris County (Houston) from 1983 to 1989); and (2) legal factors are more likely to influence the conviction decision than the pre-sentencing or punishment decisions.

To analyze the effects of legal factors and extra-legal factors on prosecutorial decision making, it was necessary to transform the convicted

111. *See supra* text accompanying notes 34-35.

cases and death-eligible cases into similar units of analysis. The possible units of analysis are offender, victim, homicide, or offender-victim combinations. For example, if three offenders killed two victims the following units of analysis could be used: victims (coding information on the crime for both victims), offenders (coding information for all three offenders), the homicide (coding information for the entire incident), or as six offender/victim combinations (coding information for the killing of each victim by each offender). The preferred method is the last, because the killing of either victim by any of the three offenders could result in a death sentence.[112] Offender/victim combinations were, therefore, chosen as the unit of analysis.

In the 213 cases from 1980-1986 involving offenders arrested for rape, robbery, or burglary and convicted for capital murder,[113] there were 275 victims, thus generating 275 offender/victim combinations. For example, if an offender murdered an elderly white couple and was sentenced to death for killing the man but not the woman, the death of the woman should still be considered as resulting in a death sentence, because it is impossible to ascertain how much influence her death had in the prosecutor's decision to try the case as capital. In the following analysis, however, cases involving multiple victims were weighted according to the number of victims killed in order to prevent biased statistical estimates in favor of multiple victim cases. For example, if two victims were killed by one offender, each offender/victim combination was assigned a weight of .50. Due to this weighting procedure, the sample size corresponds to the 213 convicted offenders.

The study was fashioned after the analytic method developed by Professors Gross and Mauro [hereinafter G&M].[114] Using their approach, an attempt was made to identify the convicted cases among the SHR cases. The convicted cases were matched to the SHR cases on all of the variables used in the analyses: type of felony-murder, weapon, multiple homicides, relationship between offender and victim, victim's sex, and race/ethnicity of victim and offender. In some cases, more than one perfect match existed in the SHR for convicted cases, and in a minority of cases no match could be found. Since the analysis involves only those variables on which the cases were matched, it does not really matter if the matched case was in fact the actual case resulting in conviction. Those cases which could not be matched presented greater difficulty. However, by examining the other felony-murder cases previously excluded from the SHR pool because of missing information, it was generally

112. This strategy is used by Garfinkel, *Research Note on Inter- and Intra-Racial Homicides*, 27 SOC. FORCES 369 (1949) (studying homicides in ten North Carolina counties from 1930 to 1940).

113. This population excluded two female offenders and two male offenders who killed Asians. Since the Houston Police Department did not report SHR data in 1982, 10 offenders arrested for capital murder in Houston in 1982 (eight of whom were later sentenced to death and two of whom were later sentenced to life imprisonment) were also not included in the analysis.

114. Gross & Mauro, *supra* note 59, at 49-54.

possible to find SHR cases missing information on one or more variables that corresponded to these cases on all non-missing values. These cases were added to the comparison groups as complete records. A minority of the convicted cases still could not be matched. These cases, in all likelihood, were not accurately coded in the police reports, were mistakenly categorized as some other type of murder, or were coded as a "suspected felony." The remaining convicted cases were added to the SHR pool. A variable was added to the data set to signify which of the final 1,149 SHR death-eligible cases resulted in the 213 capital convictions.

While this research builds upon G&M's analytic technique, four major differences serve to improve upon their method. First, in this study, all convicted capital cases (both those sentenced to life imprisonment and those sentenced to death) were matched to SHR cases, whereas G&M matched only death-sentenced cases to SHR cases. This approach was taken because the present study is mainly a measure of pre-sentence or prosecutorial discretion. Since few capital defendants are acquitted in Texas, conviction, though involving some jury discretion, is primarily an indicator of prosecutorial charging and plea bargaining practices. In comparing SHR cases to death-sentenced cases, G&M used a more cumulative measure of disparity which included both pre-sentence (prosecutorial charging) and sentencing stages (jury sentencing).

Second, whereas G&M categorized Hispanics as whites, this study includes Hispanics as a separate category.

Third, the unit of analysis here was offender/victim combinations, whereas the G&M study used the homicide incident for its unit of analysis. In multiple killings, G&M arbitrarily chose what they considered to be the most aggravating circumstances as the coding categories on variables. If both a male and female were killed in a homicide incident, the victim was coded as female; if both a black and white were killed, the victim was coded as white. By coding such multiple victim cases as female or white, G&M inflated their estimates of the effects of race and sex on sentencing because of the correlation created between multiple victims (which is a legally permissible variable that increases an offender's odds of being sentenced to death) and race or sex. Some of the increased likelihood in G&M's study of an offender being charged and sentenced to death in cases involving white victims or females victims is attributable to the statistical result that these multiple victim cases were more likely to result in a death sentence.

