BUT WAS HE SORRY? THE ROLE OF REMORSE IN CAPITAL SENTENCING

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INTRODUCTION

Everyone noticed it. He killed over one hundred people, but not once did he show any sign of remorse. More than anything else perhaps, observers of Timothy McVeigh noticed that he never broke

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down, never cried, never said "I'm sorry." In a word, he was remorse-less. Yet remorse was what everyone had hoped to see, including the jurors.[1]

· But what role does remorse really play in capital sentencing? We divide this basic question in two. First, what makes jurors come to believe a defendant is remorseful? Second, does a belief in the defendant's remorse affect the jury's final judgment of life or death? Here we present a systematic, empirical analysis that tries to answer these questions. The data on which we rely come from interviews with over 150 jurors who served on capital cases in South Carolina.

What makes jurors think a defendant is remorseful? Among other things, we find that the more jurors think that the crime is cold-blooded, calculated, and depraved and that the defendant is dangerous, the less likely they are to think the defendant is remorseful. Conversely, the less they think the defendant is responsible for the crime, the more likely they are to believe he is remorseful. The defendant's demeanor during trial also influences jurors' beliefs about remorse.

As for the background and the attitudes of the jurors themselves, we find that jurors with strong views in favor of the death penalty are less likely to think the defendant is remorseful. We also find that while racial factors generally do not influence jurors' beliefs about the defendant's remorse, white women are least likely to believe the defendant is remorseful. However, because most of the defendants in our sample were men, it is difficult to tell whether this result means that white women tend not to believe in the remorse of male defendants or that they tend not to believe in the remorse of any defendant.

Does a defendant's remorse or lack of remorse affect the sentence he receives? The general answer is yes. The more precise answer is sometimes. Remorse benefits some defendants, but not others. In multivariate models of sentencing outcomes that account for the perceived "viciousness" of the crime, we find that jurors' belief in the defendant's remorse noticeably improves the predictive value of the models—provided jurors do not think the crime is extremely vicious. When jurors *do* think the crime is extremely vicious, their belief in the defendant's remorse appears to have little influence on the sentence he receives.

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1 *See, e.g.,* Tom Kenworthy & William Booth, *Bomb Jurors Profoundly Affected,* WASH. POST, June 15, 1997, at A1 (reporting one juror as saying he was "'very bothered that [McVeigh] was so stone-faced'"); *see also* Adam Nossiter, *City That Embraced Victims Reacts with Grim Approval,* N.Y. TIMES, June 14, 1997, at 9 (reporting grandmother of two victims as saying "'I sat in the courtroom and saw Tim McVeigh, and prayed for some kind of remorse?'"); Louis Roman & Tom Kenworthy, *What Moved Him? Mystery Unsolved,* ARIZ. REP., June 14, 1997, at A1 (noting McVeigh's lack of remorse). *But cf.* Kenworthy & Booth, *supra,* at A1 (reporting that another juror said, "'We wanted to see some remorse, but it was not important?'").

Part I describes the data we use in the study. Part II describes South Carolina law as it bears on the role of remorse in capital sentencing. Using bivariate analysis, Part III addresses our first question: What makes jurors think a defendant is or is not remorseful? Part IV explores the same question, only using multivariate analysis. Finally, Part V uses both bivariate and multivariate analysis to address our second question: Does remorse matter to the sentencing outcome?

I

THE CAPITAL JURY PROJECT IN SOUTH CAROLINA

We gathered the data analyzed here as part of the Capital Jury Project ("Project"), a multistate research effort funded by the National Science Foundation. Until now, researchers trying to draw inferences about how jurors determine capital-case sentences have tended "to rely on surveys of the general population, on anecdotal data from individual cases, and on material in the written record."[2] Researchers have not systematically gathered data from jurors who served on capital cases. The Project fills this void, providing a rich source of information about capital sentencing jurors' beliefs and decision-making processes.

Our analysis rests on data gathered from the Project's efforts in South Carolina. We randomly sampled jurors from forty-one South Carolina murder cases, with a goal of interviewing four jurors per case. The sample includes twenty-two cases resulting in death sentences and nineteen cases resulting in life sentences. The cases in the study represent all South Carolina capital cases brought by the State between the enactment of the South Carolina Omnibus Criminal Justice Improvements Act of 1986 and the summer of 1993.[3] The 1986 law fundamentally changed the parole standards in capital cases and provided a natural stopping point as we worked our way backwards from the most current cases then available. Trained interviewers completed a total of 153 live interviews. Moreover, although our data are limited to South Carolina jurors, the published research us-

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2   Theodore Eisenberg & Martin T. Wells, *Deadly Confusion: Juror Instructions in Capital* `
Cases, 79 CORNELL L. REV. 1, 2 (1993) (citations omitted).

3   *See* South Carolina Omnibus Criminal Justice Improvements Act of 1986 § 27, 1986 S.C. Acts 2955, 2983 (changing parole eligibility standards). An earlier article using these data incorrectly states that the sample includes 43 cases. *See* Theodore Eisenberg et al., *Jury Responsibility in Capital Sentencing: An Empirical Study,* 44 BUFF. L. REV. 339, 350 (1996). However, because that article addressed juror-level issues, and the number of interviews was correct, *see id.,* the misstatement of the number of cases has no effect on the results there presented.

ing nationwide data gives no reason to date to think South Carolina jurors behave atypically.[4]

The fifty-one page interview instrument, which the Project designed and tested, covered all phases of both the guilt and the sentencing trials.[5] The data derived from the interviews include variables about the facts of the crime; about the racial, economic, and other characteristics of the defendant, of the victim, and of the victim's family; about the process of juror deliberation; and about the defense counsel's, the prosecutor's, and the judge's handling of the case. The data also include variables about jurors' demographic characteristics and about their views on the death penalty.

