SERIOUS ERROR WITH "SERIOUS ERROR": REPAIRING A BROKEN SYSTEM OF CAPITAL PUNISHMENT

I. Introduction

Six days following Professor James Liebman and his colleagues' release of the study *A Broken System: Error Rates in Capital Cases, 1973-1995* (the *'Liebman Study'*), *Washington Post* columnist David Broder wrote:

In the annals of politics, there have been few pieces of social research which have decisively affected the course of policy debate. Michael Harrington's "The Other America" opened the eyes of the nation—and of Presidents Kennedy and Johnson—to the extent of poverty in this nation. Daniel Patrick Moynihan's essay on "The Negro Family" alerted President Richard Nixon and his successors to the plight of female-headed welfare families.

Now, there may be a third. James S. Liebman's just-published report, "A Broken System: Error Rates in Capital Cases 1973-1995," transforms the debate on the death penalty as much as those earlier works did the understanding of poverty and welfare in America.⁵

This Note is written as a warning to Mr. Broder and those who have read and will read the *Liebman Study*. Although the study tracks "serious error" found throughout capital cases in the U.S. judicial system, the study contains serious error itself. This Note does not claim that Professor Liebman and his colleagues' conclusions are incorrect. It may be true that

^{1.} James S. Liebman, Jeffery Fagan, & Valerie West, *A Broken System: Error Rates in Capital Cases, 1973-1995*, (June 12, 2000), *at* http://justice.policy.net/jpreport/index.html [hereinafter *Liebman Study*], *reprinted in James S. Liebman, Jeffery Fagan, Valerie West, & Jonathan Lloyd, Capital Attrition: Error Rates in Capital Cases, 1973-1995*, 78 TEX L. Rev. 1839 (2000) (abridged version of the original) [hereinafter *Capital Attrition*].

^{2.} MICHAEL HARRINGTON, THE OTHER AMERICA: POVERTY IN THE UNITED STATES (1962).

^{3.} Office of Policy Planning & Research , U.S. Dep't of Labor, The Negro Family: The Case for National Action (1965).

^{4.} Liebman Study, supra note 1.

^{5.} David Broder, Editorial, *Broken Justice*, WASH. POST, June 18, 2000, at B7 (emphasis and notes added).

^{6. &}quot;Serious error" as referenced in this Note refers to "serious error" as defined by the *Liebman Study. See Liebman Study, supra* note 1, at 134-37 nn.33-40. For a discussion of "serious error," as defined by the *Liebman Study*, see *infra* Part IV.B.

the U.S. capital punishment system is wrought with "serious error," in need of serious reform, and "broken." However, such conclusions are not supported by the data found in the *Liebman Study* or the analysis conducted within it. As policy makers and legal experts begin to use the conclusions of the *Liebman Study* as part of their decision-making process, those who analyze the study must assure the public that the study's conclusions are properly supported. This Note specifically addresses the degree of significance that policy makers, legal experts, and the general public can place on the conclusive findings of the *Liebman Study*.

Although the *Liebman Study* attempts to determine whether the U.S. capital punishment system is "broken," ¹² in the course of their study, the authors execute procedures that cast doubt upon the validity of their conclusions. Their data is unavailable for peer review; ¹³ certain important parts of the study are left out from the analysis; ¹⁴ key variables are vaguely defined; ¹⁵ and the authors make unsupported assumptions about the meaning of certain variables. ¹⁶

This Note assesses the validity of the *Liebman Study*'s conclusions and the significance of its results. Part II of this Note provides both a general background of the recent history of capital punishment and an overview of certain aspects of social scientific research. Part III of this Note discusses the history, findings, and recent impact of the *Liebman Study*. Part IV of this Note examines the data, analysis, and process of the *Liebman Study*. Part V of this Note discusses the proper methodology and data analysis that the *Liebman Study*'s authors could have utilized to successfully support the study's conclusions.

- 7. Liebman Study, supra note 1, at 134-37 nn.33-40.
- 8. Id. at 121-24.
- 9. Id. For a discussion of the Liebman Study and its conclusions, see infra Parts III-IV.
- 10. *See* discussion *infra* Parts IV-V.
- 11. See infra notes 85-88 and accompanying discussion.
- 12. Liebman Study, supra note 1, at 121-24.
- 13. See Ronald Eisenberg, Prosecutor Comments on Latzer and Cauthen, PROSECUTOR, Jan./Feb. 2001, at 16, 16 (noting that Professor Liebman and his colleagues' "refusal to share underlying data with researchers" and how such actions are "particularly troubling"). Further, the information on the variables within the study is too vague for a reader to assess the distinct data collection and selection procedure of Professor Liebman and his colleagues. See, e.g., Liebman Study, supra note 1, at 134-37 nn.33-40.
- 14. See, e.g., Liebman Study, supra note 1, at 64, 68, 80 (discarding the use of Virginia in the study's state-by-state analysis because it does not support their theory).
 - 15. See, e.g., id. at 134-37 nn.33-40 (describing the study's definition of "serious error").
- 16. See discussion *infra* Part IV.B.2 (discussing how high rates of capital "serious error," as defined by the *Liebman Study*, are not an indication, as the study claims, of a broken system).

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II. GENERAL BACKGROUND

A. Recent Historical Background of Capital Punishment¹⁷

During the twenty-three year span of the data utilized within the *Liebman Study*, from 1973 to 1995, ¹⁸ many legal events occurred that dramatically altered the state of the U.S. capital punishment system. ¹⁹ Just one year before the study's data range began, the Supreme Court found the death penalty, as applied by the states, unconstitutional as "cruel and unusual punishment" under the Eighth Amendment. ²⁰ Following this determination in *Furman v. Georgia*, ²¹ many states reformed and rewrote their capital statutes to ensure that they complied with the Court's definition of "cruel and unusual punishment." ²² In fact, *Furman* touched off the biggest flurry of capital punishment legislation the nation had ever seen. ²³ For the next two and a half decades, the Court continued to both reject and approve states' new capital punishment statutes, and consequently, individual state capital sentences were either thrown out as unconstitutional or validated. ²⁴ By means of this continual volley

- 17. For a more detailed historical discussion of capital punishment, see generally STUART BANNER, THE DEATH PENALTY: AN AMERICAN HISTORY (forthcoming spring 2002) (manuscript on file with author); RAYMOND PATERNOSTER, CAPITAL PUNISHMENT IN AMERICA (1991).
 - 18. Liebman Study, supra note 1, at 6.
 - 19. See BANNER, supra note 17 (manuscript at ch. 10); PATERNOSTER, supra note 17, at 35-159.
- 20. U.S. CONST. amend. VIII ("Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.") (emphasis added). For more discussion regarding the connection between the Eighth Amendment and capital punishment, see Franklin E. Zimring & Gordon Hawkins, Capital Punishment and the American Agenda 50-76 (1986); H. A. Bedau, Why the Death Penalty Is a Cruel and Unusual Punishment, in The Death Penalty in America: Current Controversies 232, 232-37 (Hugo Adam Bedau ed., 1997).

The Court made this determination with its 1972 decision in Furman v. Georgia, 408 U.S. 238 (1972). For a more detailed discussion about the Furman decision and its impact, see PATERNOSTER, supra note 17, at 59-68, 155-56; James W. Marquart & Jonathan R. Sorensen, A National Study of the Furman-Commuted Inmates: Assessing the Threat to Society from Capital Offenders, in THE DEATH PENALTY IN AMERICA: CURRENT CONTROVERSIES, supra, at 163-67.

- 21. 408 U.S. 238 (1972).
- 22. See BANNER, supra note 17 (manuscript at ch. 10); PATERNOSTER, supra note 17, at 35-159.
- 23. See BANNER, supra note 17 (manuscript at ch. 10); PATERNOSTER, supra note 17, at 75-77; ZIMRING & HAWKINS, supra note 20, at 39-45.
- 24. See, e.g., Herrera v. Collins, 506 U.S. 390, 417-18 (1993) (approving Texas's court death penalty procedures by holding that a habeas claim is only for imprisonment violations, and thus a claim of true innocence that was based on recently discovered evidence was not proper grounds for federal habeas corpus relief); Arave v. Creech, 507 U.S. 463, 478-80 (1993) (approving Idaho's death penalty statute by holding that the requirement of a defendant to exhibit "utter disregard for human life," as construed by Idaho Supreme Court to refer to the "cold-blooded, pitiless slayer," was not facially invalid); Morgan v. Illinois, 504 U.S. 719, 751 (1992) (striking down an Illinois death penalty statute by holding that, because due process requires that a jury undertaking capital sentencing must be impartial and indifferent, jury members may not hold biases for/against the death penalty and they may

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be struck as so); Payne v. Tennessee, 501 U.S. 808, 824-30 (1991) (approving Tennessee's death penalty statute by holding that having a jury in a capital case consider victim impact statements is not barred by the Eighth Amendment of the U.S. Constitution); Stanford v. Kentucky, 492 U.S. 361, 372-78 (1989) (approving Kentucky's death penalty statute by holding that the imposition of capital punishment on a sixteen to seventeen year old is valid and is not considered "cruel and unusual punishment" under the Eighth Amendment of the U.S. Constitution); Penry v. Lynaugh, 492 U.S. 302, 339-40 (1989) (striking down a Texas death penalty statute by holding that the absence of instructions informing a jury that it could consider evidence of defendant's conditions of mental retardation and abused background deprived the jury of a method for expressing its "reasoned moral response" to mitigating evidence in rendering sentencing decision (violating the Eighth and Fourteenth Amendments of the U.S. Constitution), but that the execution of mentally retarded people convicted of capital crimes is not prohibited by the Eighth Amendment of the U.S. Constitution); Maynard v. Cartwright, 486 U.S. 356, 365-66 (1988) (striking down an Oklahoma death penalty statute by holding that an aggravating circumstance described as "especially heinous, atrocious, or cruel" was unconstitutionally vague; that it did not offer sufficient guidance to the jury in deciding whether to impose capital punishment; that the presence of an additional, unchallenged, aggravating circumstance did not validate the death sentence where the state had no procedure for attempting to maintain a death penalty when one of several aggravating circumstances was held to be invalid or unsupported; and that the effect of recent decisions of the Oklahoma Court of Criminal Appeals, which would limit the aggravating circumstance to torture or serious physical abuse cases, was to be decided originally by state courts, not federal ones); McCleskey v. Kemp, 481 U.S. 279, 317-20 (1987) (approving Georgia's death penalty statutes by holding that a study indicating that a state's capital punishment verdicts are more often imposed in cases with black defendants and white victims than with white defendants and black victims was not enough for the state to have violated the Fourteenth or Eighth Amendments of the U.S. Constitution); Tison v. Arizona, 481 U.S. 137, 157-60 (1987) (approving an Arizona death penalty statute by holding that the Eighth Amendment does not prohibit capital punishment in the case of a defendant whose participation in a felony-murder is significant and whose mens rea is one of reckless indifference); Ford v. Wainwright, 477 U.S. 399, 417-18 (1986) (striking down a Florida death penalty statute by holding that the Eighth Amendment of the U.S. Constitution prohibits a state from imposing the death penalty upon a prisoner who is insane); California v. Ramos, 463 U.S. 992, 998-99 (1983) (approving California's death penalty statute by holding that an instruction regarding the commutation powers is not necessary under the Eighth and Fourteenth Amendments of the U.S. Constitution); Zant v. Stephens, 462 U.S. 862, 886-90 (1983) (approving Georgia's death penalty statute by affirming a state court imposition of the death penalty after it invalidated one aggravating circumstance, even though the jury found two aggravating circumstances applicable); Enmund v. Florida, 458 U.S. 782, 800-01 (1982) (striking down Florida's death penalty statute by holding that the Eighth Amendment of the U.S. Constitution prohibits a capital sentence for a defendant who does not himself kill, attempt to kill, or intend that a killing or lethal force will be employed); Eddings v. Oklahoma, 455 U.S. 104, 114-17 (1982) (striking down Oklahoma's death penalty statute by holding that a state court must consider a defendant's upbringing and mental state as mitigating factors in a capital case when applicable); Godfrey v. Georgia, 446 U.S. 420, 432-33 (1980) (striking down a Georgia death penalty statute by holding that any aggravating circumstance that is vague and broad—meaning that it does not imply any inherent restraint on the arbitrary and capricious infliction of a death sentence, such as "outrageously or wantonly vile, horrible or inhuman,"—violates the Eighth and Fourteenth Amendments of the U.S. Constitution); Lockett v. Ohio, 438 U.S. 586, 608-09 (1978) (striking down Ohio's death penalty statute by holding that jurors with biased opinions about the death penalty may be excluded, and state capital statutes must include individualized consideration of mitigating factors required by Eighth and Fourteenth Amendments of the U.S. Constitution); Coker v. Georgia, 433 U.S. 584, 589-600 (1977) (striking down a Georgia death penalty statute regarding rape by holding that capital punishment for rape was in violation of the Eighth Amendment of the U.S. Constitution); Fowler v. North Carolina, 428 U.S. 904 (1976) (striking down North Carolina's death penalty statute by holding that North Carolina's imposition of the death penalty, without a proper a bifurcated trial, constituted cruel and unusual punishment); Gregg v.

throughout the 1970s, 1980s, and early 1990s, the Court refined the parameters of capital punishment and states jostled to bring their capital punishment system in line with the Court's parameters. Thus, many capital punishment sentences in the two decades following *Furman* were vacated due to the Court's interpretation of the constitutional validity of capital punishment, rather than factual or procedural problems.

Aside from challenges to the constitutional basis of capital punishment, many authors and commentators have criticized its existence and usage. In the twenty-nine years following *Furman*, analysts have criticized the quality and payment of capital defense counsel, sentencing guide lines, judicial objectivity, the length and cost of capital cases, and the stability of the capital system itself.²⁶ Through empirical evidence of appellate court

Georgia, 428 U.S. 153, 176-87 (1976) (approving Georgia's death penalty statute by holding that Georgia's capital punishment statute for murder does not violate the Eighth and Fourteenth Amendments of the U.S. Constitution; that retribution and the possibility of deterence could be considered by legislatures to determine whether the death penalty should be imposed; and that bifurcated trials, with the jury hearing extra evidence and argument before determining whether to impose capital punishment, was constitutional).

The preceding Supreme Court cases in the decades succeeding Furman demonstrate that during this period (which is the first twenty years of the twenty-three year data range of the Liebman Study) the Supreme Court constantly updated and transformed its treatment of and stance on capital punishment. The holdings of the preceding cases are examples of how these reformatting decisions affected numerous capital cases and decisions within Federal and state courts. For a more thorough analysis regarding the Court's capital punishment precedent during this time period, see BANNER, supra note 17 (manuscript at ch. 10); ZIMRING & HAWKINS, supra note 20, at 37-69; David A. J. Richards, Constitutional Interpretation, History, and the Death Penalty, in THE DEATH PENALTY IN AMERICA: CURRENT CONTROVERSIES, supra note 20, at 214-31; Carol S. Steiker & Jordan M. Steiker, Sober Second Thoughts: Reflections on Two Decades of Constitutional Regulation of Capital Punishment, 109 HARV. L. REV. 355, 361-70 (1995). For more analysis of the specific impact of the Furman and Gregg decisions and their progeny, see BANNER supra note 17 (manuscript at ch. 10); ZIMRING & HAWKINS, supra note 20, at 43-73; PATERNOSTER, supra note 17, at 5-112; Marquart & Sorensen, supra note 20, at 163-65.