The fourth major difference is that the present analysis included only death-eligible SHR cases. In contrast, G&M included all homicides and simply controlled for whether they occurred during the commission of a felony. While G&M's method has the advantage of not leaving out cases that may later be considered capital, it includes many more cases that are not death-eligible. This method resulted in an inflated estimate of racial bias, due to the frequency with which black offenders and black victims are involved in homi-

cides that are not death-eligible, combined with the low number of black on black or black victim cases resulting in death sentences.

In accordance with the G&M method, logistic regression is used to determine the effects of legal and extra-legal factors on whether a death-eligible case was eventually convicted.[115]

After this analysis, Kalven and Zeisel's liberation hypothesis[116] is tested. The sample is divided into two groups: aggravated and non-aggravated cases. If the liberation hypothesis is correct, discrimination should be more prevalent in the non-aggravated cases. The proportion of offender/victim racial combination convicted of capital murder is examined for two levels of legal seriousness to determine whether discrimination is more likely to occur in the non-aggravated cases.

B. Jury Discretion

The jury discretion analysis involves a comparison of the characteristics of the offenders, crimes, and victims of those 126 persons sentenced to life imprisonment versus those 421 persons sentenced to death by juries. Four types of variables were included: offense information, criminal history, offender characteristics, and victim characteristics. Offense information includes the type of homicide according to statutory criteria, weapon used, presence of codefendants, whether multiple victims were killed, and offender/victim relationship. Criminal history variables include prison incarcerations, Uniform Crime Reporting (UCR) violent crime convictions (murder, rape, robbery, and aggravated assault), UCR property crime convictions (burglary, theft, and auto theft), prior arrests for violent crimes, and prior arrests for non-violent crimes, excluding traffic violations. Offender characteristics include race, age, sex, occupation, and education. Victim characteristics include race, age, and sex. Criminal history and offense information are considered legal factors. Offender and victim characteristics are considered extra-legal variables.[117]

115. No cases are deleted from this analysis because no cases are missing data on any of the variables. Logistic regression is used because linear regression is not appropriate when the dependent variable is dichotomous. Logistic regression can incorporate both categorical variables and covariates as independent variables to simultaneously analyze the effects of these variables on a categorical dependent variable. Rather than assuming a linear relationship between the independent and dependent variables, logistic regression is based on a logarithmic curve.

General loglinear models are not appropriate here because our interest is with the effect of many independent or design variables on a dependent or response variable, rather than the interrelationships among a group of variables as in loglinear analysis. The purpose of this study is not to build a model considering all interaction effects between independent variables. Instead, we seek to assess the relative strength of individual independent variables on the dependent variable. Three logit equations are calculated in each section: one including only legally relevant factors, one including only extra-legal factors, and a combined model including only significant legal and extra-legal factors to determine which have more effect on prosecutorial decision to try the cases.

116. *See supra* note 58 and accompanying text.

117. The analyses employed are the same as those used in the prosecutorial discretion

C. Data Limitations

Institutional files were used to gather data for the death- and life-sentenced comparison groups. While much of the information regarding the offender's past was self-reported, criminal history and information regarding the current offense were coded from official documents. To enhance reliability, several reports were examined for consistency (*e.g.*, social summaries, court documents, newspaper clippings).

Ideally, this study would begin with all arrests for homicide and follow each case through every stage from arrest to disposition. Because SHR data does not include individual identifiers, disposition information is only available for those received at TDC. Thus, the matching procedure used[118] is the best approximation of such a study.

Michael Maxfield illuminated certain problems with SHR data that apply to the present study.[119] Maxfield examined nearly 200,000 homicides included in the SHR reports during 1976-1985. First, the coding is, to some extent, incomplete. SHR data is compiled at an early stage of investigation when limited criminal information is available.[120] Police are at first inclined to classify homicide circumstances either as "unknown" or as involving commonly encountered types of cicumstances. SHR data will therefore overestimate the frequency of murders involving conflict between parties who are at least acquaintances, and will underestimate murders involving an additional circumstance, most notably drugs, property felonies, and instrumental felonies which may involve robbery or sexual assault.

Information concerning homicides of strangers, a factor that the Maxfield study finds increases the arrestee's chance of being convicted for capital murder,[121] may be unreliable for two reasons. On the one hand, the police may prematurely assume that a conflict between related parties has occurred, precluding other instrumental circumstances.[122] On the other hand, homicides classified as between strangers may actually involve disputes between acquaintances; the SHR will most likely classify these murders as involving "other" circumstances in the SHR report.[123] In acquaintance relationships,

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section. The first involves a bivariate comparison of the proportion of offenders with various characteristics receiving the death sentence. The bivariate analysis is employed both to describe the variables and to initially determine which factors influence the conviction and sentencing decision. Then, a more limited number of relevant variables are dichotomized for the logit analyses. The dependent variable is the actual sentence — life imprisonment versus death.

Restricted multivariate analyses are then completed for both legal and extra-legal factors, and a reduced combined model limited to significant effects. Cases are deleted stepwise, meaning that any case missing information on any variable is excluded from the analysis. As in the prosecutorial discretion analysis, the liberation hypothesis is then tested.