Despite its benefits, this interview methodology limits the conclusions we can draw. For example, jurors may not be adept at evaluating what factors influence their own thinking,[6] or they may give answers they think the interviewer wants to hear.[7] Moreover, jurors' memories may have deteriorated between the time of their service and the time of their interview.[8] Finally, the interviewers spoke with jurors after they served, not before. Consequently, due to possible hindsight bias, we cannot tell for certain whether the jurors' post-trial responses represent what they believed at the time of trial or instead represent ex post rationalizations.[9] For example, jurors who voted for death may have felt compelled to "recall" that the defendant was remorseless when asked about it after the fact.

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[4] *See* Eisenberg et al., *supra* note 3, at 354 (finding that the "pattern of responses [from South Carolina jurors regarding perceptions of their sentencing responsibilities] is largely the same as that reported in . . . Project data from several states"); Stephen P. Garvey, *Aggravation and Mitigation in Capital Cases: What Do Jurors Think?*, 98 COLUM. L. REV. 1538, 1575-76 (1998) (comparing reactions of jurors from South Carolina to various aggravating and mitigating factors with reactions of jurors from several states and finding no statistically significant differences). *Compare* Eisenberg & Wells, *supra* note 2, at 6-7 (using South Carolina data to examine how jurors' impressions of the defendant's dangerousness influence their decision making), *with* William J. Bowers, *The Capital Jury Project: Rationale, Design, and Preview of Early Findings*, 70 IND. L.J. 1043, 1090-93 (1995) (using nationwide data to examine how jurors' impressions of the defendant's dangerousness influence their decision making).

[5] *See* Justice Research Center, Northeastern University, Juror Interview Instrument: National Study of Juror Decision Making in Capital Cases (unpublished document, on file with authors) [hereinafter Juror Interview Instrument].

[6] *See, e.g.*, Valerie P. Hans, *How Juries Decide Death: The Contributions of the Capital Jury Project*, 70 IND. L.J. 1233, 1235 (1995) ("Researchers have discovered that individuals are not particularly good at assessing the impact of factors that affect their thinking.").

[7] *See, e.g., id.* at 1236 ("[Jurors] will experience pressures to present themselves in a socially desirable way to the interviewer.").

[8] *See, e.g., id.* at 1235-36 (noting that "[j]urors' memories will deteriorate and change over time").

[9] *See, e.g., id.* at 1236. For a helpful discussion of hindsight bias, see generally Jonathan D. Casper et al., *Juror Decision Making, Attitudes, and the Hindsight Bias*, 13 LAW & HUM. BEHAV. 291 (1989) (assessing the impact of hindsight bias on juror decision making in civil suits against police officers).

II

WHAT DOES THE LAW SAY ABOUT REMORSE?

South Carolina's capital-sentencing scheme is like that of many states. The capital trial is bifurcated into a guilt phase and a penalty phase.[10] If the jury finds the presence of at least one statutory aggravating circumstance, the defendant becomes "death eligible."[11] Having made that finding, the jury can sentence the defendant to death or to life imprisonment.[12] Finally, South Carolina law, like the law of most other states, provides the jury with a list of aggravating and mitigating circumstances to guide its sentencing decision.[13]

Aggravating circumstances include murder committed during the commission of certain serious crimes such as kidnapping and rape, murder of a police officer, and murder by a defendant with a previous murder conviction.[14] Statutory mitigating circumstances include lack of a prior conviction for a violent crime, impaired mental capacity,

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10   *See* S.C. CODE ANN. § 16-3-20(B) (Law. Co-op. Supp. 1997).
11   *See id.* ("[I]f a statutory aggravating circumstance is found, the defendant must be sentenced to either death or life imprisonment.").
12   *See id.*
13   *See id.* § 16-3-20(C).
14   *See id.* The full text of the statute outlines the following circumstances that South Carolina law denominates as "aggravating":

> (1) The murder was committed while in the commission of [specified] crimes or acts. . . .
> (2) The murder was committed by a person with a prior conviction for murder.
> (3) The offender by his act of murder knowingly created a great risk of death to more than one person in a public place by means of a weapon or device which normally would be hazardous to the lives of more than one person.
> (4) The offender committed the murder for himself or another for the purpose of receiving money or a thing of monetary value.
> (5) The murder of a judicial officer, former judicial officer, solicitor, former solicitor, or other officer of the court during or because of the exercise of his official duty.
> (6) The offender caused or directed another to commit murder or committed murder as an agent or employee of another person.
> (7) The murder of a federal, state, or local law enforcement officer, peace officer or former peace officer, corrections employee or former corrections employee, or fireman or former fireman during or because of the performance of his official duties.
> (8) The murder of a family member of an official listed in subitems (5) and (7) above with the intent to impede or retaliate against the official. "Family member" means a spouse, parent, brother, sister, child, or person to whom the official stands in the place of a parent or a person living in the official's household and related to him by blood or marriage.
> (9) Two or more persons were murdered by the defendant by one act or pursuant to one scheme or course of conduct.
> (10) The murder of a child eleven years of age or under.
> (11) The murder of a witness or potential witness committed at any time during the criminal process for the purpose of impeding or deterring prosecution of any crime.