- 25. See BANNER, supra note 17 (manuscript at ch. 10).
- 26. See, e.g., DAVID C. BALDUS ET AL., EQUAL JUSTICE AND THE DEATH PENALTY: A LEGAL AND EMPIRICAL ANALYSIS (1990) (discussing how death penalty discrimination post-Furman occurred not in the race of the defendant, but in the race of the victim); WALTER BERNS, FOR CAPITAL PUNISHMENT: CRIME AND THE MORALITY OF THE DEATH PENALTY 173 (1979) (arguing that criminal law "must remind us of the moral order by which alone we can live as human beings. . . . and in our day the only punishment that can do this is capital punishment"); BARRY NAKELL & KENNETH A. HARDY, THE ARBITRARINESS OF THE DEATH PENALTY (1987) (arguing that black victims were less likely to have their killers receive the death penalty than white victims); Craig J. Albert, Challenging Deterrence: New Insights on Capital Punishment Derived from Panel Data, 60 U. PITT. L. REV. 321 (1999) (arguing against a deterrent effect of capital punishment); Kenneth L. Avio, Capital Punishment, in 1 The New Palgrave Dictionary of Economics and the Law, 201 (Peter Newman ed., 1998) (discussing the literature and arguments behind the deterrent effect of capital punishment and a brief history of other challenges to the rationales of capital punishment); David C. Baldus & James W.L. Cole, A Comparison of the Work of Thorsten Sellin and Isaac Ehrlich on the Deterrent Effect of Capital Punishment, 85 YALE L.J. 170 (1975) (discussing the validity of prior research and analysis on a possible deterrent effect of capital punishment); William J. Bowers & Glenn

decisions regarding capital trials, the *Liebman Study* attempts to show both the degree of error and problems within the nation's capital punishment system.²⁷ Further, the study attempts to show a difference in treatment of capital punishment between states.²⁸ The authors of the *Liebman Study* assert that the a consensus of the U.S. population²⁹ regarding crisis-level problems within the U.S. death penalty system initiated the study.³⁰

B. General Overview of Social Scientific Research

In order to support and validate their conclusions, most social scientific scholars agree that the authors of an empirical study must follow certain social scientific research processes.³¹ A study cannot simply state a hypothesis, interpret some data, and then claim that the hypothesis is correct.³² This Note will address a few of these essential processes or

- L. Pierce, The Illusion of Deterrence in Isaac Ehrlich's Research on Capital Punishment, 85 YALEL.J. 187 (1975) (discussing the nonexistence of a deterrent effect of capital punishment and arguing inconsistencies, such as the effect of murder rate, in Ehrlich's work); Isaac Ehrlich, The Deterrent Effect of Capital Punishment: A Question of Life and Death, 65 AM. ECON. REV. 397 (1975) (arguing for the truth of a deterrent effect of capital punishment); Phoebe C. Ellsworth & Samuel R. Chase, Hardening the Attitudes: Americans' Views on the Death Penalty, in The Death Penalty IN AMERICA: CURRENT CONTROVERSIES, *supra* note 20, at 90 (discussing reasons why the death penalty is continually popular despite having little or no effect on the murder rate); Wayne A. Logan, When Balance and Fairness Collide: An Argument for Execution Impact Evidence in Capital Trials, 33 U. MICH. J.L. REFORM 1 (2000) (arguing in favor of "execution impact statements," statements to inform the jury of the consequences of condemning the convicted defendant to death); Steiker & Steiker, supra note 24, at 371-438, 426 (arguing that the Supreme Court's post-Gregg path of capital punishment "has been a disaster, an enormous regulatory effort with almost no rationalizing effect"); Tom R. Tyler & Renee Weber, Support for the Death Penalty: Instrumental Response to Crime, or Symbolic Attitude?, 17 LAW & SOC'Y REV. 21 (1982) (discussing the effect of how someone not supporting the death penalty in the late Twentieth Century gave the public the impression that the person was soft on crime).
 - 27. *Liebman Study*, *supra* note 1, at 4-15, 27-51.
 - 28. Id. at 51-109.
 - 29. Liebman was possibly referring to the category of studies discussed in *supra* note 26.
 - 30. Liebman Study, supra note 1, at i.
- 31. See Gary King et al., Designing Social Inquiry: Scientific Inference in Qualitative Research (1994). See also Michael S. Ball & Gregory W. H. Smith, Analyzing Visual Data (1992); Gouri K. Bhattacharyya, Statistical Concepts and Methods (1977); Hubert M. Blalock, Jr. & Ann B. Blalock, Methodology in Social Research (1968); Sherryl Kleinman & Martha A. Copp, Emotions and Fieldwork (1993); Charles W. Lachenmeyer The Essence of Social Research: A Copernican Revolution (1973); Tim May, Social Research: Issues, Methods, and Process (1993); Gunnar Myrdal, Objectivity in Social Research (1969); Royce Singleton, Jr. et al., Approaches to Social Research (1988); Paul C. Stern, Evaluating Social Science Research (1979); Leroy Wolins, Research Mistakes in the Social and Behavioral Sciences (1982); Sonia R. Wright, Quantitative Methods and Statistics: A Guide to Social Research (1979).
- 32. See KINGETAL., supra note 31, at 20-27 (explaining that a study cannot claim a hypothesis's validation without proper support and statistical analysis).

methodologies in the context of Professor Liebman and his colleagues' validation of their study's results.³³

The results of a proper empirical study must be replicable.³⁴ Anyone reading the study must be able to conduct the study again and obtain the same results with the same information that the original authors used to conduct the study.³⁵

In addition, a study should attempt to prove its "null hypothesis." In fact, a study's suggested hypothesis is not proven until it has disproved its null hypothesis.³⁷ The authors of any empirical study must undertake steps

33. See infra Part IV.A. See also discussion infra Parts IV.B-C.

34. In fact, one research handbook states as an important general guideline, "All data and analyses should, insofar as possible be replicable." KING ET AL., supra note 31, at 26. See also BLALOCK & BLALOCK, supra note 31, at 13-17, 172-78; KING ET AL., supra note 31, at 8, 25-27, 151; SINGLETON ET AL., supra note 31, at 56-57, 117-23, 177, 339-74; WRIGHT, supra note 31, at 45-49. A study must be replicable to ensure that the study's conclusions are valid and to show that the author's work is valid. KING ET AL., supra note 31, at 26-27.

The problem of replication can be highlighted by the 1989 Fleischmann/Pons cold fusion fiasco. Two scientists, Fleischmann and Pons, announced the successful conduction of cold fusion at room temperature. See Otis Port, Fusion in a Bottle: Can it Be That Easy?, BUS. W.K., Apr. 10, 1989, at 86. Cold fusion, the melding of two independent atoms without extremely high temperatures, if done successfully, could supply pollution-free power with seawater as fuel, eliminating many of our planet's fuel problems. Id. at 86-87. However, Fleischmann and Pons's support for the findings were extremely poor and no other scientists were able to replicate the study; thus, within a few weeks the success was forgotten and the discovery discounted. See Sharon Begley, 'Cold Fusion': More Questions, Newsweek, Apr. 24, 1989, at 6; Phillip Elmer-DeWitt & Michael D. Lemonick, Fusion Illusion, TIME, May 8, 1989, at 72, 72-77; Otis Port, Fusion in a Bottle: Can it Be That Easy?, BUS. WK., Apr. 10, 1989, at 86-87; Otis Port, Table-Top Fusion Looks Less Like a Parlor Trick, BUS. WK., Apr. 24, 1989, at 132, 132-36.

- 35. See Blalock & Blalock, supra note 31, at 172-78; King et al., supra note 31, at 26-27; Singletonet al., supra note 31, at 56-57, 177, 337, 339-74.
- 36. WRIGHT, *supra* note 31, at 93-94 ("The null hypothesis states that the experimental treatment did not have any effect and that the observed difference is due solely to the operation of chance factors."). *See also* BLALOCK & BLALOCK, *supra* note 31, at 390-92; KING ET AL., *supra* note 31, at 46-47; SINGLETONET AL., *supra* note 31, at 56-57.
- 37. WRIGHT, *supra* note 31, at 94 ("The null hypothesis, then, is a competing explanation ... must be ruled out before any confidence can be placed on the causal hypothesis per se."). *See also* BLALOCK & BLALOCK, *supra* note 31, at 390-91, 422-23; KING ET AL., *supra* note 31, at 20, 28-31, 46-47; SINGLETONET AL., *supra* note 31, at 54-60; WRIGHT, *supra* note 31, at 93-94, 99, 103-05, 117, 120-21, 129.

The term "alternative hypothesis" has two different meanings in social scientific research literature that should be explained and clarified to better comprehend the significance of disproving a study's null hypothesis. To most researchers, "alternative hypothesis" is the study's actual proposed hypothesis, the possibility that the suggested relationship between the variables "did produce the observed results." WRIGHT, *supra* note 31, at 94. Thus, as a study is able to further disprove its null hypothesis, its alternative hypothesis is more likely to be true. *Id.* Other researchers state that a study's "alternative hypotheses" are those possibilities that a different relationship between the variables, besides the study's proposed hypothesis, is creating the observed effect. BLALOCK & BLALOCK, *supra* note 31, at 390-91; SINGLETON ET AL., *supra* note 31, at 57. According to this view, a study's proposed hypothesis is more likely to be true when the study is able to further disprove a high number of alternative hypotheses along with its null hypothesis. *Id.* Regardless of the terminology, all

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to show that what they are attempting to prove is wrong or that their independent variable has no effect on the dependent variable.³⁸ The null hypothesis of a study is the possibility that independent variable(s) of a study have no effect on the dependent variable.³⁹ In other words, the null hypothesis is the idea that the study's proposed theory is neither positively nor negatively valid, but rather of no effect.⁴⁰ In order to support the conclusion that their proposed hypothesis is more true than not, an author must ultimately fail in this analysis.⁴¹ If a study's authors cannot eliminate the possible existence of the null hypothesis by the collected data, then they cannot claim that their proposed hypothesis is valid.⁴²

Further, a proper empirical study must develop proper measurements for evaluating the existing observable implications that can be tested to prove its hypothesis. The variables that a study's authors choose to explain their hypothesis must have proper real world manifestations and the ability to be measured. The authors should choose measurements and variables that can explain their hypothesis through data. Additionally, a study can utilize certain methods of comparing and analyzing data to present its data in a more persuasive manner. Authors of studies may utilize such tools as Pearson's correlation coefficient, Restatistic, and

methodology guides agree that a study needs to refute its null hypotheses to show that its proposed hypothesis is more likely valid than not. *See* BLALOCK & BLALOCK, *supra* note 31, at 390-91; KINGET AL., *supra* note 31, at 28-31; SINGLETON ET AL., *supra* note 31, at 54-60; WRIGHT, *supra* note 31, at 93-94.

- 38. $See \ KINGET AL., supra \ note 31, at 28-31.$
- 39. BLALOCK & BLALOCK, supra note 31, at 391-93; WRIGHT, supra note 31, at 93-94.
- 40. WRIGHT, supra note 31, at 93-94.
- 41. See id. at 99-114, 168-70; WRIGHT, supra note 31, at 93-94, 103-05.
- 42. KING ET AL., supra note 31, at 28-29; SINGLETON ET AL., supra note 31, at 56-57.
- 43. See King et al., supra note 31, at 150-53; Singleton et al., supra note 31, at 98-101; Wright, supra note 31, at 42-49. See also Blalock & Blalock, supra note 31, at 171-72. Directors of a study must measure every variable and possible observation and the directors should describe the parameters involved in that selection for explanation and clarification within the study. King et al., supra note 31, at 141-49, 150-53.
- 44. KING ET AL., *supra* note 31, at 151, 168; SINGLETON ET AL., *supra* note 31, at 98-99; WRIGHT, *supra* note 31, at 42-49.
 - 45. See KINGET AL., supra note 31, at 141-49.
 - 46. See id. at 141-68.
- 47. See Marija J. Norusis, Quide to Data Analysis, 365-66 (1999), Singleton et al., supra note 31, at 78, 407; Wright, supra note 31, at 144-46. Pearson's correlation coefficient measures the degree of fit of the regression line to the data. Wright, supra note 31, at 144. In other words, its calculation compares the degree of uniformity of two data sets. See id.
- 48. See NORUSIS, supra note 47, at 388; WRIGHT, supra note 31, at 150. In multiple regression analysis, R² is a measure of the "proportional variance of [the observed values] explained by the linear combination of the set of independent variables expressed in a prediction equation." WRIGHT, supra note 31, at 150.

single/multiple linear regression analysis⁴⁹ to show the relevance of data and disprove a study's null hypothesis.

III. OVERVIEW OF THE LIEBMAN STUDY

A. Historical Background of the Liebman Study

Professor Liebman and his colleagues released the *Liebman Study* on June 12, 2000 and published it on the Web site of The Justice Project. In the wake of its release, newspapers across the United States announced the study's findings. The headlines of these newspaper reports read: *Study: Most Death Penalty Cases Have Significant Flaws*, Death Penalty Cases Fail in Review. One editorial described the *Liebman Study* as "[a]nother nail in the coffin of the death penalty." Following the June 2000 release of the study on the Internet, the authors published a shortened version in the *Texas Law Review*.

Just under a decade before the study's release, Professor Liebman proposed to a congressional committee, upon the suggestion of its

^{49.} See KINGET AL., supra note 31, at 96-97, 130-32, 168-69; WRIGHT, supra note 31, at 135-58. Linear regression analysis (multiple and single) illustrates the relationship between two variables, or data sets, by means of a linear mathematical equation. WRIGHT, supra note 31, at 135-36.

^{50.} See Liebman Study, supra note 1, at Introduction. According to its Web site, "The Justice Project is committed to: educating the American public about our deeply flawed capital justice system; sustaining a national dialogue between our leaders and the public which rigorously examines a system which fails to protect the innocent; mounting federal and state legislative efforts to change the unfairness in our capital justice system; and developing partnerships with advocates everywhere who share our mission and commitment." The Justice Project, About the Campaign, at http://justice.policy.net/about/ index.vtml (last visited Mar. 26, 2001).

^{51.} See, e.g., Fox Butterfield, Study Finds Majority of Death Penalty Cases Rife with Error, NEWS & OBSERVER (Raleigh, N.C.), June 12, 2000, at A1; Frank Green, Broken System or Better One? Study: VA. Reverses Fewest Death-Penalty Cases in U.S., RICHMOND TIMES-DISPATCH, June 12, 2000, at A1; Douglas Holt & Bruce Jaspen, Study: Most Death Penalty Cases Have Significant Flaws, CHI. TRIB., June 12, 2000, at 7; Brooke A. Masters, Flaws Lead Courts to Overturn Majority of Death Penalty Cases, DET. NEWS, June 12, 2000, at 4; Brooke A. Masters, Most Death Sentences Reversed, Study Finds, WASH. POST, June 12, 2000, at A10; Mark Skertic, Death Case Errors Common, CHI. SUN-TIMES, June 12, 2000, at 24; Henry Weinstein, Death Penalty Is Overturned in Most Cases; Justice: Study Finds Courts Void Executions More Than Two-Thirds of the Time, L.A. TIMES, June 12, 2000, at A1.

^{52.} See Holt & Jaspen, supra note 51, at A1.

^{53.} US Death-Row System Fraught with Errors: Study, AGENCE FR-PRESSEE, June 12, 2000, available at 2000 WL 2811890.

^{54.} Brooke A. Masters, *Death Penalty Cases Fail in Review*, TIMES UNION (Albany), June 12, 2000, at A1.