118. *See supra* p. 759.

119. Maxfield, *Circumstances in Supplemental Homicide Reports: Variety and Validity*, 27 CRIMINOLOGY 671 (1989).

120. *Id.* at 679.

121. *Id.* at 680-81.

122. *Id.*

123. *Id.* at 674-76, 678.

the degree of connection is less likely to be immediately known than in closer relationships between the parties.[124]

The total proportion of murders classified as "unknown" is 17% nationwide. This figure is in addition to murders classified as "suspected" felonies, constituting 4.8% of all murders, which would include a range of incidents that could fall into other categories.[125] In addition, killings that are coded as "other" (not "unknown") comprise 14% of the total.[126] However, police coding of incomplete information also varies by agency. Some may simply code incomplete information as missing, while others may code what is typical of cases in similar circumstances. For example, about half of the homicides in New York City are coded as "unknown," compared with less than 1% of homicides in Los Angeles.[127]

However, the factor of rape, also a significant predictor in this study, is less likely to be unreliably classified. The indicators of rape are more apparent than those of either robbery or burglary. Police are therefore more likely to classify rape-homicides as involving felonious circumstances. Hence, rape-homicides, and consequently homicides of female victims, are more likely to be included in the cohort than robbery or burglary murders of male victims. Similarly, homicides involving acquaintances and family members are more likely than those involving strangers to have complete information on all relevant variables. Non-stranger homicides are therefore also more likely to be included in the cohort. This could lead to biased estimates of effects of these variables on the prosecutorial decision to seek death.

VI.
FINDINGS

The findings are divided into two sections: prosecutorial discretion and jury discretion. Within each section, bivariate analyses are presented to show the initial relationship between various legal and extra-legal factors and the dependent variables of conviction and sentence. The proportion of cases involving offender/victim racial combinations are then assessed. Next, logistic regression results are reported. Finally, a test of the liberation hypothesis is presented.

A. Prosecutorial Discretion

Table 1 presents the proportion of death-eligible cases convicted of capital murder based on the legal factors of felony, weapon, number of victims, and relationship between the parties and the extra-legal factors of victim's sex, victim's race, and defendant's race. Two legal variables are significantly related to conviction for capital murder. First, offenders committing rape-homi-

124. *Id.* at 686.
125. *Id.* at 674-75.
126. *Id.* at 675.
127. *Id.* at 675-76.

TABLE 1
PROPORTION OF DEATH-ELIGIBLE CASES CONVICTED OF CAPITAL MURDER BY CONTROL VARIABLES

Control Variable	Proportion of Cases Convicted (213/1149)	Attained Association* (Significance)**
Legal Factors		
Felony		.0721
Rape	55/97 = .566	(.0000)
Robbery	138/891 = .155	
Burglary	20/161 = .124	
Weapon		.0006
Gun	126/709 = .178	(.4335)
Other	86/439 = .197	
# Victims		.0389
One	168/1051 = .160	(.0000)
Multiple	45/98 = .459	
Relation		.0031
Known	60/387 = .156	(.0645)
Stranger	153/762 = .200	
Extra-Legal Factors		
Victim's Sex		.0782
Male	115/907 = .126	(.0000)
Female	98/242 = .406	
Victim's Race		.0570
White	168/651 = .258	(.0000)
Black	13/227 = .056	
Hispanic	32/271 = .119	
Defendant's Race		.0112
White	91/379 = .240	(.0021)
Black	85/499 = .170	
Hispanic	37/271 = .137	

* Uncertainty Coefficient
** Likelihood Ratio Chi-Square

cides are significantly more likely to be tried and convicted of capital murder than any other felony homicide. Over half of the death-eligible rape-homicides result in conviction, while only 12.4% of burglary-homicides and 15.5% of robbery-homicides result in conviction.

The number of homicide victims also plays a significant role in pre-sentencing decisions. Death-eligible cases involving multiple victims are nearly three times as likely to result in conviction than cases involving single victims. Of the remaining legal variables, the type of weapon used and the relationship between the victim and offender are not significantly related to conviction, although homicides between strangers have a slightly greater chance of conviction than homicides between non-strangers.

In examining extra-legal factors, cases involving female victims are three times as likely to result in conviction for capital murder than are cases involv-

TABLE 2
PROPORTION OF DEATH-ELIGIBLE CASES CONVICTED OF CAPITAL MURDER BY OFFENDER/VICTIM RACIAL COMBINATIONS

Proportion of Racial Combinations		Cases Convicted (213/1149)
Offender	*Victim*	
White	White	88/302 = .291
White	Black	0/30 = .000
White	Hispanic	3/47 = .064
Black	White	63/257 = .245
Black	Black	11/183 = .060
Black	Hispanic	11/59 = .186
Hispanic	White	18/93 = .194
Hispanic	Black	1/13 = .077
Hispanic	Hispanic	18/165 = .109

ing male victims. This relationship, however, corresponds largely to the legal variable, rape.