Id.

duress, and provocation.[15] In addition to these statutory circumstances, the jury is free to consider nonstatutory factors, both aggravating and mitigating.[16] The jury's decision to sentence the defendant to death must be unanimous.[17] If the jury cannot reach unanimity, the statute requires the court to impose a sentence of life imprisonment.[18]

How does remorse fit within this scheme? On the mitigation side of the sentencing equation, the answer is pretty clear. Although South Carolina law does not list remorse as a mitigating circumstance, a capital defendant nonetheless enjoys a constitutional right to proffer in mitigation "any aspect of [his] character or record and any of the circumstances of the offense."[19] Along with most, if not all, other ju-

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15 *See id.* The full text of the statute outlines the following circumstances that South Carolina law denominates "mitigating":

(1) The defendant has no significant history of prior criminal conviction involving the use of violence against another person.

(2) The murder was committed while the defendant was under the influence of mental or emotional disturbance.

(3) The victim was a participant in the defendant's conduct or consented to the act.

(4) The defendant was an accomplice in the murder committed by another person and his participation was relatively minor.

(5) The defendant acted under duress or under the domination of another person.

(6) The capacity of the defendant to appreciate the criminality of his conduct or to conform his conduct to the requirements of law was substantially impaired.

(7) The age or mentality of the defendant at the time of the crime.

(8) The defendant was provoked by the victim into committing the murder.

(9) The defendant was below the age of eighteen at the time of the crime.

(10) The defendant had mental retardation at the time of the crime. "Mental retardation" means significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period.

Id.

16 *See id.* (stating that the jury may consider "mitigating circumstances otherwise authorized or allowed by law").

17 *See id.* ("The jury shall not recommend the death penalty if the vote for such penalty is not unanimous. . . .").

18 *See id.* (stating that if the jury cannot agree to recommend death, the judge "shall sentence the defendant to life imprisonment").

19 *E.g.,* Lockett v. Ohio, 438 U.S. 586, 604 (1978) (plurality opinion); *accord* McKoy v. North Carolina, 494 U.S. 433, 440-43 (1990); Mills v. Maryland, 486 U.S. 367, 374-75 (1988); Hitchcock v. Dugger, 481 U.S. 393, 398-99 (1987).

Although the Supreme Court never expressly has held that remorse is mitigating, it has noted the mitigating role of remorse in dicta. *See, e.g.,* Johnson v. Texas, 509 U.S. 350, 356-57 (1993) (noting in the statement of facts that the defense emphasized defendant's remorse); Riggins v. Nevada, 504 U.S. 127, 143-44 (1992) (Kennedy, J., concurring in the judgment) ("As any trial attorney will attest, serious prejudice could result if medication inhibits the defendant's capacity . . . to demonstrate remorse or compassion."); Clemons v. Mississippi, 494 U.S. 738, 771-72 (1990) (Blackmun, J., concurring in part and dissenting in part) (noting that the defendant "argued that his remorse for the crime constituted a mitigating factor" and arguing that appellate judges are ill-suited to evaluate a defendant's remorse on appeal); Strickland v. Washington, 466 U.S. 668, 673 (1984) (noting in the

risdictions,[20] South Carolina accordingly appears to treat remorse as a mitigating factor in capital-sentencing proceedings.[21]

Remorse may be mitigating in two different ways.[22] First, its mitigating effect may be freestanding. On this account, remorse is the proper moral response to one's wrongdoing, and wrongdoers who experience remorse possess a quality of character that jurors rightly con-

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statement of facts that defense counsel "argued that [defendant's] remorse and acceptance of responsibility justified sparing him from the death penalty"); McGautha v. California, 402 U.S. 183, 188 (1971) (noting in the statement of facts that defendant "related his . . . remorse").

20   *See, e.g.,* McGahee v. State, 632 So. 2d 976, 981 (Ala. Crim. App. 1993) (noting that "trial court found the existence of four mitigating circumstances," including "that the [defendant] has expressed some remorse for his actions"); State v. Brewer, 826 P.2d 783, 804 (Ariz. 1992) ("Remorse may be a mitigating factor if found to exist."); Clark v. State, 672 A.2d 1004, 1009 (Del. 1996) (noting that defendant's "remorse" was a "mitigating factor[ ]"); Parker v. State, 643 So. 2d 1032, 1035 (Fla. 1994) (per curiam) ("Jurors also may consider remorse or repentance."); Jackson v. State, 684 So. 2d 1213, 1238 (Miss. 1996) (en banc) (holding that "'catch-all'" instruction on mitigation was sufficient to encompass evidence of "extreme remorse"), *cert. denied,* 117 S. Ct. 1703 (1997); State v. Moore, 553 N.W.2d 120, 142 (Neb. 1996) (noting that "expressions of remorse for the killings" were relevant mitigating evidence), *cert. denied,* 117 S. Ct. 1448 (1997); Echavarria v. State, 839 P.2d 589, 596 (Nev. 1992) (per curiam) (noting that common-law right of allocution entitles the defendant to "stand before the sentencing authority and present an unsworn statement in mitigation of sentence, including statements of remorse" (internal quotations omitted)); State v. Loftin, 680 A.2d 677, 709 (N.J. 1996) ("During allocution, a defendant is permitted to make a brief statement in order to allow the jury to ascertain that he or she is an individual capable of feeling and expressing remorse. . . ." (internal quotations omitted)); State v. Jones, 451 S.E.2d 826, 847 (N.C. 1994) ("[T]estimony that the defendant was sorry for what he had done showed his remorse . . . [and was] relevant mitigating evidence."); State v. Rojas, 592 N.E.2d 1376, 1387 (Ohio 1992) ("[Defendant's] remorse and assistance to the police are mitigating factors."); Malone v. State, 876 P.2d 707, 719 (Okla. Crim. App. 1994) (noting that "mitigating evidence showed . . . [that the defendant] exhibited remorse for his actions"); Commonwealth v. Holland, 543 A.2d 1068, 1077 (Pa. 1988) ("[T]he demeanor of a defendant, including his apparent remorse, is a proper factor to be considered by a jury in the sentencing phase of a capital case."); *Ex parte* Jacobs, 843 S.W.2d 517, 520 (Tex. Crim. App. 1992) (noting that evidence of remorse was relevant but did not require special instruction); State v. Pirtle, 904 P.2d 245, 274 (Wash. 1995) (en banc) (noting that "remorse for the crime" is relevant mitigating evidence).