 $^{55. \ \ \, \}text{Editorial}, \textit{New Evidence of Errors Fuels Death-Penalty Doubts}, \text{USA TODAY}, \text{June 12, 2000}, \\ \text{at 18A}. \\$

^{56.} Capital Attrition, supra note 1, at 1839.

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members, that a study chronicling the possible error within U.S. habeas corpus cases might be worthwhile.⁵⁷ In response to this suggestion, from 1991 to June 2000, Professor Liebman⁵⁸ and the study's other authors collected, organized, and analyzed the data and theories in the study.⁵⁹ Using the information imbedded within capital cases for the twenty-three year span from 1973 to 1995, the study's authors sought to confirm or deny their concerns about the U.S. capital punishment system.⁶⁰ The authors tracked the movement of all capital cases from this time period through the state and federal judicial systems.⁶¹ By assigning values to certain judicial actions ⁶² that are possible within capital cases, the authors compiled data that spoke to the collective treatment of capital cases during

For a discussion on objectivity on social scientific research, see KING, *supra* note 31, at 27-28, 63-65, 161-65 (noting that without proper acknowledgment and strict adherence to procedure, bias and extreme objectivity within social scientific research can be a serious problem); MYRDAL, *supra* note 31, at 43-49 (stating that bias in research exists naturally; however, independence of one's bias in the conducting of one's research and strong empirical processes can negate any ill effects of such bias); and see generally KLEINMAN & COPP, *supra* note 31 (discussing the consequences of having strong emotions or bias in research).

59. Liebman Study, supra note 1, at xxi, acknowledgments.

that period within the judicial system. ⁶³

- 60. The authors were fueled by concerns that (1) "many feel capital trials put people on death row who don't belong there" and (2) "capital appeals take too long." *Id.* at 1.
- 61. *Id.* at 5 (monitoring how appellate courts treated certain cases, to be collected from the study between 1973-1995).
- 62. *Id.* at 5, 134-37 nn.33-42 (including, but not for every case, judicial actions such as the reversal, remand, or approval of a trial court's decision as well as the overturning of the original trial courts conviction or sentence).
 - 63. Id. at 5.

^{57.} See Hearings on Habeas Corpus Reform Before the Subcomm. on Civil and Constitutional Rights of the House Comm. on the Judiciary, 101st Cong. (1991) (statement of James Liebman, Vice Dean and Professor, Columbia University School of Law). See also Description of A Broken System: Error Rates in Capital Cases, 1973-1995, at http://justice.policy.net/jpreport/ index.html (June 12, 2000) ("In 1991 the Chair of the U.S. Senate Committee on the Judiciary asked Professor James Liebman of the Columbia University School of Law to calculate the frequency of relief in habeas corpus cases.").

^{58.} Professor Liebman has consistently worked as an anti-death penalty advocate. *See* Eisenberg, *supra* note 13, at 16 (noting that Professor Liebman's refusal to disclose the study's data is especially troubling considering "Liebman maintains an active criminal defense practice and has been litigating against the death penalty since long before he became a professor"). Professor Liebman served as Assistant Counsel, NAACP Legal Defense and Educational Fund from 1979 to 1985 where he specialized in capital punishment and habeas corpus matters. *See* Faculty and Administration - Columbia Law School, James S. Liebman (2000), *at* http://30.law.columbia.edu/faculty/jLiebman.html. *See also* The Italian Academy for Advanced Studies in America at Columbia University Presents: Moratorium on the Death Penalty (1998), *at* http://30.italianacademy.columbia.edu/lectures/Moratorium/bios/Liebman.html. "Since 1982, he has argued four capital habeas corpus cases in the United States Supreme Court He was awarded a 1999 Soros Senior Justice Fellowship to support public advocacy on . . . the death penalty in the United States." *Id*.

B. Results of the Liebman Study

The Liebman Study attempted to address "the reliability—indeed, the bare reliability—of the death penalty system as a whole."64 The authors discussed two beliefs that they claim spurred their inquiry⁶⁵—that the transition from death sentence to execution is too slow and that the death sentences themselves are "fraught with error." 66

To address these beliefs, the authors collected an immense amount of data. Beginning in 1991, the authors collected published information and case histories from an undisclosed amount of capital cases.⁶⁷ Professor Liebman and his colleagues continued to compile data from these cases as they matured through the U.S. judicial system. 68 They examined the state and federal appellate decisions, from 1973 to 1995, which reviewed state trial courts' capital cases.⁶⁹ The authors concluded that of the 5,760 capital convictions rendered by state courts, sixty-eight percent contained "error that substantially undermines the reliability of the guilt finding or death sentence imposed at trial."70 Professor Liebman and his colleagues did not collect the same information about every case. Some cases received closer attention because certain case information was available from published opinions and the Legal Defense Fund of the NAACP.⁷¹ The authors then tabulated and analyzed the results.⁷²

The authors concluded that the U.S. "capital punishment system [is] collapsing under the weight of its own mistakes." ⁷³ The study announced that the overall "serious error rate" of the capital punishment system is sixty-eight percent and that the death sentence itself was removed upon retrial in a very high proportion of those cases.⁷⁴ Additionally, according to Professor Liebman and his colleagues, the rates of reversal between states varied; thus, some states had a more favorable rate of "serious error"

^{64.} *Liebman Study, supra* note 1, at 2.

^{65.} *Id*. at 4. 66. *Id*.

^{67.} Id. at 5, 27.

^{68.} Id. at 5, 27-28, 132-33 n.26.

^{69.} Id. at 132-33 n.26.

^{70.} Liebman Study, supra note 1, at 134-37 nn.33-42. According to Professor Liebman and his colleagues, courts reversed forty-one percent of those cases on "serious error" during direct appeals; state court decisions reversed forty-seven percent of those cases; and when habeas corpus review was added to the scenario, sixty-eight percent of all capital cases contained "serious error." Id.

^{71.} Id. at 5.

^{72.} Id.

^{73.} Id. at 124.

^{74.} Id. at 6.

than others.⁷⁵ From these findings, the *Liebman Study* declared that the system "must fail to catch and correct some of the error that has flooded the system" and it is consequently "broken."⁷⁶

C. Impact and Reaction to the Liebman Study

With the increase of DNA evidence⁷⁷ and the anti-capital punishment attitude of many Americans,⁷⁸ numerous people have heralded and cited to the *Liebman Study*. Many publications have written editorials centered on the findings of the *Liebman Study*.⁷⁹ In fact, one editorial noted that the study's "results are startling," ⁸⁰ while another even called for legislation to correct the problems that the study claims to have unearthed.⁸¹ Further, many social science, political science, and legal authorities have commented favorably on the study.⁸² These authorities agree with the study's call for capital punishment reform and accept the study's conclusions as fact.⁸³ As one legal periodical noted, "The press reported [the *Liebman Study*] with great fanfare and as an established fact. There has been no media effort to explore the flaws and exaggerations in Liebman's analysis."⁸⁴ A smaller number of experts (mostly two professors from John Jay College of Criminal Justice) have been mildly critical of the study in short, poignant pieces and some address the

^{75.} Liebman Study, supra note 1, at 7.

^{76.} *Id.* at 121.

^{77.} See generally, e.g., ABA Okays Recommendation on Collection of DNA Evidence, ARIZ. ATT'Y, Nov. 2000, at 9, 9; Peter Donnelly & Richard D. Friedman, DNA Database Searches and the Legal Consumption of Scientific Evidence, 97 MICH. L. REV. 931 (1997).

^{78.} See BANNER, supra note 17 (manuscript at ch. 10); discussion supra note 26.

^{79.} See, e.g., Editorial, Pass a Resolution to Condemn Death Penalty: Death Penalty Debate Continues, SYRACUSE HERALD-J., July 7, 2000, at A10; Editorial, Serious, Reversible Error, 161 N.J. L.J. 890 (2000); David Sarasohn, Editorial, Put Captial Punishment Out of Its Misery, PORTLAND ORGANIAN, June 10, 2001, at C04.

^{80.} Serious, Reversible Error, supra note 79, at 890.

^{81.} Pass a Resolution to Condemn Death Penalty: Death Penalty Debate Continues, supra note 79, at A10.

^{82.} See, e.g., Alan Berlow, The Broken Machinery of Death, 12 AM. PROSPECT 1617, 1617 (2001); Eric Black, Media Watch: Who Put the Death Penalty on the Agenda?, STAR-TRIB., July 13, 2000, at 16A; Broder, supra note 5, at B7; Vincent E. Doyle III, Doubting Our Death Penalty Systems, 225 N.Y. L.J. 53 (2001); Judge Rudolf J. Gerber, On Dispensing Injustice, 43 ARIZ. L. REV. 135 (2001); Scott Goldstein, Death Penalty Foes Call for Moratorium, 9 N.J. LAW.: WKLY. NEWSPAPER 1315 (2000); Neil Seeman, Review, Capital Questions: What is Fueling the Growing Opposition to the Death Penalty?, NAT'L POST, Aug. 5, 2000, at B1; Teresa Stepzinski, Death Penalty Draws Fire: Report Paints Bleak Picture of Capital Punishment, Pointing Out High Numbers of Errors in the Process, Fl.A. TIMES UNION, June 24, 2000, at A1.

^{83.} See Broder, supra note 5, at A25; Goldstein, supra note 82, at 1315; Stepzinski, supra note 82, at A1.

^{84.} Eisenberg, *supra* note 13, at 16.

authors' bias against the death penalty. 85 In defense, Professor Liebman and his colleagues have responded to most of the criticism with specific, targeted rebuttals. 86

Despite the slight criticism, the *Liebman Study* has garnered influential support. ⁸⁷ In fact, before the one-month anniversary of the study's release, both the U.S. House of Representatives and the Senate used the study as support for legislation. ⁸⁸ State legislatures have also used the study to

85. See, e.g., Eisenberg, supra note 13, at 16; Joseph L. Hoffman, Violence and the Truth, 76 IND. L. J. 939 (2001) (Special Feature: The Harry Pratter Professorship Lecture); Barry Latzer & James N.G. Cauthen, Another Recount: Appeals in Capital Cases, PROSECUTOR, Jan./Feb. 2001, at 25, 25 [hereinafter Latzer & Cauthen III]; Barry Latzer & James N.G. Cauthen, Capital Appeals Revisited, 84 JUDICATURE 64 (Sept./Oct. 2000) [hereinafter Latzer & Cauthen I]; Barry Latzer & James N.G. Cauthen, The Meaning of Capital Appeals: A Rejoinder to Liebman, Fagan, and West, 84 JUDICATURE 142 (Nov./Dec. 2000) [hereinafter Latzer & Cauthen II]; Brady Snyder, Is Death-Row Report Flawed?, DESERET NEWS, June 20, 2000, at A1; James Q. Wilson, Editorial, Do Errors in Capital Cases Mean Innocent Are Killed?, SEATTLE POST-INTELLIGENCER, July 11, 2000, at B5. In fact, the university paper of Professor Liebman's own institution expressed criticism of the Liebman Study. See Jamie Sneider, Statistics Fail Activists, COLUMBIA DAILY SPECTATOR, Feb. 6, 2001, available at 2001 WL 12495817.

86. See Jeffery Fagan, James S. Liebman, & Valerie West, Death Is the Whole Ball Game, 84 JUDICATURE 144 (Nov./Dec. 2000) [hereinafter Fagan et al., Ball Game]; James Liebman, Jeff Fagan, & Valerie West, Technical Errors Can Kill, NAT'L L.J., Sept. 4, 2000, at A16 [hereinafter Liebman et al., Technical Errors]; James S. Liebman, Jeffrey Fagan, & Valerie West, Death Matters, a Reply to Latzer and Cauhen, 84 JUDICATURE 72 (Sept./Oct. 2000) [hereinafter Liebman et al., Death Matters]; Valerie West, Jeffrey Fagan, & James S. Liebman, Look Who's Extrapolating: A Reply to Hoffman, 76 IND. L.J. 951 (2001) (Special Feature: The Harry Pratter Professor Lecture) [hereinafter West et al., Extrapolating].

87. See, e.g., Post-Conviction DNA Testing: When Is Justice Served?: Hearing Before the Senate Judiciary Comm., 106th Cong. 47, 16, 29 (2000) [hereinafter Senate DNA Hearings] (statements of Charles F. Baird, Co-chair, National Comm. to Prevent Wrongful Executions; Sen. Russell Feingold, Member, Senate Judiciary Comm.; Sen. Patrick Leahy, Ranking Member, Senate Judiciary Comm.; Sen. Orrin G. Hatch, Chairman, Senate Judiciary Comm.); Broder, supra note 5, at B7.

88. See Innocence Protection Act: Hearing on H.R. 4167 Before the Subcomm. on Crime of the House Comm. on the Judiciary, 106th Cong. 10, 22-23, 38 (2000) [hereinafter House Innocence Hearings] (statements by James E. Coleman, Jr., Chair, Section of Individual Rights and Responsibilities; Rep. William D. Delahunt, Member, House Comm. on the Judiciary; Rep. Ray LaHood); Senate DNA Hearings, supra note 87, at 4-7, 16, 29 (statements of Charles F. Baird, Cochair, National Comm. to Prevent Wrongful Executions; Sen. Russell Feingold, Member, Senate Judiciary Comm.; Sen. Patrick Leahy, Ranking Member, Senate Judiciary Comm.; Sen. Orrin G. Hatch, Chairman, Senate Judiciary Comm.). The media has also used the Liebman Study to encourage certain policy, for example Pass a Resolution to Condemn Death Penalty: Death Penalty Debate Continues, supra note 79 at A10. Further, legal authorities have used the Liebman Study to encourage certain policy. See, e.g., Judge Rudolf J. Gerber, On Dispensing Injustice, 43 ARIZ. L. REV. 135 (2001); Lissa Griffin, The Correction of Wrongful Conviction: A Comparative Perspective, 16 AM. U. INT'L L. REV. 1241 (2001); David McCord, An Open Letter to Govenor George Ryan Concerning How to Fix the Death Penalty System, 32 LOY. U. CHI. L.J. 451 (2001); Kenneth Williams, The Antiterrorism and Effective Death Penalty Act: What's Wrong with It and How to Fix It, 33 CONN. L. REV. 919 (2001); Denise Young, The Debate over Arizona's Death Penalty, ARIZ. ATT'Y, Nov. 2000, at 26.

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support legislation. ⁸⁹ Before the U.S. Senate Judiciary Committee, Senator Russell Feingold stated, "[s]tudies like that of Professor Liebman are further proof that our nation should suspend all executions. . . . [T]he Innocence Protection Act is a first good step in addressing some of the most egregious flaws [mentioned in the *Liebman Study*]." ⁹⁰ In fact, the ranking member of the Senate Judiciary Committee introduced a portion of the *Liebman Study* into the Committee's record. ⁹¹ The *Liebman Study* has even been used in support of legal decisions in state court. ⁹²

IV. A NALYSIS OF THE LIEBMAN STUDY'S PROCESS AND RESULTS.

As the *Liebman Study* continues to influence public opinion, educational dialogue, and legislation, social scientists and legal commentators familiar with the study must either assure decision makers of the study's validity or warn them of its deficiencies. The data collected within the study must properly support its startling conclusions, as the study's results have the potential to significantly alter the U.S. capital punishment system. Accordingly, if the *Liebman Study*'s data and analysis support its conclusions, then its role of reform in the discourse of the media, legal experts, and policy makers is justified. However, if the

^{89.} See, e.g., John Caher, State Bar Meeting to Consider Death Penalty, Cameras in Court, 225 N.Y. L.J. 1 (2001); Richard Perez-Pena, State Bar Calls for a Halt to Capital Punishment, N.Y. TIMES, Apr. 1, 2001, at 30.