Homicides involving white offenders have the highest conviction rate, followed by those involving black offenders and Hispanic offenders. While this finding refutes suggestions of racial discrimination based on the race of the offender, it appears that racial discrimination on the basis of the race of the victim exists. Cases involving white victims are twice as likely to result in conviction than are Hispanic-victim cases and five times as likely to result in conviction than are cases involving black victims. From this analysis, it appears that homicides involving white victims are the most aggressively prosecuted in the pre-sentencing stages, while homicides involving black victims are prosecuted less vigorously during the pre-sentencing stages of processing. This discrepancy reflects a devaluation of the lives of black victims.

Table 2 shows the proportion of death-eligible cases convicted of capital murder based on offender/victim racial combinations. The findings further illustrate black victim devaluation during the pre-sentencing stages of processing. Cases involving racial combinations of white offenders and white victims (WkW), followed by black offenders and white victims (BkW), are the most likely to result in conviction, with rates of 29% and 25% respectively. Homicides involving Hispanic offenders and white victims (HkW) and black offenders and Hispanic (BkW) victims are the next most likely to result in conviction with rates of 19.4% and 18.6% respectively. Intra-racial cases involving Hispanics have an 11% conviction rate. Intra-racial cases involving blacks resulted in conviction in only 6% of the cases. Only one of thirteen HkB cases and none of the thirty WkB cases resulted in conviction. Similarly, only three of the forty-seven WkH cases resulted in conviction.

Intra-racial killings occur more often between individuals with a prior personal relationship. This legal variable could partially explain the discrep-

TABLE 3
LOGIT MODEL OF LEGAL AND EXTRA-LEGAL FACTORS RELATED TO CONVICTION

Logits						
Variables	Legal Factors	Extra-Legal Factors	Combined Model	Std. Error	Z-Value	Predicted Proportional Change[1]
MULTVIC	.897***		.935	.125	7.48***	.181
RAPE	1.246***		1.105	.125	8.81***	.222
ROBBERY	.097					
GUN	.147					
STRANGER	.319***		.396	.100	3.96***	.067
FEMALVIC		.728***				
BKW		.369***	.436	.113	3.84***	.075
WKW		.462***	.588	.109	5.41***	.105
BKB		−.385*	−.381	.182	−2.10*	−.051
Mean conviction	.185	.185	.185			
Intercept	.074	1.132	.023			
−2L likelihood Ratio Chi Square	37.56	.22	68.62			
−2L with intercept only	177.99	131.87	263.14			

1 The change in probability of conviction for unit change in the independent variables was calculated using Petersen's (1985) formula: $\exp(L_1) / [1 + \exp(L_1] - (L_0) / [1 + \exp(L_0)]$, where L_0 is the logit before the unit change in x_j, and $L_1 = L_0 + B_j$ is the logit after the unite change in x_j. The mean conviction was chosen as the comparison point before and after adding the effects of the parameters; hence, L_0 is calculated using the formula Ln [P/(1−P)], where P=.185

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

ancy in conviction rates. In addition, killings involving white offenders or white victims may involve the most serious felonies or most dangerous types of weapons.[128]

Table 3 presents an analysis of the relationship of legal and extra-legal variables to conviction. Of the legal variables, MULTVIC refers to the presence of multiple victims, RAPE and ROBBERY refer to the type of felony-homicide (burglary is the reference category), GUN refers to the weapon causing death, and STRANGER refers to the relationship between victim and offender. Of the extra-legal variables, FEMALVIC refers to the sex of the victim, and BkW, WkW, and BkB refer to offender/victim racial combinations.[129] This analysis is designed to show the change in the probability of conviction of a defendant charged with homicide involving the listed variables. Therefore, the column in Table 3 entitled "Predicted Proportional Change"

128. Hence, it is necessary to simultaneously control for the effects of these legal variables when considering the effects of racial combinations on pre-sentence decision-making.

129. In the Logit analysis presented in Table 3, all of the independent variables are dichotomous, and are all coded no, 0; yes, 1.

indicates the greater or lesser chance of being convicted based on the various legal and extra-legal variables.[130]

The probability that death-eligible offenders will be convicted of capital murder is 18.5%. Of the legal variables, MULTVIC and RAPE have the greatest effect on the eventual conviction of death-eligible offenders. Homicide cases involving multiple victims are 18.1% more likely to result in conviction than cases involving single victims. Rape-homicides are 22.2% more likely to result in conviction than burglary-homicides. If the homicide involves strangers, the probability of conviction increases by 6.7%.

All of the racial combinations have significant effects on conviction. Whites who kill whites are 10.5% more likely to be convicted than the residual categories involving mainly Hispanic offenders or victims. The probability of conviction increases by 7.5 % for blacks killing whites, and decreases by 5.1% for blacks killing blacks. The findings do not support contentions that BkW are treated more severely than other racial combinations. But where there is a black victim, there is a significantly lower chance of being convicted. Homicides involving white victims are prosecuted more aggressively than homicides involving black victims, while cases involving Hispanic victims fall in the middle.