21   *Cf.* State v. Koon, 328 S.E.2d 625, 627 (S.C. 1984) (treating remorse as mitigating circumstance in context of statutory proportionality review), *overruled on other grounds by* State v. Torrence, 406 S.E.2d 315 (S.C. 1991).

22   *See, e.g.,* Jeffrie G. Murphy, *Repentance, Punishment, and Mercy, in* REPENTANCE: A COMPARATIVE PERSPECTIVE 143, 148-49, 157 (Amitai Etzioni & David E. Carney eds., 1997) (explaining that remorse mitigates both in a deterrence framework by showing that the defendant is "less likely to commit crimes again" and in a retribution framework by showing that the defendant "has a better character"). The cases interpreting § 3E1.1(a) of the federal sentencing guidelines, which provides for a sentencing reduction if an offender "clearly demonstrates acceptance of responsibility for his offense," U.S. SENTENCING COMM'N, GUIDELINES MANUAL § 3E1.1(a) (1994), also reflect these two theories. *See* Michael M. O'Hear, *Remorse, Cooperation, and "Acceptance of Responsibility": The Structure, Implementation, and Reform of Section 3E1.1 of the Federal Sentencing Guidelines,* 91 NW. U. L. REV. 1507, 1523-42 (1997) (discussing the two theories).

sider in mitigation.[23] Alternatively, remorse's mitigating effect may be derivative. On this account, remorse is mitigating because it serves as evidence that the defendant, having made his first step on the way to rehabilitation, is less likely to be dangerous in the future.[24] Whatever the normative grounds for remorse's mitigating effect, defense lawyers generally agree that remorse plays an important role in the jury's determination of their client's fate.[25]

What about lack of remorse? In some states, the applicable statutory scheme limits aggravating evidence to that which falls within the scope of the statute's enumerated aggravating circumstances.[26] Consequently, if lack of remorse is not included on the list of aggravating factors, the jury cannot consider it.[27] However, even in these states, prosecutors can usually introduce lack of remorse evidence in rebuttal.[28] In other states, prosecutors can use such evidence to establish the existence of other statutory aggravating circumstances (e.g., that the crime was "heinous, atrocious, or cruel")[29] or to establish that the

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23 *See, e.g.,* Murphy, *supra* note 22, at 157 ("The repentant person has a better character than the unrepentant person, and thus the repentant person—on this theory—simply deserves less punishment than the unrepentant person.").

24 *See, e.g., id.* at 148-49 ("[I]t seems obvious that repentant people are less likely to commit crimes again than are those criminals who are unrepentant.").

25 *See, e.g.,* Dennis N. Balske, *New Strategies for the Defense of Capital Cases,* 13 AKRON L. REV. 331, 356 (1979) ("It is . . . important that the client, where appropriate, express remorse, both for the victim and the victim's family. . . . [Additionally], the client must honestly express contrition and seek the mercy, as opposed to forgiveness, of the jury."); *see also* Phyllis Brown, *Testimony of "Mitigating Circumstances": What Purpose Does It Serve?,* FED. LAW., Sept. 1997, at 5, 5 ("Common wisdom is that a show of remorse may result in mitigation."); *cf.* Caren Myers, Note, *Encouraging Allocution at Capital Sentencing: A Proposal for Use Immunity,* 97 COLUM. L. REV. 787, 805-06 (1997) (endorsing allocution at capital sentencing as a way to "encourage [the defendant] to take responsibility for his actions").

26 *See generally* James R. Acker & C.S. Lanier, *Aggravating Circumstances and Capital Punishment: Rhetoric or Real Reforms?,* 29 CRIM. L. BULL. 467, 496 & n.144 (1993) (listing state statutes that proscribe consideration of nonstatutory aggravating evidence); Stephen Gillers, *Deciding Who Dies,* 129 U. PA. L. REV. 1 app. at 102-19 (1980) (same).

27 *See, e.g.,* Shellito v. State, 701 So. 2d 837, 842 (Fla. 1997) (per curiam) ("[L]ack of remorse is a nonstatutory aggravating circumstance and cannot be considered in a capital sentencing."), *cert. denied,* 118 S. Ct. 1537 (1998); *cf.* State v. Price, 388 S.E.2d 84, 100 (N.C.) ("[R]emorselessness is not a statutory aggravating circumstance and may not be argued as such."), *vacated for reconsideration,* 498 U.S. 802 (1990), *reinstated,* 418 S.E.2d 169 (N.C. 1992).

28 *See, e.g.,* Walton v. State, 547 So. 2d 622, 625 (Fla. 1989) (per curiam) (holding that the State can present "[lack of remorse] evidence to rebut nonstatutory mitigating evidence of remorse presented by a defendant").