^{90.} Senate DNA Hearings supra note 87, at 67 (statement of Sen. Russell Feingold, Member, Senate Judiciary Comm.). Also, outside of legislative hearings, politicians have used the Liebman Study to encourage certain Policy. See e.g., Sen. Russ Feingold, The Death Penalty Under Attack, 16-SUM CRIM. JUST. 18 (2001).

^{91.} See Senate DNA Hearings, supra note 87, at 47 (statements of Sen. Orrin G. Hatch, Chairman, Senate Judiciary Comm.; Sen. Patrick Leahy, Ranking Member, Senate Judiciary Comm.).

^{92.} Williams v. State, 31 P.3d 1046 (Okla. Crim. App. 2001).

^{93.} Because legislation based upon the *Liebman Study* would attempt to fix the study's alleged "broken system," before such legislation occurs, legislators must be assured that a potential fix would be beneficial to the U.S. capital punishment system rather than detrimental. *See Liebman Study, supra* note 1, at 64, 68. *See also* supra note 31 and accompanying discussion.

^{94.} See KING ET AL., supra note 31, at 8, 24-28 (explaining that data claiming to support a hypothesis must be shown to do so); WRIGHT, supra note 31, at 44-49 (explaining the importance of supporting a proposed hypothesis with proper data).

^{95.} See, e.g., House Innocence Hearings, supra note 88, at 10, 22-23, 38 (statements by James E. Coleman, Jr., Chair, Section of Individual Rights and Responsibilities; Rep. William D. Delahunt, Member, House Comm. on the Judiciary; Rep. Ray LaHood); Senate DNA Hearings, supra note 87, at 4-7, 16, 29 (statements of Sen. Russell Feingold, Member, Senate Judiciary Comm.; Sen. Orrin G. Hatch, Chairman, Senate Judiciary Comm.; Sen. Patrick Leahy, Ranking Member, Senate Judiciary Comm.); Pass a Resolution to Condemn Death Penalty: Death Penalty Debate Continues, supra note 79 at A10.

^{96.} See, e.g., Broder, supra note 5, at B7; Goldstein, supra note 82, at 1315; Stepzinski, supra note 82, at A1.

study's data does not confirm its conclusions and the study's analysis does not validate its own findings, then the stated conclusions of the Liebman Study are not conclusions but rather solely unsupported hypotheses.⁹⁸ Thus, as policy makers and others consider basing decisions on the findings of the *Liebman Study*, they should also know whether those findings are proper conclusions or unsupported hypotheses.

The Liebman Study's authors assert that the U.S. capital punishment system is "broken." In support of this conclusion, Professor Liebman and his colleagues kept their data private, 100 established conclusions through vague variables, 101 used data from a chaotic period in capital punishment history, 102 assumed that appellate reversal is problematic, 103 and disregarded certain states in state-by-state analysis. 104 The analysis section of this Note will evaluate the effect of Professor Liebman and his colleagues' actions and determine the significance of these actions upon the study's conclusions.

As part of the evaluation of the *Liebman Study*, this section of the Note will discuss the social scientific methodology, measurement, analysis, and conclusions found within the study. The ensuing discussion regarding the process and results of the Liebman Study will include an evaluation of the following statistical aspects of the study: (A) proper statistical methodology for empirical social scientific research, ¹⁰⁵ (B) the authors' use of "serious error" to conclude that the U.S. capital punishment system is broken, 106 and (C) the study's state-by-state comparisons of both "serious error" and non-"serious error." 107

^{97.} See KING ET AL., supra note 31, at 6-8, 24-28 (explaining that a reader can only rely on a study's justified hypothesis if the hypothesis is properly empirically supported).

^{98.} See id.

^{99.} Liebman Study, supra note 1, at 121-24.

^{100.} See, e.g., Eisenberg, supra note 13, at 16 (noting Professor Liebman and his colleagues' "refusal to share underlying data with researchers").

^{101.} See, e.g., Liebman Study, supra note 1, at 134-37 nn.33-40 (describing the study's definition of "serious error").

^{102.} See Liebman Study, supra note 1, at 67, 128 n.7; discussion supra Part II.A.

^{103.} See discussion infra Part IV.B.2 (discussing how high rates of capital "serious error," as defined by the Liebman Study, are not an indication, as the study claims, of a broken system).

^{104.} See Liebman Study, supra note 1, at 64, 68, 80 (discarding the use of Virginia in the study's state-by-state analysis because it does not conform to their theory).

^{105.} See infra Part IV.A.

^{106.} See infra Part IV.B.107. See infra Part IV.C.

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A. Validity of the Liebman Study's Data, Measurement, and Methodology

The conclusions of the *Liebman Study*'s authors are based on data that no reader of the study can ascertain or evaluate. The study's data is unavailable for confirmation. ¹⁰⁸ In addition, the study's authors attempt to bolster their proposed hypothesis rather than question its validity, ¹⁰⁹ and the study's measurement values chosen by the authors are not proper observations. ¹¹⁰ Actions such as making data unavailable and eliminating a critical state from state-by-state analysis are not typical in any field of research. ¹¹¹

Statistically speaking, any study that attempts to confirm a theory or validate an idea cannot solely state its hypothesis followed by its conclusion and assume that any reader will support those conclusions. Between the hypothesis 113 and conclusion, an author must reveal data and proper statistical analysis. Despite the fact that most theories in social science can never be proven outright, most social scientists and statistical guides have established principles and guidelines which, if followed by a study, lead to a greater (or lesser) likelihood that a proposed hypothesis is confirmed. In their analysis and process, the authors of the *Liebman Study* violated a number of social scientific research principles, which are all specific standard empirical study practices that are employed to confirm valid inferences, thereby making their analysis appear incomplete.

^{108.} *See infra* notes 118-43 and accompanying text. *See, e.g.*, Eisenberg, *supra* note 13, at 16 (noting Professor Liebman and his colleagues' "refusal to share underlying data with researchers").

^{109.} See infra notes 144-49 and accompanying text. See, e.g., Liebman Study, supra note 1, at 64, 68, 80 (ignoring Virginia's error rates); id. at 137 n.40 (using a time period for their data that would increase error rates).

^{110.} See infra notes 150-57 and accompanying text. See, e.g., Liebman Study, supra note 1, at 134-37 nn.33-40; discussion supra Part IV.B.1.

^{111.} See Eisenberg, supra note 13, at 16 (preventing data dissemination); Liebman Study, supra note 1, at 64, 68, 80, 137 n.40 (disregarding certain state data).

^{112.} See supra note 94.

^{113.} In this Note, the term "proposed hypothesis" refers to the study's author's prediction regarding the relationship between certain variables. Many social scientists refer to this hypothesis as the "causal" or "alternative" hypothesis. *Compare* BLALOCK & BLALOCK, *supra* note 31, at 390-91, with WRIGHT, supra note 31, at 93.

^{114.} See discussion supra Part II.B.

^{115.} See KING ET AL., supra note 31, at 7-12; SINGLETON ET AL., supra note 31, at 35-37, 52-58. In social scientific research, one is merely making inferences about the world through observations. KING ET AL., supra note 31, at 7-12.

^{116.} SINGLETON ET AL., *supra* note 31, at 53-54 (stating that one can truly prove no conclusion, but rather through proper procedure and inferences, a study can show that a proposed hypothesis is more and more likely to be true).

^{117.} See KING ET AL., supra note 31, at 230 ("Valid inference is possible only so long as the

First, the authors of the *Liebman Study* prevented others in the legal and social scientific field from confirming their results. In social scientific terms, the study is not replicable. No one can repeat the results of the *Liebman Study*. In fact, the authors' data is neither available nor accessible. Aside from the lack of variable description and data within the study, the authors have personally denied a request to view the actual data from the study. Reporting all aspects of the data collection and the data itself is critical for establishing reproductibility and supporting the study's conclusion. As one guide states, The most important rule for all data collection is to report how the data were created and how we came to possess them. Although the *Liebman Study*'s authors informed the reader that the study did not analyze all 5,760 death

inherent logic underlying all social scientific research is understood and followed.").

- 118. See Eisenberg, supra note 13, at 16 (noting Professor Liehman and his colleagues' "refusal to share underlying data with researchers" and how such actions are "particularly troubling in light of media misrepresentations of Liehman as a neutral professor heading a Columbia University study"); Latzer & Cauthen III, supra note 85, at 26 n.11 ("Upon our request, Prof. Liehman declined to release his data to us."); Letter from James S. Liehman, Professor, Columbia School of Law, to Adam L. VanGrack, Student, Washington University School of Law 1 (Feb. 6, 2001) (on file with author) [hereinafter Liehman Data Letter] (explaining the Liehman Study authors' decision to withhold/delay the study's data upon request). While the letter indicates a future posting of the data, such action has not occurred. See id. It is also important to note that any data received may not even be the pure primary variable data that researchers need to determine replicability. Professor Liehman and his colleagues' refusal to release the data prevents others from using such data to confirm the results of the study. See KINGET AL., supra note 31, at 230-31. See generally Liehman Study, supra note 1.
- 119. Compare su pra note 118, with BLALOCK & BLALOCK, supra note 31, at 13-17, 172-78, and KING ET AL., supra note 31, at 8, 25-27, 151, and SINGLETON ET AL., supra note 31, at 56-57, 117-23, 177, 339-74, and WRIGHT, supra note 31, at 45-49.
- 120. See generally Liebman Study, supra note 1. As the study failed to pinpoint the data used to prove the hypothesis, a reader is unable to find or utilize such data.
 - 121. See Eisenberg, supra note 13, at 16; discussion supra note 118.
 - 122. See infra Parts IV.A-B.
- 123. See Eisenberg, supra note 13, at 16; Latzer & Cauthen III, supra note 85, at 26 n.11; Liebman Data Letter; discussion supra note 118. The authors of the Liebman Study refused to share their data with the author, inquiring academics, or the general public. Eisenberg, supra note 13, at 16. In fact, because the data may only include figures of the authors' already judged cases, the Liebman data may not even be the true information that would enable the reader to determine how the authors of the study selected the data within "serious error" or other variables. Liebman Data Letter, supra note 118, at 1.

One social scientific research commentator noted that "science . . . is public, not private." ROBERT K. MERTON, SOCIAL THEORY AND SOCIAL STRUCTURE 37 (1968 Free Press) (1949). The authors of any social scientific research have a duty to make their research, along with a detailed description of the methodology taken in that research, public. KINGETAL., *supra* note 31, at 7-9. The true validity of a study takes place in the public discourse; thus, if the public cannot analyze the study, then one cannot ascertain the true validity of the study. *Id.* Consequently, the lack of methodology and data that Professor Liebman and his colleagues have offered to the public create uncertainty concerning their conclusions

- 124. KING ET AL., supra note 31, at 51.
- 125. Id. (emphasis omitted).

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sentences from 1973-1995, 126 the reader does not know which cases were placed into which variable category. 127 Although Professor Liebman and his colleagues limited their study to 4,578 specific cases that had completed the appellate process, the study's procedure is questionable and the use of the entire 1973-1995 time period is problematic. ¹²⁸ Even though early dates in this data range include chaotic events in capital punishment's constitutionality, 129 Professor Liebman and his colleagues did not explain why using this time period, versus a more recent era, 130 would be most effective. With more recent data, 131 less chaotic time periods, ¹³² and more clear case selection, ¹³³ the study's data would be more indicative of the current state of the U.S. capital punishment system. In fact, though the authors indicated that some of the data came from certain consulted printed opinions and various NAACP case records, ¹³⁴ the authors did not clarify the following: which specific cases they viewed, which sources from each case they observed, and how they chose any of those cases. Because a collection of cases solely from such sources may include only certain types of cases, such information about the data is important to assess the data's reliability. 135 In fact, of the limited information that is available in the study, some has already been reported to be incorrect. 136 Unfortunately, with the unavailability of specific data

- 126. Liebman Study, supra note 1, at 137 n.40.
- 127. The Liebman Study failed to include this information about the study's data.
- 128. See Liebman Study, supra note 1, at 5-6, 134 n.33, 136-37 n.40. The authors located all of the 5,760 capital cases from 1973-1995 but only reviewed the 4,578 cases that had fully reached direct state review. *Id.* at 137 n.40.
 - 129. See supra Part II.A.
- 130. Other social scientists roughly calculated some of the same statistics as the *Liebman Study* for the 1990s, and with fewer resources than the *Liebman Study*. *See* Latzer & Cauthen I, *supra* note 85, at 65-69. In response, the *Liebman Study* authors did not criticize Latzer and Cauthen's use of these more recent years, while Latzer and Cauthen did criticize the *Liebman Study* authors for their choice of time periods. *Compare* Liebman et al., *Death Matters, supra* note 86, at 72-74, *with* Latzer & Cauthen I, *supra* note 85, at 64-66. As more data is available for the later years, the *Liebman Study* notably failed to utilize a proportional representation of this more up-to-date data, especially considering their confusing methods of determining "serious error." *See Liebman Study, supra* note 1, at 134 n.33; *infra* Part IV.B.
 - 131. See Latzer & Cauthen I, supra note 85, at 65-69.
 - 132. See discussion supra Part II.A.
- 133. The study's authors selected certain nonrandom data that was conveniently available. *Liebman Study*, *supra* note 1, at 5. The use of data such as NAACP records undoubtedly emphasized certain "error prone" cases, which had expensive appellate defense counsel, as opposed to the average death penalty appeal.
 - 134. *Id.* at 5.
 - 135. See KINGET AL., supra note 31, at 7-9.
- 136. Eisenberg, *supra* note 13, at 16 (noting that "[r]eports from Florida and Utah prove that [the study] mislabelled cases as reversals when they were not, and anecdotal evidence from other states suggests additional problems").

information and questionable data selection, the authors' data cannot be guaranteed to be representative of the true state of the U.S. capital punishment system. 137

Adding to the problem of reproducibility, certain general aspects of the authors' analysis create uncertainty that makes replication impossible. The authors use variables such as "serious error" and "overall error rates" and "overall error rates" to support their conclusions. 140 Although the study defines these terms, the authors' case selection process and individual definitions are vague. 141 Presented with any number of cases that the authors analyzed, a reader cannot be certain that they will find the same "serious error" as the authors did in the study. 142 Questions of author objectivity further exentuate many of these data problems considering that Professor Liebman is a constant, vocal anti-death penalty advocate and that the Soros Foundation, an anticapital punishment group with the stated purpose to "find effective ways to curb the [death] penalty's use," significantly funded the *Liebman* Study. Because members of the legal and social scientific community cannot replicate the *Liebman Study*, the public cannot fully accept the conclusions that the study draws from Professor Liebman and his colleagues' data and analysis.

Second, in their analysis, the *Liebman Study*'s authors made choices in their procedure to bolster their results in support of their proposed theory, rather than relying on the most functional and useful data possible. In social scientific terms, the authors made no attempt to support, confirm, or reference their null hypothesis. ¹⁴⁴ As the *Liebman Study* posited that U.S. capital punishment system is broken and fraught with error, the study's null hypothesis was the possibility that the U.S. capital punishment system is as sound and non error prone as other parts of the U.S. judicial system. ¹⁴⁵ However, Professor Liebman and his colleagues never posit that their theory could be wrong. On the contrary, they continually explained

^{137.} For a more detailed discussion regarding the need for data to be public and error in relying on a study's conclusions without its data, see KINGET AL., *supra* note 31, at 8-9, 51-57.