The insignificant effects of ROBBERY and GUN were excluded from the analysis. Because an almost perfect correlation existed between FEMALVIC and RAPE, FEMALVIC was excluded from the analysis. Although there were cases where an offender was charged with the murder of a male during the rape of a female, such cases were few. Secondly, FEMALVIC, like RAPE itself, may be a proxy for the heinousness of the offense, and it is more important to measure the effect of the legal factor that indicates this concept.

These results, however, are not conclusive. It is possible that the introduction of additional legal and contextual variables could diminish the apparent discrepancies. Also, race may be a proxy for social status. If so, crimes involving victims of higher social status are more likely to result in trial and conviction than homicides involving victims of lower social status. Furthermore, the limitations due to the use of SHR data could lead to skewed or biased results. The effects of STRANGER are likely to be overestimated, while the effects of RAPE are likely to be underestimated. As discussed ear-

130. All legal factors were forced into an equation. Then, extra-legal factors were forced into a separate equation. The final model combined significant legal and extra-legal factors, eliminating non-significant effects from the equation using backward elimination. In the model of legal factors, RAPE has the largest influence on whether a person is eventually convicted of a capital crime when death-eligible. MULTVIC is also strongly related to conviction, and STRANGER to a lesser extent. ROBBERY and GUN are not significantly related to conviction. In the extra-legal model, FEMALVIC and the racial combinations of BkW and WkW are positively related to conviction. BkB is negatively related to conviction.

It was necessary at this point to evaluate the effect of independent variables on conviction on the logistic curve because any offender has an 18.5% chance of being convicted of capital murder if the dependent variable is considered. Since all the variables were dichotomized, there was no need to standardize coefficients.

TABLE 4
PROPORTION OF DEATH-ELIGIBLE CASES CONVICTED OF CAPITAL MURDER BY OFFENDER/VICTIM RACIAL COMBINATIONS AND LEVEL OF AGGRAVATION

Proportion of Racial Combinations	Proportion of Non-Aggravated* Cases Convicted (25/298)	Aggravated** Cases Convicted (188/851)
Victim		
Offender		
White	17/173 = .098	152/479 = .317
White	11/119	77/183
Black	5/33	58/224
Hispanic	1/21	17/72
Black	4/69 = .058	8/157 = .051
White	0/7	0/23
Black	4/59	7/124
Hispanic	0/3	1/10
Hispanic	4/56 = .071	28/215 = .130
White	1/7	2/40
Black	0/7	11/52
Hispanic	3/42	15/123

* Cases not involving multiple victims, rapes, or strangers.
** Cases involving multiple victims, rapes, or strangers.

lier, homicides involving strangers were more likely to be missing information[131] and therefore were less likely to be classified as felony-murders. Hence, stranger-murders are less likely to be included in the SHR comparison group. This smaller number of stranger-murders in the SHR comparison group inflates the effects of those stranger-murders in the convicted group, making the proportion of individuals with such a characteristic in the SHR comparison group convicted of capital murder larger than it should be. The opposite is true of rape-murder, where most incidents are included within the comparison group due to the obvious indicators present in a rape-murder. Hence, the proportion of individuals convicted out of the total number of individuals arrested for rape-murder may result in smaller estimates when compared to the other categories of felony-murder.

Table 4 presents the proportion of death eligible cases convicted of capital murder by offender/victim racial combinations, based on whether the case is characterized as aggravated or non-aggravated.[132] This part of the study tests Kalvin and Zeisel's liberation hypothesis.[133] If the liberation hypothesis is

131. *See supra* notes 121-23 and accompanying text.

132. To determine if the consideration of extra-legal factors, particularly race of offender and victim, increases in the absence of strong evidence for conviction, the cases were categorized according to their legal gravity. Aggravated homicides are cases involving multiple victims, rapes, or strangers which are considered to significantly increase chances of conviction. All other homicides were categorized as non-aggravated.

133. *See supra* note 58 and accompanying text.

TABLE 5
PROPORTION OF CONVICTED CAPITAL MURDERERS SENTENCED TO DEATH BY OFFENSE INFORMATION

Control Variable	Proportion of Defendants Receiving Death (421/547)	Attained Association* (Significance)**
Statutory type		
Rape	77/96 = .802	
Robbery	207/273 = .758	
Burglary	41/51 = .804	
Arson	4/4 = 1.000	
Kidnapping	29/30 = .967	
Remuneration	22/34 = .647	
Escape	3/8 = .375	
Multiple victims	10/13 = .769	
Killing police officer	28/38 = .737	
Weapon		.0019
Gun	269/356 = .756	(.2839)
Other	152/191 = .796	
Codefendants		.0039
None	196/245 = .800	(.1275)
One or more	225/302 = .745	
# Victims		.0048
One	333/441 = .755	(.0903)
Multiple	88/106 = .830	
Relation		.0016
Known	122/153 = .797	(.3326)
Stranger	299/394 = .759	

* Uncertainty Coefficient
** Likelihood Ratio Chi-Square

correct, the proportion of cases resulting in conviction that involved black offenders or white victims should be larger in the non-aggravated than in the aggravated category.