29 *E.g.,* Sireci v. State, 399 So. 2d 964, 971 (Fla. 1981) ("[L]ack of remorse . . . can be offered to the jury and judge as a factor which goes into the equation of whether or not the crime was specially heinous, atrocious, or cruel."); State v. Thompson, 768 S.W.2d 239, 252 (Tenn. 1989) (noting that evidence contradicting defendant's claim of remorse was relevant to establishing sufficiency of statutory aggravating circumstance that crime was "heinous, atrocious, and cruel"); Thomas v. Commonwealth, 419 S.E.2d 606, 619 (Va. 1992) (indicating that lack of remorse is relevant in determining "'dangerousness'" and "'vileness'"); *cf.* State v. Langford, 813 P.2d 936, 949 (Mont. 1991) (noting that the trial "court properly viewed [the defendant's] lack of remorse as evidence of the absence of mitigating

defendant "constitutes a continuing threat to society."[30] In many other states, the prosecution may freely rely on lack of remorse evidence as a nonstatutory aggravating circumstance,[31] provided of course that the State can demonstrate the existence of at least one statutory aggravating circumstance.[32]

South Carolina's capital statute does not list lack of remorse among its enumerated aggravating circumstances. Nonetheless, South Carolina law recognizes that jurors may rely not only on statu-

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factors sufficiently substantially to call for leniency"); State v. Lord, 822 P.2d 177, 221 (Wash. 1991) (en banc) (noting that lack of remorse was relevant to determining whether the defendant deserved leniency).

[30]   *E.g.,* State v. Aragon, 690 P.2d 293, 302-03 (Idaho 1984) (noting that evidence of defendant's "utter lack of remorse" is relevant to determining whether the defendant "poses a continuing threat to society"); Cudjo v. State, 925 P.2d 895, 902 (Okla. Crim. App. 1996) (noting that a "defendant's . . . lack of remorse" is relevant to determining the statutory aggravating circumstance of being a continuing threat to society), *cert. denied,* 117 S. Ct. 981 (1997); Chambers v. State, 903 S.W.2d 21, 26 (Tex. Crim. App. 1995) (regarding evidence of lack of remorse as relevant to showing the special circumstance that defendant would constitute a continuing threat to society); *Thomas,* 419 S.E.2d at 619 (noting that lack of remorse is relevant in determining "'dangerousness'" and "'vileness'").

[31]   *See, e.g.,* Carr v. State, 480 S.E.2d 583, 594 (Ga.) ("A defendant's lack of remorse, as evidenced by his courtroom demeanor, is a permissible area of inquiry and argument during the sentencing phase of a capital trial."), *cert. denied,* 118 S. Ct. 313 (1997); People v. Erickson, 513 N.E.2d 367, 380 (Ill. 1987) ("A defendant's [lack of] remorse is a proper subject for consideration at sentencing." (internal quotations omitted) (brackets in original)); State v. Hamilton, 681 So. 2d 1217, 1225 (La. 1996) ("[L]ack of remorse is relevant to the character and propensities of the defendant." (internal quotations omitted)), *cert. denied,* 117 S. Ct. 1705 (1997); Bruce v. State, 616 A.2d 392, 410 (Md. 1992) ("[T]he trial judge certainly could have found the issue of lack of remorse relevant to the sentencing."); State v. Richardson, 923 S.W.2d 301, 322 (Mo. 1996) (en banc) ("[Defendant's] lack of remorse for the crimes for which he was convicted was clearly relevant to his sentencing. . . ."), *cert. denied,* 117 S. Ct. 403 (1996); State v. Parker, 337 S.E.2d 497, 502 (N.C. 1985) ("If after . . . time for reflection remorse does not come, and there is evidence of this fact, then lack of remorse properly may be found by the sentencing judge as an aggravating circumstance."); State v. Lundgren, 653 N.E.2d 304, 323 (Ohio 1995) ("[The defendant's] lack of remorse reflects upon his character."); Commonwealth v. Chester, 587 A.2d 1367, 1378 (Pa. 1991) (noting that the fact that defendants were not remorseful was a factor that "legitimately could be weighed by the jury"); State v. Young, 853 P.2d 327, 353 (Utah 1993) ("A jury may legitimately consider a defendant's . . . lack of remorse . . . in the penalty phase hearing."); *cf.* Matthews v. Commonwealth, 709 S.W.2d 414, 423 (Ky. 1985) (indicating that lack of remorse is a nonstatutory aggravating factor); Leatherwood v. State, 435 So. 2d 645, 653-54 (Miss. 1983) (en banc) (upholding admission of evidence that showed defendant "lacked remorse").

Federal law also appears to treat lack of remorse as nonstatutory aggravating evidence. *See* United States v. Nguyen, 928 F. Supp. 1525, 1541 (D. Kan. 1996) (concluding in a federal death-penalty case that "[t]here does not appear to be any constitutional problem with a 'lack of remorse' [aggravating] factor *per se*" (quoting Zant v. Stephens, 462 U.S. 862, 885 n.22 (1983) (dicta) (quoting Fair v. State, 268 S.E.2d 316, 321 (1980)))). *But cf.* United States v. Davis, 912 F. Supp. 938, 946 (E.D. La. 1996) ("Without passing on whether lack of remorse is *per se* an inappropriate independent [sentencing] factor to consider, the court finds it inappropriate in this case."), *aff'd,* 132 F.3d 1454 (5th Cir. 1997), *cert. denied,* 118 S. Ct. 1331 (1998).

[32]   *See, e.g.,* Zant v. Stephens, 462 U.S. 862, 878 (1983).

tory aggravating factors but also on nonstatutory ones,[33] which may include lack of remorse.[34] Assuming lack of remorse is a legitimate aggravating circumstance under South Carolina law, the State generally cannot bring that fact to the jury's attention, at least if the defendant chooses not to take the stand. South Carolina prosecutors comment on a nontestifying defendant's lack of remorse at their risk, because such remarks may be held to impermissibly impinge upon the defendant's constitutional right to remain silent.[35] Consequently, whatever role a defendant's lack of remorse plays in the capital sentencing decisions of South Carolina jurors, it probably plays that role with little or no prompting from the State.