^{138.} For a discussion of the *Liebman Study*'s definition of "serious error," see *Liebman Study*, supra note 1, at 134-37 nn.33-42; infra notes 171-74 and accompanying text.

^{139.} For a discussion of the *Liebman Study*'s definition of "overall error rate," see *Liebman Study*, supra note 1, at 6, 136 n.39.

^{140.} Id. at 134-37 nn.33-40.

^{141.} See id. at 121-24, 134-37 nn.33-40. For further discussion of the problems with the "serious error" variable, see infra notes 140-43 and accompanying discussion.

^{142.} For further discussion of the problems with the "serious error" variable, see discussion *infra* Part IV.B.

^{143.} See Eisenberg, supra note 13, at 16; discussion supra note 58.

^{144.} See BLALOCK & BLALOCK, supra note 31, at 390-92; WRIGHT, supra note 31, at 93-94.

^{145.} The Liebman Study itself does not address its null hypothesis.

how every data set bolstered their theory regardless of other possible/likely interpretations. In fact, the authors labeled certain information, which could support their null hypothesis, as "clearly an outlier." To avoid a problematic occurrence, the authors ignored the low error rates of Virginia. In spite of Virginia's nonconformance to their theory, the authors consider Virginia's figures unimportant. As the authors did not conceive any counter explanations or theories, the conclusions given may not be the only valid theories to explain their data analysis.

Finally, the study's choices of measurement confuse different aspects of the U.S. judicial system. In other words, the authors of the Liebman Study improperly conceived the specific measurement choices selected to show the observable implications of their theory. 150 The authors' main theory attempted to explain a dependent variable's occurrence (the U.S. capital system is broken) through an independent variable's prominence ("serious error"). ¹⁵¹ This measurement choice for an independent variable ("serious error") did not succeed in showing, explaining, or exemplifying that the U.S. capital punishment system is broken. 152 Further, the study's variable of "serious error" is not only a measure of capital trial court error, but also a simultaneous measure of the willingness of appellate court[s] to reverse. 153 Unfortunately, neither of these two characteristics of the variable can be separated. 154 The measurement of variables in the *Liebman* Study lacks association with observable implications, which properly measured variables contain. 155 An independent variable must be properly measurable, and it must be able to distinctly explain the theory when aligned with the dependent variable. 156 Because "serious error" does not accomplish either of these criteria for a proper measurement, 157 the

^{146.} Liebman Study, supra note 1, at 40-43, 74-75, 79-80, 116.

^{147.} Capital Attrition, supra note 1, at 1858.

^{148.} Liebman Study, supra note 1, at 64, 68, 80.

^{149.} Id.

^{150.} See King et al., supra note 31, at 28-30, 139-49; Singleton et al., supra note 31, at 31-32. "Observable implications" are those real world manifestations that could indicate the existence of the alternative hypothesis and, as such, guide the data. King et al., supra note 31, at 28-30.

^{151.} Liebman Study, supra note 1, at i-iii.

^{152.} See discussion infra Part IV.B.

^{153.} See discussion infra Part IV.B.

^{154.} See discussion infra Part IV.C.

^{155.} See KINGET AL., supra note 31, at 139-85; SINGLETON ET AL., supra note 31, at 97-105.

^{156.} See BLALOCK & BLALOCK, supra note 31, at 13-23, 28-57, 172-74; KING ET AL., supra note 31, at 139-85; SINGLETON ET AL., supra note 31, at 97-105; WRIGHT, supra note 31, at 44-49.

^{157.} See discussion infra Part IV.B.

author's conclusions about the degree of "brokenness" in the U.S. capital punishment system is unfounded.

B. Assumptions of the Liebman Study's "Serious Error" 158

One of the major claims by the authors of the *Liebman Study* is that sixty-eight percent of all U.S. capital cases have "serious error." This figure's prominence is evident by its significant visibility in numerous periodical announcements and articles regarding the study. This emphasis is justifiable because the study supports many of its ultimate conclusions upon this variable and uses it in numerous methods. Thus, one must properly evaluate the variable "serious error" and its measurement by the authors to effectively evaluate the *Liebman Study*. As a result, the definition of "serious error," its usage as a measurement value, and its usage as an independent variable by the authors merit attention.

The *Liebman Study*'s treatment of "serious error" contains two major problems. First, the high proportion of "serious error" claimed by the authors¹⁶² may not be as high in today's capital punishment system as the *Liebman Study* concludes.¹⁶³ Second, a high proportion of "serious error"

^{158.} Liebman Study, supra note 1, at 134-37 nn.33-42 (defining "serious error").

^{159.} The authors determined the actual sixty-eight percent figure by calculating a series of passage rates at each stage of the appeals process and adding them up. *See id.* at 136-37 n.40.

Because 41% of the capital judgments reviewed on state direct appeal were found to be tainted by serious error, only 59% of those judgments were available for state post-conviction review. Because at least 10% (this figure is probably higher, *see supra* note 38; *infra* Appendix C, pp. C-1 to C-2) of that 59%—meaning at least 5.9% of the original pool (.10 x .59 = .059)—failed this second, state post-conviction inspection, the overall rate of error found by state courts is 47% (41% + 6%) of the original pool. Then, of the 53% (100% - 47% = 53%) of capital judgments that were available for federal habeas review, 40%—meaning 21% of the original pool (.40 x .53)—failed the federal inspection. The "overall error rate" thus is at least 68% of the overall pool (41% + = 6% + 21% = = 68%). In other words: *At least 68% of the capital judgments that were fully inspected were found seriously flawed at some stage*.

Id. at 136-37 n.40.

^{160.} See Fox Butterfield, Death Case Study Finds Many Flaws: Review of Capital Punishment Shows Two-Thirds Reversal Rate, PITTSBURGH POST-GAZETTE, June 12, 2000, at A1; Marcia Coyle, 68% Error Rate Found in Death Case Study: Author Calls Serious Problems 'Epidemic', NAT'L L.J., June 19, 2000, at A1, A8; Brooke A. Masters, 68% of Death-Penalty Cases Reversed, SEATTLETIMES, June 12, 2000, at A1.

^{161.} *Liebman Study, supra* note 1, at 7, 11, 38-41, 55-56, 60-61, 64, 68-69, 79, 134-37 nn.33-42.

^{162.} Sixty-eight percent nationally. *Id.* at 5-7.

^{163.} This Note uses the term "may" in this context because the study lacks data for proper analysis. *See* discussion *supra* Part IV.A. This uncertainty concerning "serious error" is a distinct problem and casts further doubt on the conclusions presented in the *Liebman Study*.

does not explain or indicate that our capital punishment system is broken as the authors claim it does. 164

1. How Much "Serious Error" Exists?

The Liebman Study's finding of "serious error" may not be as high as claimed in the study. 165 On its first page, the Liebman Study defined "serious error" as "error substantially undermining the reliability of capital verdicts." ¹⁶⁶ However, despite the fact that the study itself referred to "serious error" as being reversals of decisions, 167 overturning of verdicts, 168 and serious fault, 169 the authors' actual method of measuring "serious error" is unclear from the study. 170

First, although the study included a series of footnotes vaguely describing the methodology of "serious error," the authors did not explain clearly which appellate decisions Professor Liebman and his colleagues labeled "serious error." A reader of the study, when presented with all

- 164. Liebman Study, supra note 1, at 124-26.
- 165. The authors claim that "serious error" exists for sixty-eight percent of all capital cases. *Id.* at
- 166. See id. at 2. 167. Id. at 7.
- 168. Id. at 6.
- 169. Liebman Study, supra note 1, at 134-37 nn.33-40.
- 170. See id. at 134-37 nn.33-42.
- 171. The authors present a vague notion of "serious error," defining it as "error that substantially undermines the reliability of the guilt finding or death sentence imposed at trial." Id. at 6. However, in previous and subsequent footnotes of the Liebman Study, they attempt to explain their personal methodology in selecting those cases that have "serious error." See id. at 134-37 nn.33-40.

In footnote 33, the authors attempt to explain the criteria they deemed sufficient to designate

In calculating error rates, we count only errors that result in reversal of a capital conviction or sentence. To do so, the error must be "serious" in three respects that render our calculation of "error" conservative. First, to be reversible, error must be prejudicial, either because the defendant has actually shown that it probably affected the outcome of his case or because it is the kind of error that almost always has that effect. See generally 2 James S. Liebman & Randy Hertz, Federal Habeas Corpus Practice and Procedure §§ 32.1, 32.3, 32.4 (3d ed. 2000) (generally discussing the harmless error doctrine). The vast majority of error that state appellate courts discover is deemed harmless and does not result in reveral [sic]. . . .

Second, to be reversible, error generally must have been properly preserved. Most state direct appeal courts will not grant relief based on error-no matter how egregious and prejudicialthat the defendant did not properly preserve by way of (1) a timely objection at trial, (2) reiteration in a timely new trial motion at the end of trial, and (3) timely and proper assertion on appeal. See 1 Liebman & Hertz, supra §§ 7.1a, at 276-77 & n.29, 26.1. This is true even in cases in which the failure to preserve the error was the fault of counsel, not the defendant, and even in many instances in which the lawyer's mistake resulted from inexperience, incompetence or sheer stupidity, and not a valid exercise of professional judgment. See

of the capital cases from 1973 to 1995, would not be able to choose definitively which cases contained "serious error" and which cases did not. The authors state that in their "serious error" calculations they only included "prejudicial" errors that undermine the decision and those errors

Stephen B. Bright, Death by Lottery—Procedural Bar of Constitutional Claims in Capital Cases Due to Inadequate Representation of Indig ent Defendants, 92 W. VA. L. REV. 679, 683 (1990); Randall Coyne & Lyn Entzeroth, Report Regarding Implementation of the American Bar Association's Recommendations and Resolutions Concerning the Death Penalty and Calling for a Moratorium on Executions, 4 GEO. J. ON FIGHTING POVERTY 3, 28-30 (1996). Numerous prisoners have been executed despite acknowledged prejudicial errors affecting their convictions and sentences, because they failed to preserve their objections. . . .

Finally and most obviously, error—no matter how prejudicial—only results in reversal if it is discovered. If it is not discovered, because, for example, the party responsible for it fails to disclose it, *see*, *e.g.*, *infra* note 98, reversal will not occur and the error will not be deemed "serious" by our measure.

Hundreds of examples of "serious error" found in state post-conviction proceedings are collected in Appendix C *infra*. Dozens of examples of the even narrower category of "serious error" that warrants federal habeas relief are collected in Appendix D *infra*. See also cases cited *infra* notes 36, 44, 97-106.

Liebman Study, supra note 1 at 134-35 n.33.

Footnote 36 describes the difference between serious error in direct and post-conviction cases: The category of "serious error" that leads to state post-conviction reversal is narrower than "serious error" at the direct appeal stage, cf. supra note 33, because, generally, only properly preserved state and federal constitutional violations that (1) were not, and (2) could not have been raised on direct appeal can be the basis for state post-conviction reversal. As at the direct appeal stage, moreover, error—no matter how egregious and how much it undermines the accuracy of the capital verdict—never gets corrected at the state post-conviction stage (and thus does not count as "serious error" in our analysis) unless it is discovered and litigated. See supra note 33. And given the failure of a number of capital-sentencing states—Virginia, prominent among them—to provide any lawyers or funding for them at all at the state post-conviction stage, the likelihood that serious error will not be discovered and litigated in state post-conviction proceedings is often very high.

Id. at 135 n.36.

Footnote 38 describes the notion of serious error within federal habeas corpus appeals:

The definition of "serious error" that warrants reversal in federal habeas corpus proceedings is even narrower than the analogous definitions at the direct appeal stage (which is set out *supra* note 33 and accompanying text) and at the state post-conviction stage (see *supra* note 35). This is because error is only reversible on habeas if it meets the three criteria for "seriousness" on direct appeal-the error must be (1) prejudicial, (2) properly preserved and (3) discovered.

Id. at 136 n.38.

Footnote 39 describes the "overall error rate" (sixty-eight percent figure) as it is in terms of "serious error."

The "overall error rate" is the proportion of capital judgments thrown out during the first (state direct appeal) inspection due to serious error, plus the proportion of the original judgments that survive the first inspection but are thrown out at the second (state post-conviction) inspection, plus the proportion of the original judgments that survive both state inspections but are thrown out at the final (federal habeas) stage. The "overall success rate" is the converse. In note 40 *infra*, we use this method to calculate the national composite "overall error rate."

Id. at 136 n.39.

that result in reversals.¹⁷² From such a description, one would assume that a significant number of these errors eventually caused a reversal of the particular conviction or provoked the court to grant a retrial.¹⁷³ However, Professor Liebman and his colleagues provide no information about the eventual result of the 4,578 analyzed capital cases evaluated under the *Liebman Study*¹⁷⁴ and had difficulty finding certain information about these cases.¹⁷⁵ In fact, the authors' information came from specific nonrandom sources that likely led to a prejudicial selection of certain cases over others.¹⁷⁶ Further, some reports suggest that the authors themselves misrepresented cases under their own definitions.¹⁷⁷ In fact, in a post-study reply, the authors themselves acknowledge a range of interpretation of their own data.¹⁷⁸

Out of the 5,760 capital cases from the data span of the study, the authors know of only 301 cases in which errors were serious enough to merit a retrial and only twenty-two cases where errors were serious

Our "overall error rate" is *not* the rate of error in the 5,780 [sic] death sentences imposed between 1973 and 1995. That number cannot be calculated because, at the end of 1995, many of those death sentences were pending in some court *awaiting* review, but had not yet been *finally* resolved at one of the three inspection stages. This rate instead uses the outcomes of the 4,578 cases in which state direct review occurred during the study period, and the 599 of those cases in which subsequent federal habeas review occurred, together with the 248 known state post-conviction reversals (taken as a proportion of the 2,693 capital judgments that had "cleared" state direct appeal) to calculate the error rate found in capital judgments that were finally reviewed.

Id. at 137 n.40.

175. See Liebman Study, supra note 1, at 5-6, 133 n.28.

176. Id. at 5.

^{172.} Liebman Study, supra note 1, at 134 n.33.

^{173.} Because the authors failed to provide the reader any information regarding the eventual result of any of the cases besides those in Appendix C, the reader cannot be confident that any (except for the 301 cases in Appendix C) of the cases labeled "serious error" resulted in a retrial or had any part of the case overturned in a final determination. *See id.* at 134-37 nn.33-40, app. C.

^{174.} Although the authors mention the "5,760 death sentences" figure throughout the study, they did not analy ze all those death sentences. *See id.* at 137 n.40. In fact, the authors computed 1,000 fewer cases into the main study and used even fewer to determine the true rates of conviction/sentence reversals. *See id.* at 137 n.40, C-1, C-2.

^{177.} Eisenberg, *supra* note 13, at 16 (noting that "[r]eports from Florida and Utah prove that [the authors] mislabeled cases as reversals when they were not, and anecdotal evidence from other states suggests additional problems"). In fact, a recent study attempting to use data as similar to the *Liebman Study* as possible found that Professor Liebman and his colleages drastically inflated their data, whereas the "true serious error rate" is closer to fifty-two percent, not the *Liebman Study*'s sixty-eight percent. Latzer & Cauthen III, *supra* note 85, at 26-27.