While the data sample in the first column of Table 4 is small, it appears that the liberation hypothesis is not borne out in these cases. The difference in conviction rates among killers of victims of different races is actually larger among the aggravated cases. Table 4 shows that aggravated cases are 2.75 times more likely to result in conviction than non-aggravated cases, with a conviction rate of 22% versus a conviction rate of 8%. The pattern among the aggravated cases parallels that in Table 3. Conviction rates among racial combinations in the non-aggravated group do not differ significantly.

In conclusion, the data show support for the effects of both legal and extra-legal factors on pre-sentencing decisions which result in the eventual conviction of death-eligible offenders. The data do not show support for the liberation hypothesis.

TABLE 6
PROPORTION OF CONVICTED CAPITAL MURDERERS SENTENCED TO DEATH BY OFFENDER CRIMINAL HISTORY

Control Variable	Proportion of Defendants Receiving Death (421/547)	Attained Association* (Significance)**
Arrests		−.0062
None	27/37 = .730	(.4423)
1-2	76/99 = .768	
3 or more	317/410 = .773	
Violent contacts		.1623
None	183/266 = .688	(.0001)
1-2	182/217 = .839	
3 or more	55/63 = .873	
Property convictions		.0355
None	201/272 = .739	(.2037)
1-2	147/187 = .786	
3 or more	73/88 = .830	
Violent convictions		.1091
None	260/354 = .734	(.0053)
1-2	134/164 = .817	
3 or more	27/29 = .931	
Prison incarceration		.1037
None	204/288 = .708	(.0076)
1-2	183/221 = .828	
3 or more	34/38 = .895	

* Pearson correlation coefficients before categorization.
** T-test before categorization.

B. Jury Discretion

Table 5 presents the proportion of convicted capital murderers sentenced to death based on the types of murder and other offense information. While the large number of categories makes results difficult to interpret, none of the categories appear to significantly affect the sentencing process. It should be noted, though, that kidnapping-murder convictions resulted in a higher percentage of death sentences. Yet, this is most likely attributable to more vigorous prosecution of particularly heinous homicides such as kidnapping, in an effort to obtain death sentences. In addition, it should also be noted that only three out of eight killings committed during escapes from penal institutions resulted in death sentences, which is the lowest proportion of defendants receiving death sentences. Most often, the weapon used, the presence of codefendants, the killing of multiple victims, and the relationship between victim and offender do not have an effect on the sentence.

Table 6 presents the proportion of convicted capital murderers sentenced to death based on characteristics of the offender's criminal history. Question

TABLE 7
PROPORTION OF CONVICTED CAPITAL MURDERERS SENTENCED TO DEATH BY OFFENDER AND VICTIM CHARACTERISTICS

Control Variable	Proportion of Defendants Receiving Death (421/547)	Attained Association* (Significance)**
Offender		
Age		.0068
17-24	191/261 = .732	(.0446)
25 or older	230/286 = .804	
Sex		.0046
Male	415/536 = .774	(.0985)
Female	6/11 = .545	
Occupation		.0009
Professional	27/33 = .818	(.4655)
Other	389/509 = .764	
Education		.0004
0-9	165/217 = .760	(.6238)
10 +	253/325 = .778	
Victim		
Age		.0037
1-20 years	83/100 = .830	(.3687)
21-51	234/304 = .770	
52 +	82/108 = .759	
Sex		.0045
Male	275/366 = .751	(.1083)
Female	195/242 = .806	

* Uncertainty Coefficient
** Likelihood Ratio Chi-Square

Two, which decides the fate of most convicted capital offenders,[134] is based on a prediction of future dangerousness. Hence, offenders with lengthy criminal histories, especially offenders with histories that include violence, are far more likely to be sentenced to death than offenders with limited criminal histories.

Table 6 also shows that offenders with arrests or convictions for violent offenses and offenders with a prison record receive death sentences more often than offenders without these characteristics. In addition, the proportion of defendants receiving death sentences increases if an offender has more than one conviction for a violent or property related offense and if the offender has served more than one term of incarceration.

Table 7 shows the proportion of convicted capital murderers sentenced to death based on offender and victim characteristics such as age, sex, occupation, and education.[135] Suprisingly, the only offender or victim characteristic

134. *See supra* text accompanying notes 54-55.