III
WHAT MAKES JURORS THINK HE'S REMORSEFUL?: A
BIVARIATE ANALYSIS

Common sense and conventional wisdom suggest that a remorseful defendant stands a better chance of avoiding a death sentence than one who lacks remorse. But what makes jurors think a defendant is remorseful?

To begin our analysis, we need some measure of how remorseful jurors thought the defendant actually was. We asked jurors what impression they had of the defendant and whether they thought the defendant was "sorry for what [he] did."[36] Jurors responded to this question by selecting a number from one to four. A one indicated that the statement reflected the jurors' impression of the defendant "very well," and a four indicated that the statement reflected the jurors' impression "not at all."[37] Thus, the smaller the number the more a juror thought the defendant was remorseful. We refer to this variable as the "remorse variable," and we explore the correlation between it and the characteristics of the crime, of the defendant, and of

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[33] *See, e.g.,* State v. Skipper, 328 S.E.2d 58, 62 (S.C. 1985), *overruled on other grounds by* Skipper v. South Carolina, 476 U.S. 1 (1986).

[34] *Cf.* State v. Jones, 340 S.E.2d 782, 784 (S.C. 1985) (noting in the context of proportionality review that defendant "admitted on the witness stand that he felt no remorse for his crimes"), *vacated for reconsideration,* 476 U.S. 1002 (1986), *reinstated,* 378 S.E.2d 594 (S.C. 1989).

[35] *See* State v. Diddlemeyer, 371 S.E.2d 793, 795 (S.C. 1988), *overruled on other grounds by* State v. Torrence, 406 S.E.2d 315 (S.C. 1991); State v. Cockerham, 365 S.E.2d 22, 23 (S.C. 1988) (per curiam) (dicta); State v. Hawkins, 357 S.E.2d 10, 13 (S.C. 1987), *overruled on other grounds by* State v. Torrence, 406 S.E.2d 315 (S.C. 1991); State v. Arther, 350 S.E.2d 187, 190-91 (S.C. 1986); *cf.* State v. Johnson, 360 S.E.2d 317, 319 (S.C. 1987) (noting that a prosecutor may not comment on the defendant's lack of remorse because it violates "his constitutional right to plead not guilty and put the state to its burden of proof"). *But cf.* Gaskins v. McKellar, 916 F.2d 941, 951 (4th Cir. 1990) (holding that prosecutorial comment on defendant's refusal to testify did not rise to the level of a due process violation).

[36] Juror Interview Instrument, *supra* note 5, at 6 (Survey Question II.B.1).

[37] *Id.*

the jurors. We also examine the relation between jurors' belief in the defendant's remorse and the race of the defendant and victim.

A. Crime-Related Factors

Characteristics of the crime may influence jurors' beliefs about a defendant's remorse. A murder may be so premeditated or so calculated that ex post expressions of remorse carry little credibility. In addition, the nature of the defendant's involvement in the crime may affect a juror's belief in his remorse. A defendant who merely stood by while another committed the murder—a murder the defendant did not endorse—may more credibly claim to be remorseful for his part in the killing than the actual killer. Crime-related factors we explore include (1) the nature of the crime and (2) the defendant's proffered reasons for acquittal.

1. *Nature of the Crime*

We asked jurors how well a particular word or phrase described the murder for which the defendant had been convicted. For example, we asked jurors whether the murder was "vicious" or "bloody."[38] The first column in Table 1 lists the twelve words or phrases we presented to the jurors for their reaction. The jurors responded on the same one-to-four scale that we used to measure the remorse variable—one indicating that the word or phrase described the crime "very well" and four indicating that it described the crime "not at all." The second and third columns in Table 1 report the mean value and the variance of these responses. For example, nearly all jurors described the defendant's killing as "senseless." This crime descriptor has a mean value of 1.14 with a variance of 0.15. Jurors' responses varied more when we asked if they would describe the killing as "vicious." Most thought "vicious" described the killing "very well," but the responses showed greater variation than the responses to the "senseless" crime descriptor.

Table 1's next three columns explore the relation between the crime descriptors and the remorse variable. Each column reports the significance level, often referred to as a *p*-value, of a test of the hypothesis that no correlation exists between the crime descriptor and the remorse variable.[39] For example, in the column labeled "Life cases,"

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[38]   *Id.* at 4 (Survey Question II.A.2).

[39]   Since the crime descriptors and the remorse variable are both ordered variables, Kendall's τ is used to test the significance reported in these three columns. *See* Alan Agresti, *The Effect of Category Choice on Some Ordinal Measures of Association*, 71 J. AM. STAT. Ass'N 49 *passim* (1976) (testing different measures practitioners use to describe the relation between two ordinal variables and concluding that Kendall's τ "seems more stable overall than the others"). For more on ordinal measures of association, see ALAN AGRESTI, ANALYSIS OF ORDINAL CATEGORICAL DATA 156-200 (1984).

the "vicious" row shows a significance level of .004. This number indicates that in cases in which the jury imposed a life sentence the probability of observing *by chance* a correlation between "vicious" and the remorse variable as strong or stronger than the observed correlation was approximately 4-in-1000. Therefore, at conventional levels of statistical significance ($p \leq .05$), we can reject the hypothesis that no correlation exists between the perceived level of viciousness and the perceived level of remorse.[40] In sum, the more jurors saw the crime as being vicious, the less inclined they were to believe in a defendant's remorse.