^{178.} West et al., *Extrapolating, supra* note 86, at 953 (noting "serious error" rates from forty percent to eighty-eight percent). However, despite the beneficial nature of such justifications for use of the sixty-eight percent figure, they were not in the original study, are still based on "hidden" data, and still mix up different levels of appellate review. *See id. See also* Hoffman, *supra* note 85, at 944-47.

enough to lead to a conviction reversal. ¹⁷⁹ These 301 retrials and twenty-two reversals came from a separate study within the *Liebman Study* that selected cases in a nonrandom manner and then improperly attempted to make parallels between this small, biased sample and the entire U.S. capital punishment system. ¹⁸⁰ Consequently, a reader of the *Liebman Study* is neither assured how serious "serious error" is, nor how important such cases are in analyzing whether the U.S. capital punishment system is broken. While in a post-study reply the authors note that twenty-two reversals alone should indicate a problem within the system, ¹⁸¹ (1) in *all* of these twenty-two cases the current system did correct the error ¹⁸² and (2) this small proportion of cases is *not* what the authors herald in their big percentage claims. ¹⁸³

Second, the time period assessed by Professor Liebman and his colleagues is an improper measurement and is therefore not representative of the current state of the capital punishment system. The *Liebman Study* authors claim that their "serious error" figure is representative of the current system. ¹⁸⁴ However, the inclusion of data from the 1970s and parts of the 1980s does not support such a claim. ¹⁸⁵ As a result of the numerous Supreme Court holdings and state statutory reforms relating to capital punishment, the period from 1972 through the mid-1980s was a very turbulent time for capital punishment. ¹⁸⁶ In fact, even Professor Liebman and his colleagues note that appellate decisions during the period between

^{179.} Liebman Study, supra note 1, at app. C.

^{180.} *Id.* at 7, 121-24, app. C. Appendix C of the *Liebman Study* includes a separate "Post-Conviction Study." *Id.* at app. C. Analyzing 301 nonrandom, post-conviction cases, the *Liebman Study* authors established the conclusions therein. Professor Liebman and his colleagues did not randomly select the 301 cases from all of the 5,760 capital cases or even from the post-conviction capital cases. *Id.* at G1. The authors selected only those cases in which specific information about the cases were available. *Id.* The authors assumed the true conviction and sentencing reversals that occurred in the retrials of these 301 cases must be parallel to the 5,760 capital cases in the study and also applicable to the current decade. *Liebman Study*, *supra* note 1, at 7, 121-24, app. C. For further criticism of this aspect of the *Liebman Study*, see Hoffman, *supra* note 85, at 945-47.

^{181.} See West et al., Extrapolating, supra note 86, at 954-56.

^{182.} It is continually important to note that experts, including the study's authors, "still have proven no instance, not one, of a mistaken execution during the modern era of American capital punishment." Hoffman, *supra* note 85, at 941. *See also infra* text accompanying notes 244-45.

^{183.} The authors do not answer the questions surrounding the use of only twenty-two cases to all capital appeals. *See* West et al., *Extrapolating*, *supra* note 86, at 954-56. If the authors' only use of the twenty-two cases was to show that conviction reversals upon new trials do exist generally, then they should not have generalized that the results of Appendix C were indicative of the whole system.

^{184.} See Liebman Study, supra note 1, at 14-19.

^{185.} See Latzer & Cauthen I, supra note 85, at 66 n.7. See also supra notes 22-24 and accompanying text.

^{186.} See supra Part II.A. See also BANNER, supra note 17 (manuscript at ch. 10) (explaining that the constant reformatting of the Court's view on capital punishment caused this volatility).

1973 and 1982 were "extremely volatile." As the Supreme Court was establishing its own view of constitutional capital punishment, ¹⁸⁸ state and federal courts reacted chaotically towards capital cases. ¹⁸⁹ As the Court invalidated statute after statute, ¹⁹⁰ many reversals of capital decisions by appellate courts were the result of unsettled law rather than trial court error.¹⁹¹ Considering the constant approval and disapproval of states' capital punishment statutes in the seventies and eighties, ¹⁹² much of the Liebman Study's data is skewed. Although Professor Liebman and his colleagues have assured the public that only valid, serious trial reversals are included in their figures, 193 without the authors' data decisions available, one cannot be confident in their decisions. 194 Because law-based reversals were common during this volatile period, 195 they almost certainly exist in their data; however, due to the lack of data availability 196 and replication difficulties with the study, 197 readers of the study will never know. Moreover, the study's authors only claim to have limited the study's problem of the turbulent 1970s by removing certain 1976 decisions. 198 Additionally, the authors cannot discount the fact that the appellate and trial judges were as highly sensitive and "volatile" as the Supreme Court during this period. 199 Consequently, a high degree of

- 187. *Liebman Study*, *supra* note 1, at 67, 128 n.7.
- 188. See discussion supra Part II.A.
- 189. See PATERNOSTER, supra note 17, at 59-68, 155-56; Marquart & Sorensen, supra note 20, at 163-67
 - 190. See BANNER, supra note 17 (manscript at ch. 10). See also discussion supra Part II.A.
- 191. See BANNER, supra note 17 (manuscript at ch. 10); PATERNOSTER, supra note 17, at 59-68, 156-58
 - 192. See discussion supra Part II.A.
- 193. See Liebman Study, supra note 1, at 134 n.33, 138 n.40; Liebman et al., Technical Errors, supra note 86, at A16.
- 194. See Blalock & Blalock, supra note 31, at 13-17, 172-78; King et al., supra note 31, at 8, 25-27, 151; Singleton et al., supra note 31, at 56-57, 117-23, 177, 339-74; Wright, supra note 31, at 45-49.
 - 195. See discussion supra Part II.A.
 - 196. See supra note 118 and accompanying text.
 - 197. See discussion supra Part IV.A.
- 198. Liebman et al., *Technical Errors*, *supra* note 86, at A16. Further, information regarding the exact cases that the authors removed is unavailable. While the authors acknowledge the removal, they still do not explain the criteria, method, or details on the removal of such decisions. Additionally, for proper replicability, the authors should have clarified which cases, during this short time period, they excluded from the study.
- 199. *Liebman Study*, *supra* note 1, at 42. In fact, the authors also acknowledge that error rates did not stabilize until 1983. *Id.* However, despite this admission, the reader has no idea of the degree of volatility during this period or what action, if any, the authors took to address this volatility. Such unanswered concerns regarding a crucial variable to the study create reservation towards trusting the study's conclusions.

reversals may have been the result of such volatility. 200

Further, because the *Liebman Study* includes those years when the Court itself was unsure about the constitutionality of capital punishment, the authors do not present the most useful data to indicate the present picture of capital trials.²⁰¹ In fact, the overall number of death sentences itself was extremely erratic until 1982. 202 The authors' inclusion of cases from the decades immediately following Furman²⁰³ created more "serious error" and favored the authors' proposed theories. These years included law-based reversals and decisions of judges who, unsure of the Court's capital punishment position, would be more likely to reverse a lower court decision.²⁰⁴ Thus, these higher error factors bias the study in favor of the anti-capital punishment conclusion that the authors attempt to draw from the data. The higher the "serious error" count within the capital system, the closer the results will be to the authors' proposed hypothesis. The bias from including this extremely volatile period in capital punishment history should not occur in a study that aimed to present the current state of the death penalty, as the *Liebman Study* claimed to do.

Some commentators have critiqued the *Liebman Study* as giving a false indication of the study's own defined "serious error" by arguing that the authors should only concern themselves with error in convictions. ²⁰⁵ As defined by the authors, the study's "serious error" variable refers to reversals due to error in convictions and reversals due to error in the sentencing. ²⁰⁶ Professor Liebman and his colleagues responded to such

^{200.} As a result of the volatility that the U.S. capital punishment system experienced in the seventies and eighties, the use of those periods in the *Liebman Study* leads to in accurate analysis. First, many of the "serious error" reversals likely occurred simply from law-based reversals (i.e., changes in capital punishment law handed down by the Court), not from trial court malfeasance. *See supra* Part II.A. *See also* discussion *supra* Part IV.B. However, due to incomplete analysis, the reader is unaware of whether such law-based reversals were included in the study. Additionally, while the Court itself consistently reformed its capital punishment views, trial and appellate courts, rushing to catch up, treated capital cases differently than they do in today's more calm environment. *See* BANNER, *supra* note 17 (manuscript at ch. 10).

^{201.} See King ET AL., supra note 31, at 8, 20-29 (explaining that the data presented should be the best data available to justify the proposed hypothesis).

^{202.} TRACY L. SIELL, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CAPITAL PUNISHMENT 1998 (1999) [hereinafter Capital Punishment 1998]; TRACY L. SNELL, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CAPITAL PUNISHMENT 1997 (1998); TRACY L. SNELL, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CAPITAL PUNISHMENT 1996 (1997); TRACY L. SNELL, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CAPITAL PUNISHMENT 1995 (1996).

^{203.} See supra notes 22-24 and accompanying text.

^{204.} See supra Part II.A.

^{205.} See Latzer & Cauthen I, supra note 85, at 64-69.

^{206.} See Liebman et al., Death Matters, supra note 86, at 72-73. The 1976 Supreme Court decision reinstituting capital punishment, Gregg v. Georgia, 428 U.S. 153 (1976), allowed capital

criticism by stating: any error possibily leading to a defendant's death, as opposed to a life sentence, is as meaningful to their study as an error with the conviction. ²⁰⁷ The authors' defense is correct. Because the authors define "serious error," they should include errors in sentencing. ²⁰⁸ Error at the trial level within the capital punishment system exists both during the conviction and sentencing phases of the trial. ²⁰⁹ Consequently, the bifurcation of capital trials and appeals may explain why the "serious error" figures are high, assuming they are, but the inclusion of sentencing error within "serious error" is not one of the problems with the variable.

2. High "Serious Error" Does Not Equal A Broken System

Even if the *Liebman Study*'s high rates of "serious error" across the U.S. capital punishment system are a valid representation of today's system, such figures do not indicate that the system is "broken." Simply because a high percentage of appellate courts reverse lower court capital punishment decisions does not necessarily indicate that the system is not working.

First, Professor Liebman and his colleagues have no idea how many of these "serious error reversals" actually resulted in changes from the original conviction or sentence. The only record of true reversals of trial court decisions occur in the *Liebman Study*'s Appendix C (a specific independent Post-Conviction Study), which the authors acknowledge is "incomplete." In fact, in an interview, Professor Liebman misstates his own findings by saying, "[w]hen those cases that we looked at went back on retrial, we found that over 80% of them ended up with a sentence less than death when the errors were cured." The authors did not reexamine

punishment to exist only if the process included a bifurcated trial. *Id.* at 163, 179-80. The Court mandated that states conduct capital trials determining the guilt in one phase and the sentence in the other. *See* BANNER, *supra* note 17 (manuscript at ch. 10). The sentencing phase was to consist of a separate trial in which the judge/jury weighed the aggravated circumstances of the crime against the mitigated factors against a capital sentence. *Id.* at 176-80. *See also* BANNER, *supra* note 17 (manuscript at ch. 10).

- 207. See Liebman et al., Death Matters, supra note 86, at 72-77.
- 208. See Liebman Study, supra note 1, at 134 n.33.
- 209. For a similar rebuttal by Professor Liebman and his colleagues, see Liebman et al., *Death Matters*, *supra* note 86, at 72-75.
 - 210. Liebman Study, supra note 1, at 121-24.
- 211. Compare Liebman Study, supra note 1, at app. C., with KING ET AL., supra note 31, at 120-38, and WRIGHT, supra note 31, at 35-38. A valid sample of a population must be a representative sample. KING ET AL., supra note 31, at 120-38. Consequently, it must not bias a certain type of selection nor be statistically too small a sample to be relevant. *Id.*
 - 212. Liebman Study, supra note 1, at app. C.
 - 213. Scot's Backers Believe Legal Errors in US Could Bring Him a New Trial, THE HERALD

those cases with which they found "serious error" in the first place.²¹⁴ They only examined 301 specific cases.²¹⁵ Professor Liebman and his colleagues analyzed these cases in a separate study, and the data that they received from this sample is not a valid representation of their original population of "serious error."²¹⁶ First, as the population of capital cases is 5,760 (plus those from 1995-1999), 301 is not a valid representative sample.²¹⁷ Second, the authors did not choose these 301 cases at random, and the selection is in fact biased.²¹⁸ Because Appendix C does not include a large enough sample to measure retrial effect and the figures themselves are biased, the authors cannot conclude that certain proportions of overturned convictions or sentence remediation exist.

Second, the study includes no gauge to evaluate the seriousness of "serious error." The readers cannot trust that sixty-eight percent of the cases that the authors have independently deemed to have "serious error" are serious enough to merit our concern. Because the *Liebman Study* includes only a vague methodology through the footnotes, all of the "serious error" cases counted for its figures may not merit enough concern to conclude that the U.S. capital punishment system is broken.

Third, "a broken system" may not be the cause of high "serious error" rates; but rather, our nation's purposeful twentieth-century adjustments to the U.S. capital punishment system produced high "serious error" rates.²²¹

(Glasgow, Scotland), Oct. 31, 2000, available at 2000 WL 28099567.

- 214. Liebman Study, supra note 1, at app. C.
- 215. Liebman Study, supra note 1, at app. C.
- 216. See Liebman Study, supra note 1, at app. C. The 301-case sample in Appendix C is too small to be a representative sample of the entire population of capital cases from 1973–1995 (or through 1999). Statistical authorities necessitate a certain threshold in asserting that a sample population can be a valid representation of a population at large. KING ET AL., supra note 31, at 120-38. A sample of 301 cases is too small for proper analysis of a population of over 5,700 cases. See Id.
 - 217. See discussion supra note 216.
- 218. The authors did not choose the 301 cases in the "Post-Conviction Study" at random. *See Liebman Study, supra* note 1, at app. C. According to Professor Liebman and his colleagues, these cases were the only cases available to the authors, likely due to the court system overturning a high degree of original decisions. *See id.* This nonrandom factor resulted in a non-representative sample and created serious doubt for any parallel that the authors place between the results of their "Post-Conviction Study" and the true occurrence in the 5,760 death sentences from 1973–1995.
- 219. The degree of seriousness of the *Liebman Study* authors' "serious error" is extremely vague. *See supra* Part III.B. With no data support to form clear delineations, one cannot determine the degree of seriousness of each error noted in the study.
- 220. The degree of significance of the *Liebman Study*'s main variable, "serious error," is in doubt. This problem could be countered with corrected replicability in the study. *See also BLALOCK & BLALOCK, supra* note 31, at 172-78; KING ET AL., *supra* note 31, at 26-27; SINGLETON ET AL., *supra* note 31, at 56-57, 177, 337, 339-74. If, with the data or such direction in the study, one were to replicate the results of the study, they would need to gauge (or know how the author gauged) the seriousness of each error to label it "serious error." *See* KING ET AL., *supra* note 31 at 26-27.
 - 221. For discussions of some reasons why death is different in the twentieth-century judicial

The Supreme Court recognized that "the qualitative difference of death from all other punishments requires a correspondingly greater degree of scrutiny of the capital sentencing determination" ²²² and, more emphatically, that "death is a punishment different from all other sanctions in kind rather than degree." ²²³ The Court, Congress, and the states have each imposed specific high hurdles that exist only for capital cases and appeals. ²²⁴ One of the most evident differences is the bifurcation of the capital trial. ²²⁵ In redeclaring the death penalty constitutional in 1976, the Court required that to impose a death sentence, a capital trial must include a separate post-conviction trial to determine whether the convicted defendant deserves the death penalty. ²²⁶ Following its 1976 decision in *Gregg v. Georgia*, ²²⁷ the Court has continued to adjust the procedure and components of the sentencing phase of the bifurcated trial. ²²⁸ With two

system, see David McCord, Is Death Different for Purposes of Harmless Error Analysis? Should It Be?: An Assessment of United States and Louisiana Supreme Court Case Law, 59 LA. L. Rev. 1105 (1999); Note, The Rhetoric of Difference and the Legitimacy of Capital Punishment, 114 HARV. L. Rev. 1599 (2001); Stefanie Lindeman, Note, Because Death Is Different: Legal and Moral Arguments for Broadening Defendants Rights to Discovery in Federal Capital Cases, 73 St. John's L. Rev. 541 (1999).