135. For easier presentation of data, offender and victim age and education were categorized. However, results using t-tests found similar results to those presented. Age of offender

TABLE 8
PROPORTION OF CONVICTED CAPITAL MURDERERS SENTENCED TO DEATH BY OFFENDER/VICTIM RACIAL COMBINATIONS

Proportion of Racial Combinations		Defendants Receiving Death (419/547)
Offender	*Victim*	
White	White	196/247 = .794
White	Black	3/4 = .750
White	Hispanic	6/6 = 1.000
Black	White	115/147 = .782
Black	Black	26/34 = .765
Black	Hispanic	16/18 = .889
Hispanic	White	30/49 = .612
Hispanic	Black	2/3 = .667
Hispanic	Hispanic	25/39 = .641

that played a significant role in the eventual sentence was the offender's age. Individuals twenty-five years of age or older received a death sentence more often than individuals ages seventeen to twenty-four.[136] The victim's sex was not related to sentence, although murderers of female victims were sentenced to death slightly more often than murderers of male victims. With regard to the offender's sex, the sample size is too small to reach any conclusions. It appears, however, that females are less likely to be sentenced to death. The two measures of offender social status, education and occupation, were not related to sentence. Age of the victim also lacked statistical significance, although an offense involving a younger victim was somewhat more likely to lead to a death sentence.

Table 8 presents the proportion of convicted capital murderers sentenced to death based on offender/victim racial combinations. The table shows that offender/victim racial combinations have little relationship to sentence. The proportion of capital offenders receiving the death sentence remained roughly equivalent whether the offender was black or white, although Hispanic offenders received the death sentence less frequently.

Table 9 presents an analysis of the relationship of legal and extra-legal factors to sentencing. This analysis is designed to show the change in the probability of a convicted person receiving the death sentence. The number of cases may be too small to draw any solid conclusions. CONVICT is a variable created by combining convictions for property, violent, or other kinds of felonies, as well as violent arrests and prison incarcerations. The CONVICT measure has the highest correlation with sentence. The only homicide categories

and education were dichotomized at the median, while victim age was split at the second and eighth deciles to make three groups, the middle containing three-fifths of the cases, and the youngest and oldest groups containing one-fifth each.

136. This could explain only 1% of the variation in sentence.

TABLE 9
LOGIT MODEL OF LEGAL AND EXTRA-LEGAL FACTORS RELATED TO SENTENCE

Variables	Logits: Legal Factors	Logits: Extra-Legal Factors	Combined Model[1]	Std. Error	Z-Value	Predicted Proportional Change[2]
CONVICT	.471***		.474	.116	4.08***	.077
RAPE	.025					
ROBBERY	−.023					
GUN	−.046					
CODEFEND	−.113					
MULTVIC	.262*		.280	.145	1.92*	.046
STRANGER	−.088					
EDUCAT		−.029				
OCCUPAT		.185				
OFFAGE		.295**				
YOUNGVIC		−.144				
FEMALVIC		.153				
BKW		.314*	.178	.143	1.24	
WKW		.226	.209	.130	1.62	
BKB		.240	.017	.230	.07	
Means sentence	.770	.770	.770			
Intercept	−1.232	−1.951	−1.278			
−2L Likelihood Ratio Chi-Square	76.94	62.05	10.55			
−2L with intercept only	98.92	78.00	32.83			

1 The model was also calculated with CODEFEND, MULTVIC, EDUCAT, OFFAGE, YOUNGVIC as covariates in linear form. The results did not differ substantially, but did create a matrix with more zero cells and an increased possibility of biased parameter estimates; hence the models in the table were run using only dichotomous variables.

2 The change in probability of conviction for unit change in the independent variables was calculated using Petersen's (1985) formula: $\exp(L_1) / [1 + \exp(L_1) - (L_0) / [1 + \exp(L_0)]$, where L_0 is the logit before the unit change in x_j and $L_1 = L_o + B_j$ is the logit after the unit change in x_j. The mean conviction was chosen as the comparison point before and after adding the effects of the parameters; hence, L_0 is calculated using the formula Ln[P/(1−P)], where P=.770

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

containing enough cases to consider are RAPE and ROBBERY. GUN refers to the weapon involved, CODEFEND refers to multiple offenders, MULTVIC refers to multiple victims, and STRANGER refers to the relationship between offender and victim.[137] Turning to the extra-legal factors, EDUCAT, refers to education, OCCUP refers to occupation, OFFAGE refers to

137. These legal variables are all coded no, 0; yes, 1.

age of offender, YOUNGVIC refers to the age of the victim,[138] and FEMALVIC refers to a female victim.[139] The racial interaction terms of BkW, WkW, and BkB are also included, with Hispanic cases constituting the reference categories.[140]

Of the legal factors, CONVICT has the strongest effect of the legal factors on sentence. MULTVIC is also significant. The extra-legal factors of OFFAGE and BkW are also positively related to death sentences in the extra-legal model.[141] Based on this analysis, the categories CONVICT and MULTVIC were positively associated with a death sentence.[142] A prior conviction increased an offender's odds of receiving a death sentence by 7.7%, while multiple murder victims increased the odds by 4.6%. Offender/victim racial interaction terms did not significantly affect the death sentence, although the order of the non-significant coefficients parallel those in the pre-sentencing analysis, with WkW as the highest, followed by BkW, and then BkB.