Similarly, the column labeled "Death cases" shows that in cases in which the jury imposed a death sentence the probability of observing by chance a correlation between "vicious" and the remorse variable as strong or stronger than the observed correlation is .116. Interestingly, the statistical significance of the relationship between viciousness and remorse is greater in life cases than in death cases. This result may arise because less variation in perceived viciousness and remorse exists in death cases than in life cases. In any event, the effect moves in the same direction for both life cases and death cases, and it is significant or near-significant in both groups of cases.

Dividing the sample into life cases and death cases alleviates some concern about hindsight bias. If a similar correlation exists between the crime descriptor and the remorse variable in both life and death cases, it is less likely that the relation is simply an artifact of whether the juror ultimately voted to sentence the defendant to life or to death. The fact that a similar correlation exists in both life and death cases suggests that a relationship really does exist between the two variables and that the observed relationship is not simply the product of hindsight bias.

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[40] In other words, Table 1 explores the hypothesis that the crime descriptors and the remorse variable are independent. By convention, the hypothesis being tested is called the "null hypothesis." GEORGE W. SNEDECOR & WILLIAM G. COCHRAN, STATISTICAL METHODS 64 (8th ed. 1989). The reported significance levels are the probability of rejecting the null hypothesis when it is true. That is, the significance levels provide an inverse measure of the likelihood that the relation between a crime descriptor and the remorse variable shows a real relation rather than mere random variation. The smaller the significance level, the more surprised one would be to observe the relation if the tested hypothesis (i.e., that no relation exists) were true. *See id.* By convention, results that are significant at or below the .05 level are described as "statistically significant." *See, e.g.,* THE EVOLVING ROLE OF STATISTICAL ASSESSMENTS AS EVIDENCE IN THE COURTS app. a at 197 (Stephen E. Fienberg ed., 1989).

TABLE 1

RELATION BETWEEN THE NATURE OF THE CRIME AND REMORSE

In your mind, how well do the following words describe the killing?

1 very well   2 fairly well   3 not so well   4 not at all

(Survey Question II.A.2)

Word or phrase describing crime	Descriptive statistics		Significance tests of relation between word or phrase and remorse			Regression models that control for sentencing outcome t-statistics		n
	Mean	Variance	Life cases	Death cases	All cases	Juror level	Jury level	
Bloody	1.64	0.75	.145	.027	.096	2.234	1.745	151
Gory	1.88	1.08	.076	.463	.016	-2.588	-1.435	151
Vicious	1.34	0.48	.004	.116	.000	-2.591	-2.029	152
Depraved	1.77	0.87	.021	.016	.001	-2.923	-1.610	152
Calculated	1.88	1.08	.003	.024	.000	-3.235	-3.178	152
Cold blooded	1.26	0.41	.000	.032	.000	-4.104	-2.841	152
Senseless	1.14	0.15	.047	.621	.015	-1.859	-0.855	153
Repulsive	1.34	0.37	.219	.626	.321	-0.524	-1.044	151
Work of a "mad man"	2.34	1.24	.403	.640	.747	-0.263	-0.379	151
Made you sick to think about it	1.66	0.78	.396	.475	.292	-1.146	-0.300	152
Victim made to suffer before death	1.91	1.39	.369	.774	.937	0.822	0.748	152
Body maimed or mangled after death	2.93	1.61	.432	.607	.683	-0.162	-1.037	149

NOTE: The dependent variable in the regression models is the remorse variable. The independent variables are the case descriptor in each row plus a dummy variable for whether a death sentence was imposed. Jury-level regression results are based on 41 cases. A positive sign on the t-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

Table 1's two regression-model columns also explore the relation between the crime descriptor and the remorse variable. The goal is again to control for sentencing outcome to the extent possible, now using regression models rather than relying simply on significance tests of basic correlations. The dependent variable in each model is the remorse variable. The independent (or explanatory) variables in each model are the crime descriptor and a dummy variable reflecting whether or not the sentence was death.[41] The first regression-model column uses *juror*-level data—data in which the response of each of the sampled jurors constitutes an observation. The second regression-model column uses *jury*-level data—data in which the mean values of each of the remorse variables for each defendant constitute an observation. Accordingly, we based the second set of models on forty-one observations, which represent the outcome in each of the cases.

Our use of both juror-level and jury-level regression models reflects the nature of the data. The juror-level models have the advantage of exploiting all of the data because they account for individual juror variation in beliefs about remorse within a single capital case. But these models do not fully account for the fact that we interviewed more than one juror in all but one case. Consequently, these models do not reflect the high degree of within-case consistency that exists with respect to jurors' beliefs about a defendant's remorse. The remorse variable within each case has a standard deviation of 1.0 or less for all but nine cases, and it has a maximum value of 1.53. For a typical case in which we interviewed four jurors, a standard deviation of 1.0 indicates that three of the four jurors gave the same response to the remorse question. In other words, and not surprisingly, jurors' beliefs about a defendant's remorse depended on the case they heard. The juror-level models do not fully account for this fact, thus potentially exaggerating the reported correlations. The jury-level regression models eliminate this possibility because they rely on a case-level mean for each variable used. As a result, however, they do not make full use of all the data. In short, the jury-level models avoid the problem of nonindependence of observations but at the price of not making full use of the data.