- 222. California v. Ramos, 463 U.S. 922, 998-99 (1983).
- 223. Woodson v. North Carolina, 428 U.S. 280, 303-04 (1976).
- 224. These include not only such universal hurdles of the bifurcated trial and mandatory appellate review, but also state-specific procedures such as mandatory en banc seating of capital appellate review in Texas. *See* BANNER, *supra* note 17 (manuscript at ch. 10); TEX. CONST. art 5, §4 ("The court must sit en banc during proceedings involving capital punishment.").
 - 225. See BANNER, supra note 17 (manuscript at chs. 9-10).
 - 226. See Gregg v. Georgia, 428 U.S. 153, 164-65 (1976).
 - 227. 428 U.S. 153 (1976).

228. See Arave v. Creech, 507 U.S. 463, 478-80 (1993) (holding that the requirement of a defendant to exhibit "utter disregard for human life," as construed by the Idaho Supreme Court to refer to the "cold-blooded, pitiless slayer," was not facially invalid); Payne v. Tennessee, 501 U.S. 808, 824-30 (1991) (holding that the Eight Amendment of the U.S. Constitutuion does not bar a jury from considering victim impact statements in a capital case); Penry v. Lynaugh, 492 U.S. 302, 339-40 (1989) (holding that the absence of instructions informing a jury that it could consider evidence of defendant's conditions of mental retardation and abused background deprived the jury of a method for expressing its "reasoned moral response" to mitigating evidence in rendering sentencing decision (violating the Eighth and Fourteenth Amendments of the U.S. Constitution), but that the execution of mentally retarded people convicted of capital crimes is not prohibited by the Eighth Amendment of the U.S. Constitution); Maynard v. Cartwright, 486 U.S. 356, 365-67 (1988) (holding that an aggravating circumstance described as "especially heinous, atrocious, or cruel" was unconstitutionally vague; that there was a failure to offer sufficient guidance to the jury in deciding whether to impose capital punishment; that the presence of an additional, unchallenged, aggravating circumstance did not validate the death sentence where the state had no procedure for attempting to save a death penalty when one of several aggravating circumstances was held to be invalid or unsupported; and that state, not federal, courts were to originally decide the effect of recent decisions of the Oklahoma Court of Criminal Appeals, which would limit the aggravating circumstance to torture or serious physical abuse cases); Zant v. Stephens, 462 U.S. 862, 886-90 (1983) (holding that the death sentence may stand if a state court rules an aggravating circumstance invalid, even if the jury finds two or more aggravating circumstances applicable); Eddings v. Oklahoma, 455 U.S. 104, 114-17 (1982) (striking down

separate trials, the appealing capital defendant has two trials in which to find error, whereas the appealing noncapital defendant has only one.²²⁹ In fact, the *Liebman Study* acknowledges that if "serious error" occurs in either part of the bifurcated trial, then it counts in their study.²³⁰ Although Professor Liebman and his colleagues are justified in including this error in their study,²³¹ the *Liebman Study* needs to acknowledge that this additional trial, which only occurs during capital cases, creates a double opportunity for "serious error" to occur. Consequently, if the bifurcation aspect of the capital system (as the Court has developed it) is working, then capital cases should have higher "serious error" rates than noncapital cases.

Additionally, there are other aspects of capital appeals that increase capital "serious error" rates over noncapital rates. First, in all states with capital punishment, capital cases are given mandatory appellate rights to the highest court of the state. This mandatory appeal ensures that a

Oklahoma's death penalty statute by holding that a state court must consider a defendant's upbringing and mental state as mitigating factors in a capital case when applicable); Godfrey v. Georgia, 446 U.S. 420, 432-33 (1980) (holding that any aggravating circumstance that is vague and broad—meaning that it does not imply any inherent restraint on the arbitrary and capricious infliction of a death sentence, such as "outrageously or wantonly vile, horrible or inhuman,"—violates the Eighth and Fourteenth Amendments of the U.S. Constitution); Lockett v. Ohio, 438 U.S. 586, 608-09 (1978) (holding that one may exclude jurors with biased opinions about the death penalty, and state capital statutes must include individualized consideration of mitigating factors required by the Eighth and Fourteenth Amendments of the U.S. Constitution).

- 229. Each capital defendant received two separate trials, one trial for conviction and one trial for sentencing. Unlike a noncapital defendant, the system allows each capital defendant to separately appeal two trials, with double the likelihood of finding a sympathetic appellate judge. *See* Latzer & Cauthen I, *supra* note 85, at 64-68.
- 230. See Liebman Study, supra note 1, at 134 n.33; Liebman et al., Death Matters, supra note 86, at 72-74.
 - 231. See discussion supra Part IV.B.1.
- 232. See, e.g., ALA. CODE § 13A-5-55 (2000) ("In all cases in which a defendant is sentenced to death, the judgment of conviction shall be subject to automatic review."); DEL. CODE ANN. tit. 11, § 4209(g)(1) (1999) ("Whenever the death penalty is imposed, and upon the judgment becoming final in the trial court, the recommendation on and imposition of that penalty shall be reviewed on the record by the Delaware Supreme Court."); FLA. STAT. ch. 921.141(4) (1996) ("The judgment of conviction and sentence of death shall be subject to automatic review by the Supreme Court of Florida and disposition rendered within two years after the filing of a notice of appeal. Such review by the Supreme Court shall have priority over all other cases and shall be heard in accordance with rules promulgated by the Supreme Court."); 720 ILL. COMP. STAT. 5/9-1(i) (1993) ("The conviction and sentence of death shall be subject to automatic review by the Supreme Court. Such review shall be in accordance with rules promulgated by the Supreme Court."); MD. ANN. CODE art. 27, §414 (2000) ("Whenever the death penalty is imposed, and the judgment becomes final, the Court of Appeals shall review the sentence on the record."); Mo. REV. STAT. § 565.035 (1999) ("Supreme court to review all death sentences."); N.C. ŒN. STAT. § 15A-2000(d)(1) (2000) ("The judgment of conviction and sentence of death shall be subject to automatic review by the Supreme Court of North Carolina pursuant to procedures established by the Rules of Appellate Procedure. In its review, the Supreme Court shall consider the punishment imposed as well as any errors assigned on appeal."); TEX. CRIM.

significant body of judges will review both the conviction and sentencing trials for error. Consequently, unlike noncapital cases, all capital cases receive appellate review from the highest state court, and as more review is given, more reversals occur.²³³ Additionally, all capital cases, unlike noncapital cases, are given a right to federal habeas corpus review.²³⁴ Thus, each defendant convicted of a capital crime is given the right, subsequent to mandatory state review, to have the federal judicial system review his conviction and sentencing trials.²³⁵ As a result of these two types of mandatory appellate review,²³⁶ capital cases are subject to much more judicial review than noncapital cases.²³⁷ Thus, capital cases will receive more reversals of both the conviction and sentencing trials.²³⁸ Once imposed, courts cannot reverse death. For this reason, the judicial actors who address capital cases give those cases greater scrutiny.²³⁹ Judges are prone to look more closely for error in capital cases and to err on the side of lifesaving.²⁴⁰ Defendants are more likely to appeal as they

PROC. CODE ANN. § 37.071(2)(h) (Vernon 2000) ("The judgment of conviction and sentence of death shall be subject to automatic review by the Court of Criminal Appeals.").

- 233. While a small-time drug dealer may not want to risk money, time, and effort for an appeal that is not guaranteed to be heard, an appealing capital defendant perceives no risk as they are assured that their appeal will be heard by at least one appellate court.
- 234. *See* Habeas Corpus, 28 U.S.C. § 2254 (1994); Special Habeas Corpus Procedures in Capital Cases, 28 U.S.C. § 2261 (1994).
 - 235. Id.
 - 236. These are mandatory state appellate review and mandatory federal habeas corpus review.
 - 237. See, e.g., Latzer & Cauthen I, supra note 85, at 68-71.
- 238. There is a greater chance that one will find a problem when different courts look at a specific case for error or problems. Even the *Liebman Study* authors acknowledge that more review leads to more reversals. *See Liebman Study*, *supra* note 1, at 139 n.53. Thus, large amounts of "serious error," as the *Liebman Study* authors define it, does not necessarily mean that capital cases have more error than noncapital cases or that all of these reversals are due to trial court malfeasance. *See id.* at 5. Rather, the high error could simply be the result of a higher degree of review of capital cases than of noncapital cases.
- 239. See, e.g., California v. Ramos, 463 U.S. 922, 998-99 (1983). While most authors find greater appellate scrutiny of capital cases, some commentators argue that during capital trials, capital juries are more prone to convict the defendant than noncapital juries. See Samuel R. Gross, The Risks of Death: Why Erroneous Convictions Are Common in Capital Cases, 44 BUFF. L. REV. 469, 474-76 (1996). See also Claudia L. Cowan et al., The Effects of Death Qualification on Jurors' Predisposition to Convict and on the Quality of Deliberation, 8 LAW & HUM. BEHAV. 53 (1984); Robert Fitzgerald & Phoebe C. Ellsworth, Due Process vs. Crime Control: Death Qualification and Jury Attitudes, 8 LAW & HUM. BEHAV. 31 (1984). This capital jury conviction aptness could itself lead to a higher degree of appellate reversals of capital trial convictions because juries would be sending a disproportionate number of error-prone capital cases up to the appellate courts for review.
- 240. See FRANK CARRINGTON, NEITHER CRUEL NOR UNUSUAL 123 (1978) ("[O]ur legal system examines capital convictions with such an intense scrutiny."); Gross, supra note 239, at 473 ("[W]e do devote more attention to capital cases than to other felony prosecutions.").

Just as the *Liebman Study* authors recognize in *Death Matters*, a *Reply to Latzer and Cauthen*, judges see death as the most serious punishment and will be more likely to ask for a retrial of a case that takes a person's life. Liebman et al., *Death Matters*, *supra* note 86, 72-76. Additionally, the

have mandatory passes to do so and have their lives at stake.²⁴¹ In addition, many organizations have established contributions, funds, and programs for appealing capital cases but not noncapital cases.²⁴² These organizations, along with the attraction of a capital case to many lawyers, help to create strong capital appeals.²⁴³ Each of these factors contributes to significantly higher scrutiny and "serious error" rates in capital cases than in noncapital cases. Consequently, if the system is working, one should *expect* to find high "serious error" in capital cases.

Finally, even if all of the noted "serious errors" were serious, the judicial system rectified every "serious error" noted in the *Liebman Study*.²⁴⁴ The system, not Professor Liebman and his colleagues, found these errors and the system corrected them. Through appeals, our judicial system seeks, finds, and corrects serious error. Thus, if this is error that the judicial system corrected, the system, established for this purpose, is doing its job. If the authors found a significant amount of errors that the judicial system did not find or a significant number of innocent people who could

Supreme Court has acknowledged that courts should look more carefully at capital cases than noncapital cases. *See* California v. Ramos, 463 U.S. at 998-99 ("[T]he qualitative difference of death from all other punishments requires a corresponding greater degree of scrutiny of that capital sentencing determination.").

- 241. As the U.S. judicial system mandates many types of appeals, capital defendants are more prone to file for appeal than noncapital defendants. *See* Latzer & Cauthen I, *supra* note 85, at 70 (discussing capital defendants' higher "incentive to file appeals"); U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STATISTICS, FEDERAL HABEAS CORPUS REVIEW 12 (1995) (discussing the inability of short-term inmates to file habeas corpus petitions).
- 242. Many organizations, such as Professor Liebman's former employer, the NAACP Legal Defense Fund, seek out capital cases on appeal to help indigent capitally convicted defendants appeal their death sentences. *See* BANNER, *supra* note 17 (manuscript at chs. 9-10).
- 243. Gross, *supra* note 239 at 497-98 ("[The capital defendant] is likely to be better represented on direct appeal than he would be otherwise, and he is likely to have counsel on the post-appellate collateral review, while most defendants have none.").
- 244. The Liebman Study authors determined a "serious error" only by looking to those corrections made by appellate courts. Liebman Study, supra note 1, at 134-38 nn.33-40. Thus, the U.S. capital punishment system had corrected every "serious error" that the authors found. The Liebman Study authors respond to this problem by stating that this is the only option for this type of study. Liebman et al., Death Matters, supra note 86, at 74. This response is not sufficient. If the only option for a study will not yield to proper analysis, then the study cannot bypass the problem by simply acknowledging it, using the option, and claiming the analysis will not be flawed. See KINGET AL., supra note 31, at 7-9, 25-27. Additionally, the *Liebman Study* claims a connection between Illinois Governor Ryan's 1999 decision (to stop executions due to the fact that some convicted prisoners were found to be innocent while on death row after their appeals process) and the degree of "serious error" in Illinois's capital punishment system. See Liebman Study, supra note 1, at 3, 79. This parallel does not exist because "serious error" measures only appellate court decisions and the decision, by Governor Ryan was based on truly innocent convictions after the appeals process, a subset of cases that the Liebman Study does not measure. Several authors have noted that a problem with the Liebman Study is that it purports to show error, but it cannot identify a single erroneously-conducted execution. See, e.g., Snyder, supra note 85, at A1; Wilson, supra note 85, at B5.

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not get into the system, the authors would consider the system broken. However, the only errors that the authors found were those also found and corrected by the system that the authors claim is broken. ²⁴⁵

C. Validity of the Liebman Study's State-by-State Comparisons

In Part VIII of the *Liebman Study*, the authors examine state-by-state error rates.²⁴⁶ The study looks at each state court system's degree of error and compares the different systems.²⁴⁷ Using the same "serious error" variable from the earlier parts of the study, the study measured the degree of each state's "error" by the number of times an appellate court considers a trial court's verdict problematic.²⁴⁸ The authors consider a state's error rate to be "better," or containing less error, if the error rate is lower. ²⁴⁹ In fact, the authors state that "observers and policy makers" should consider the comparisons between individual state error rates. 250 Specifically, the authors call Illinois's overall error rate, which is two percent lower than the national average, better than average.²⁵¹ Also, despite its relevance as one of fifty states and the second highest death penalty state since 1973, the authors ignore Virginia's extremely low error rate in all sections of state-by-state error review.²⁵² The prominence of these figures is evident from newspaper and periodical use of these state-by-state figures to compare the status of certain state systems.²⁵³

The Liebman Study devotes sixty pages to these state and regional

^{245.} This Note does not attempt address the viability, possible success, or preference for a study measuring the error that someone outside the legal system prepared. This Note solely addresses the degree to which the data, analysis, process, and procedure of the *Liebman Study*, which does address errors not found by the U.S. legal system, supports its conclusions.

^{246.} See Liebman Study, supra note 1, at 51-109.

^{247.} See id. at 53-54, 57, 61, 63, 66-67, 69-70, 72-73, 77-78, 81, 83-84, 86.

^{248.} Id. at 134-37 nn.33-40.

^{249.} See id. at 55, 64, 75-76, 79.

^{250.} Id. at 51.

^{251.} See Liebman Study, supra note 1, at 79.

^{252.} See id. at 64, 75, 80.