A test of the liberation hypothesis in the context of jury discretion is difficult because legal factors had an insignificant effect on sentence. In addition, only a small number of cases were analyzed. Yet, dividing the cases into aggravated and non-aggravated on the basis of CONVICT and MULTVIC provided the result that 80% of the aggravated cases were sentenced to death versus 61% of the non-aggravated cases. Cell sizes were very small when cases were broken down by race of victim, thus making the proportions unreliable. However, there appeared, overall, to be little difference in the proportions sentenced to death by victim race between the groups.

CONCLUSION

Since the *Furman* decision in 1972, the United States Supreme Court has concluded that the processing of capital cases is legally free from racial discrimination and arbitrariness. Researchers undertaking statistical studies have consistently challenged this conclusion.[143]

The Texas capital statute presents an exceptional opportunity to test for the existence of discrimination or arbitrariness in prosecuting a case or imposing a sentence. On one hand, the statute is "nearly mandatory," allowing juries only limited discretion in answering Question Two, concerning future

138. Persons under 20 are coded as 0, and persons over 20 coded as 1.

139. Persons are coded 1 if a female was killed during the offense.

140. As in the prosecutor discretion analysis, first all legal, then all extra-legal variables, were forced into a logit analysis. *See supra* note 131.

141. Both of these models provided little reduction in error over the intercept alone. The combined model included only significant effects and racial interaction terms, using backward elimination of nonsignificant effects.

142. The Z-value or the number of standard deviations from the expected value for CONVICT was 4.08, while MULTVIC barely reached a level of significance at the .05 level.

143. *See generally supra* Part III (discussing the literature).

dangerousness. At the same time, the jury is not guided in answering the question.

The results of this study show a pattern of discrimination on the basis of the victim's race. Cases involving white victims are more likely to be prosecuted than cases involving non-white victims. However, it also appears that a legalistic rationale exists for the prosecutor choosing to prosecute some of the small proportion of death-eligible cases as capital murders. The death penalty is more likely to be sought in homicide cases involving rapes, multiple victims, and strangers. Ultimately, the arbitrariness issue cannot be fully assessed because of the lack of many evidentiary variables.

In the sentencing analyses, few factors could be identified as influencing the life-death decision made by juries. Only the legal factors of a convicted person's prior criminal history, the offender/victim racial combination, and the relationship between offender and victim were significantly related to sentence. Yet these effects were minimal.

Jury decisions did not appear to be biased by race. However, the inability to build a sufficient model from legal variables suggests that the life-death decision was arbitrary. In answering Question Two, juries partially relied on the defendants' prior criminal history and whether the crime involved multiple victims. Beyond these two rather poor predictors, it was impossible to distinguish between the life- and death-sentenced cases.

Perhaps if more evidentiary variables were considered, the differences between life- and death-sentenced cases would become more apparent. However, the important variables identified as significant in previous capital sentencing research (*e.g.* type of capital murder, weapon used, relationship between victim and offender) showed little influence in Texas. The results are consistent with other sentencing studies which often find little, if any, evidence of racial discrimination in sentencing, and a concomitant lack of legal variables to account for the life-death decision.[144]

This study also examined the liberation hypothesis, which may mask discrimination or lessen its effects. That is, juries and prosecutors base their decisions on legal factors in strong cases, but rely on extra-legal factors in weaker cases where they are "liberated" from the facts of the case. To determine whether this hypothesis holds in Texas, the cases were grouped by level of aggravation according to the legal variables. The less aggravated cases were found to be no more likely than the aggravated group to be sentenced on the basis of racial combinations, the opposite of what one would expect if the liberation hypothesis were true.

In conclusion, prosecutorial decisions were based partially on legal factors and partially on the race of the victim. Such decisions are probably not conscious, but instead result from a process of case typification, where prosecutors try offenders for capital murder in death-eligible cases considered most

144. B. NAKELL & K. HARDY, *supra* note 64; *Failure of Justice*, *supra* note 68; *Capital Sentencing in Kentucky*, *supra* note 59.

likely to result in conviction. In the sentencing stage, juries also did not appear to discriminate on the basis of race. Their decisions, however, do appear to be arbitrary. This result is to be expected considering the lack of jury guidance in the sentencing process.

The legal implications for the Texas capital statute are clear. First, prosecutorial discretion has not been controlled. In less serious cases, plea bargaining and other forms of prosecutorial discretion are recognized as a necessary evil. However, where a person's life hangs in the balance, the possibility of prosecutorial bias cannot be tolerated. Second, juries do not make decisions on the basis of legal factors which can be easily identified. The dangerousness provision of Question Two plays into stereotypes of the violent person. Undoubtedly, jurors determine punishment based on their own mental images of the violent criminal.