^{253.} See Eric Brazil, Death Penalty Study: Bad News for State, for 1976-95, 87% of Capital Sentences Delivered in California Were Found Defective, S.F. Examiner, June 13, 2000, at A8; Capital Case Errors High in Georgia: 80% of Death Penalty Trials Flawed, Fl.A. TIMES UNION (Jacksonville), June 13, 2000, at A1; Frank Green, Broken System or Better One? Study: VA. Reverses Fewest Death-Penalty Cases in U.S., RICHMONDT IMES-DISPATCH, June 12, 2000, at A1; Sally Kestin, Death Penalty Errors Vex State Mistakes Among the Highest in Nation, SUN-SENTINEL (Ft. Lauderdale, Fla.), June 19, 2000, at 1A; Brooke A. Masters, Death Row Cases in Va. Earn New Court Scrutiny, WASH. POST, Mar. 29, 2001, at B1, B4; Kevin McDermott & Eric Stern, Missouri Rates Well on Death Penalty "Errors," Suspended Illinois System Is Average for U.S., Study Finds, ST. LOUIS POST-DISPATCH, June 13, 2000, at A1, A8.

comparisons.²⁵⁴ Although the charts and graphs of these comparisons do indicate differences,²⁵⁵ they are not meaningful. Aside from the substantive problems of the *Liebman Study*'s Part VIII, the authors do not analyze the state-by-state data with any statistics or concrete comparison.²⁵⁶ The authors often describe possible correlation among variables by "looking at them" without any true comparison or statistical analysis.²⁵⁷ In fact, the authors refer to certain state-by-state analysis as "a rough measure."²⁵⁸ Comparison tools such as Pearson's correlation coefficient,²⁵⁹ R² statistic,²⁶⁰ and linear regression²⁶¹ are all sufficient means of statistical comparisons that Professor Liebman and his colleagues do not employ.²⁶² These statistical tests would yield results more trustworthy than comments that a relationship seems to appear "wildly and randomly" or "weak."²⁶³

Much like in the *Liebman Study*'s national analysis, the variable that the authors used to compare the error rates among states and regions is "serious error," or "overall error rates." The authors calculated the amount of "reversals" of trial court decisions for each state. However, this variable does *not* simply measure the error within trial courts. Although the authors failed to acknowledge the variable's possible multifaceted measurement, "serious error" simultaneously also measures the degree of willingness of an appellate court to reverse or remand a capital verdict. In fact, these two measurements of the variable are indistinguishable. A high rate of trial court reversals within a state could mean that (1) the state's trial courts are fraught with error or (2) the state's

^{254.} Liebman Study, supra note 1, at 51-112.

^{255.} Id.

^{256.} Regarding valid assertions, an academic community must be assured that the assertions from data are valid rather than ad hoc guesses. *See* KING ET AL., *supra* note 31, at 96-97, 130-32, 168-69; NORUSIS, *supra* note 47, at 360-90; WRIGHT, *supra* note 31, at 135-58.

^{257.} See KINGET AL., supra note 31, at 94.

^{258.} Id. at 102.

^{259.} See Norusis, supra note 47, at 365-66; Singleton et al., supra note 31, at 78, 407; Wright, supra note 31, at 144-46. See also supra note 46.

^{260.} See WRIGHT, supra note 31, at 150; NORUSIS, supra note 47, at 388. See also supra note 45.

^{261.} See King et Al., supra note 31, at 96-7, 130-32, 168-69; Wright, supra note 31, at 135-58. See also supra note 47.

^{262.} See Liebman Study, supra note 1, at 51-109.

^{263.} Id. at 94.

^{264.} Id. at 134-37 nn.33-40.

^{265.} See id.

^{266.} Because "serious error" is a measure of how often an appellate court finds "error" in trial courts, a state's degree of error is affected in every case by both (1) the state's errors at trial level and also (2) the state appellate judges' propensity to find error at trial level. *See* discussion *supra* Part IV B

appellate courts or federal appellate courts²⁶⁷ are prone to reversing decisions. Conversely, a low rate of trial court reversals could mean that (1) the state's trial courts have few errors or (2) the state's appellate courts or federal appellate courts are prone to leaving state court decisions alone. Unfortunately, there is no way to separate these two measurements from "serious error." There is no way to tell what a high or low value of "serious error" indicates for each state. Although the Liebman Study's authors were looking for an observable implication of error at the trial level, their measurement value ("serious error") cannot provide a measurement of the implication that a state's trial system²⁶⁹ has a high or low error rate. If hypothetical state E, whose trial courts have many capital errors, has a staunch, pro-capital punishment, nonreversing appellate court system, then E will have a low "serious error value." Despite the fact that E's court system is fraught with capital trial level error, Professor Liebman and his colleagues would incorrectly conclude that E's capital trial level error is low due to E's low "serious error rate" value.

Examples of this measurement confusion are evident from the study's data. Virginia continually has extremely low rates of reversals.²⁷⁰ However, this low "serious error" rate cannot explain whether Virginia's trial courts' capital cases have little error, or if Virginia appellate courts tend to let capital cases stand on their own, or if each of these two scenarios are true.²⁷¹ The authors failed to make this distinction even though Virginia²⁷² consistently ranks far below the other states in "error

^{267.} Because the only role for federal courts in capital punishment is through habeas corpus appeals, federal court data will be available from that state only if habeas corpus appeals are included from that state. Thus, as such appeals are not always included in the *Liebman Study*'s figures, and some states have very few examples, these figures alone are not very helpful. *See Liebman Study*, *supra* note 1, at 51-109.

^{268.} The *Liebman Study* raises a defense to this concern by concluding that state judges act similarly to federal judges in that state. *Id.* at 80-81. However, this defense does not successfully counter this concern because most federal judges in a state have come from state courts in that state and are likely still influenced by instate factors. *See* Latzer & Cauthen I, *supra* note 85, at 68.

^{269.} See generally Lori Montgomery & Daniel LeDuc, Sentences Without Finality, WASH. POST, Feb. 4, 2001, at A1, A18 (describing how different judges in different states treat the sentencing of criminals incongrously and how different laws in different states cause uneven reviewing of cases).

^{270.} According to the *Liebman Study*, Virginia has ten percent direct state court reversal (the lowest of all states; forty-one percent national average), thirteen percent all state court reversal (the lowest of all states; forty-seven percent national average), and eighteen percent "overall error rate" (the lowest of all states; sixty-eight percent national average). *Liebman Study*, *supra* note 1, at 53, 61, 77-79.

^{271.} The authors have trouble with this phenomenon. *See Liebman Study supra* note 1, at 55, 64, 75-76, 80.

^{272.} Nationally, Virginia ranks second for executions from 1973-1998. CAPITAL PUNISHMENT 1998, supra note 202, at 10.

rate." Instead, the authors offer no explanation for this phenomenon and call Virginia a "distinct anomaly" and an "outlier." Because the variable "serious error" is a measurement of both of these phenomena, one cannot use it to compare the degree of error within a trial court. In fact, despite the fact that the *Liebman Study* applauds low-error states, a significant portion of the *lowest* "serious error" states have the *highest* rates of per capita executions. Nonetheless, some authorities are even using these state error rate comparisons to support state public policy.

Similarly, many of the *Liebman Study*'s state-by-state non-error rate conclusions are not supported. The study attempts to establish correlations, or the lack thereof, between state-by-state death sentences and each of the following statewide characteristics: executions, homicides, race, political pressure, state spending on courts, and caseloads.²⁷⁸ Although the study does graph these statistics, even the authors admit that proper analysis would be a matter "requiring more sophisticated analysis."²⁷⁹ The authors

One might explain the above pattern by the fact that the states with the greater execution rates have appellate justices that are more prone to approve of executions and not be against capital punishment. Such patterns might also occur due to public opinion, institutional factors, or state biographical information. Professor Liebman and his colleagues addressed none of these possibilities. *See Liebman Study, supra* note 1, at 51-109.

^{273.} Liebman Study, supra note 1, at 64, 68.

^{274.} Id. at 80.

^{275.} As appellate courts make the ultimate decision to find error or not, one cannot separate their propensity towards finding error in capital cases from the "actual" or "true" error at trial level. This measurement of trial error ("serious error") chosen by the Professor Liebman and his colleagues is not a valid measurement of such error because it contains a separate variable characteristic—willingness of a state's appellate court to find error in trial courts—that determines the Evel of "serious error" value.

^{276.} For error rates in direct appeals (the only error chart with significant state comparisons including all states), the bottom three, lowest-ranked, error states have the 2nd, 5th, and 1st highest rates of per capita executions respectively. *Compare Liebman Study, supra* note 1, at 53, *with* CAPITAL PUNISHMENT 1998, *supra* note 202, at 10. For error rates in all state courts (data not available for all states), the bottom three lowest- ranked error states have the 2nd, 5th, and 28th highest rates of per capita executions rates respectively. *Compare Liebman Study, supra* note 1, at 61, *with* CAPITAL PUNISHMENT 1998, *supra* note 202, at 10. For error rates in habeas corpus cases (some states with less than three cases), the bottom three lowest-ranked error states have the 1st, 2nd, and 6th highest rates of per capita executions rates respectively. *Compare Liebman Study, supra* note 1, at 66, *with* CAPITAL PUNISHMENT 1998, *supra* note 202, at 10. For overall error rates (data not available for all states), the bottom three lowest-ranked error states have the 2nd, 5th, and 3rd highest per capita execution rates respectively. *Compare Liebman Study, supra* note 1, at 77, *with* CAPITAL PUNISHMENT 1998, *supra* note 202, at 10.

^{277.} See, e.g., Denise Young, The Debate over Arizona's Death Penalty, ARIZ. ATT'Y, Nov. 2000, at 26, 30 n.32.

^{278.} For the execution comparisons, see *Liebman Study*, *supra* note 1, at 91-94. For homicide comparisons, see *id.* at 97-99. For race comparisons, see *id.* at 99-101. For political pressure comparisons, see *id.* at 103-05. For state expenditures comparisons, see *id.* at 106-05. For state caseload comparisons, see *id.* at 110-12.

^{279.} Id. at 99.

casually view the graphs and make vague statements about the relationships of the variables. Instead of eyeballing the trends and comparing a few states, the authors should have utilized proper statistical comparison such as Pearson's correlation coefficient, R² statistic, or even linear regression analysis. In fact, because the *Liebman Study* authors are attempting to predict why certain states act as they do towards death sentences, they would likely benefit from the use of a multiple regression analysis, which could isolate each variable's effect on other variables and provide a much clearer picture of whether a certain variable (like homicides) actually contributes to the dependent variable (death sentences).

The *Liebman Study*'s own measurement for its independent variable ("serious error") cannot effectively explain its dependent variable (trial court error within state courts). "Serious error" among states cannot explain whether a state's trial courts have more or less error than another state's trail court. Consequently, the *Liebman Study*'s data cannot verify the author's conclusions about state differences. Therefore, the "observers and policy makers," of whom the authors suggest should take note of their figures, should not base any policy decisions on these unsupported conclusions.

V. PROPOSAL

The *Liebman Study* did not confirm that the U.S. capital punishment system is broken. The study did not prove that the U.S. judicial system "fail[s] to catch and correct some amount of the error that has flooded the system." Although Professor Liebman and his colleagues failed to conclusively confirm their theory, researchers could conduct successive studies that would effectively analyze some of the *Liebman Study*'s proposed theories.

^{280.} See supra notes 45-46 and accompanying text.

^{281.} See NORUSIS, supra note 47, at 455-88; supra notes 47-49 and accompanying discussion.

^{282.} Multiple linear regression analysis allows one to see how a dependent variable reacts to the many different independent variables. By using single linear regression analysis (even this was not employed by the *Liebman Study*), one would not account for the influence of these other factors. *See* NORUSIS, *supra* note 47, at 455-88. Even the authors of the *Liebman Study* admit that many different factors may be influencing the effect and use of capital punishment at the same time. *See Liebman Study*, *supra* note 1, at 91-105. In order to explain many of the questions that the authors are asking in their state comparison section, it might also be helpful to include non-death penalty states into their equation. This would present a broader picture of why a state would or would not have the death penalty and by what degree the state is imposing death sentences.

^{283.} Liebman Study, supra note 1, at 51.

^{284.} Id. at 121.

A study addressing the theories posited by the authors of the Liebman Study could take steps that would lead to more trustworthy results and conclusions. First and foremost, the study must utilize proper empirical social scientific research methodology. ²⁸⁵ Such processes could solve many of the problems that exist within the *Liebman Study*, beyond general methodology. 286 Additionally, the Liebman Study's theory was extremely vague²⁸⁷ and its targeted conclusions were too broad to be addressed by a few independent variables.²⁸⁸ In fact, aside from attempting to answer on too broad of a theory in one step, the authors addressed nationwide and state differential problems and attempted to explain why capital punishment is more prevalent in certain states or regions of the country.²⁸⁹ A study could be more conclusive, more detailed, and less vague than the Liebman Study by simply making its analysis more focused and addressing its theories more carefully. A study that solely attempts to address one aspect of the U.S. capital punishment system²⁹⁰ can more easily conduct proper methodology and connect independent variables to dependent variables than a study hat targets many significant areas of the U.S. capital punishment system. If, after analyzing the conclusions of many of these studies, the U.S. capital punishment system appears to be broken, then the authors could better evaluate their theory.

^{285.} See discussion supra Part II.B.

^{286.} The following examples highlight how proper methodology could solve some of the other problems in the study. The authors of the study could solve the problems of the degree of seriousness in the "serious error" figure with full disclosure of the data and replicability of the study. See discussion supra Parts IV.A-B. With observable implications and choice of measurements, the authors would have likely been able to correct many of the general problems with their "serious error" variable. See id. By addressing the null hypothesis of their study, the authors would address any bias inherent in their research and analysis and likely quiet many critics. See discussion supra Part IV.A. See also Latzer & Cauthen I, supra note 85, at 64-67; Snyder, supra note 85, at A1; Wilson, supra note 85, at B5.

^{287.} The *Liebman Study* never clarified what it meant by "broken system." *See Liebman Study*, *supra* note 1, at 121-24. It stated a broad hypothesis without support and never explained how it would show the failure of the U.S. capital punishment system. *See id.* at 1-7, 121-24.

^{288.} The *Liebman Study*'s authors attempted to establish that the system was "broken" almost exclusively by the vague variable "serious error." *Compare supra* notes 171-72 and accompanying discussion, *with supra* note 287.

^{289.} See supra Part IV.C and accompanying discussion.

^{290.} Any one of the following examples could be a separate study with focused theories that would establish a significant step in better understanding the U.S. capital punishment system: (1) the reasons for which capital punishment exists only in certain states; (2) the reasons for which certain states have higher rates of death sentences and executions; (3) the prevalence of innocent capital convictions not caught by the U.S. judicial system; (4) the extent to which the U.S. capital punishment system differs from the general U.S. criminal punishment system and whether the incongruities account for the differences in current appellate reversal rates between the two systems.

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VI. CONCLUSION

The *Liebman Study*'s results and conclusions are problematic. Professor Liebman and his colleagues do not follow proper empirical social scientific research methodology and do not use proper measurements to support their conclusions. "Serious error," as defined and analyzed by the authors of the *Liebman Study*, does not justify or lead to the conclusion that the U.S. capital punishment system is broken. Considering that the *Liebman Study*'s conclusions are unfounded, public policy makers should not rely on its findings, courts should not reform their practices due to its analysis, and commentators should not compare it to significant policy papers of the past century. Nonetheless the *Liebman Study* does posit some serious and significant theories about the U.S. capital punishment system, and those theories may be entirely valid. However, the *Liebman Study* does not provide much assistance in establishing support for those theories.

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