The two regression-model columns require additional explanation. First, each column reports the *t*-statistics for each crime descriptor. In the interest of space, we report only the *t*-statistic, not a

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41 Because the remorse variable is ordinal and takes on more than two values (recall that jurors responded on a one-to-four scale), we used ordered logit-regression models for the juror-level regression. *See generally* ALAN AGRESTI, CATEGORICAL DATA ANALYSIS 261-63, 265-66 (1990) (exploring logit models that exploit ordinality). We employ ordered logit models that account for the fact that the data are clustered by defendants. We used ordinary least-squares regression models for the jury-level regression because the dependant variable is continuous. *See id.* at 2.

regression coefficient or a significance level.[42] Suffice it to note that a t-statistic of 1.96 corresponds to a significance level of .05. Any entries in the regression-model columns greater than 1.96, or less than -1.96, are significant at or beyond the .05 level. For example, note that the "vicious" row shows t-statistics of -2.591 and -2.029 for the two regression models. Consequently, in both the juror- and jury-level regression models one can reject the hypothesis that no correlation exists between the perceived level of viciousness and the perceived level of remorse.[43] Second, since we coded the crime descriptors and the remorse variable on the same ordinal scale, a positive t-statistic reflects a positive correlation between remorse and the crime descriptor, while a negative sign reflects a negative correlation. For example, the negative sign on the "vicious" t-statistics means that the more inclined jurors are to describe the crime as vicious, the less inclined they are to believe a defendant is remorseful.

Two of the crime descriptors—"calculated" and "cold blooded"— are statistically significant for life cases, death cases, and all cases combined, and they are also significant in both regression models. "Depraved" follows the same pattern but is not as significant in the jury-level regression model. Three other descriptors—"gory," "vicious," and "senseless"—are statistically significant or near-significant in life cases and all cases combined, but not in death cases. Of these three, "vicious" is significant or near-significant in both regression models. Surprisingly, one descriptor—"bloody"—actually correlated in the "wrong" direction: jurors who thought the crime was bloody also thought the defendant was remorseful. However, this result is significant only in death cases, and it is only marginally significant in the jury-level regression. With respect to the remaining crime descriptors, the relation between the descriptor and the jurors' belief in the defendant's remorse begins to fade. Indeed, no relation may exist between these variables and the remorse variable.

Table 1 suggests that jurors who believe the defendant's crime required some degree of preparation or planning—"calculated," "cold blooded," and (perhaps) "vicious"—usually don't think that the defendant is remorseful. Jurors faced with such crimes may be reluctant to credit any ex post expression of remorse. This result suggests that jurors would not have believed McVeigh even if he had said he was sorry. The negative correlation between "vicious" and remorse also may indicate that jurors simply don't care about remorse if they consider the crime bad enough. On the other hand, defendants who

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[42] The t-statistic results from dividing the regression coefficient by the coefficient's standard error. One can compute the significance level from the t-statistic. *See* LAWRENCE C. HAMILTON, REGRESSION WITH GRAPHICS 42-45 (1992).

[43] *See supra* note 40 for discussion of the null hypothesis.

commit crimes that look bad—crimes that jurors describe as "bloody" or the "work of a 'mad man'"—but that don't look planned still have a chance to convince jurors of their remorse.

2. *Reasons Offered for Acquittal*

Table 2 explores the relation between the reasons the defendant offered during trial for why the jury should acquit him and jurors' belief in his remorse. Here we coded explanations as zero-one "dummy variables," with zero indicating that the defense did not present the specified reason and one indicating that it did. Thus, the "Mean" column shows the percentage of jurors who reported that the defendant presented the specified reason. As in Table 1, we present three columns of significance tests, which report the significance of the relation between the reason presented and the jurors' belief in the defendant's remorse.[44] The two regression columns in Table 2, like those in Table 1, report *t*-statistics from juror-level and jury-level regression models. To be consistent with Table 1, we have adjusted the sign on the *t*-statistics so that a positive sign again correlates with greater remorse and a negative sign correlates with less remorse.[45] To illustrate, consider the defendant who claims he "had no role whatsoever in the killing." Table 2's first row shows that this acquittal reason correlates with reduced belief in the defendant's remorse in both regression models. Thus, a defendant who proffers this excuse during trial should not expect jurors to believe he is remorseful during the penalty phase.

Table 2 also suggests that jurors are more likely to think a defendant is remorseful if the reason he offers for acquittal either emphasizes his minor role in the crime—but does not claim he had no role at all—or otherwise reduces his culpability. For example, a correlation exists between a defendant's explanation that he "had only a minor role in the killing" and a juror's belief that the defendant was remorseful. Moreover, the significance tests and the *t*-statistics from the regression models indicate that this correlation is statistically significant in death cases, in all cases combined, and in the juror-level regression model (*t*-statistic = 2.422; *p* = .020). In short, jurors are more likely to believe in a defendant's remorse if they think he had only a minor role in the crime.

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44 The significance tests in Table 2 are based on the Mann-Whitney test. *See* H.B. Mann & D.R. Whitney, *On a Test of Whether One of Two Random Variables Is Stochastically Larger than the Other,* 18 ANNALS OF MATHEMATICAL STAT. 50 (1947).

45 Since the acquittal reasons are coded zero-one and the remorse variable is coded on a decreasing one-to-four scale (i.e., the greater the number, the less jurors' belief in a defendant's remorse), a positive sign on a *t*-statistic without adjustment would mean that the presence of an acquittal reason corresponds with *reduced* belief in the defendant's remorse.

TABLE 2

RELATION BETWEEN DEFENDANT'S EXPLANATION FOR THE CRIME AND REMORSE

What were the main reasons why defendant should be found not guilty, according to the defense?
0 reason not presented   1 reason presented
(Survey Question III.A.6) (re-coded to 0, 1)

Reason presented by defense for acquittal	Mean	Significance tests of relation between reasons presented and remorse			Regression models that control for sentencing outcome t-statistics		n
		Life cases	Death cases	All cases	Juror level	Jury level	
Defendant had no role whatsoever in the killing	0.34	.002	.533	.018	-2.598	-1.029	144
Defendant had only a minor role in the killing	0.26	.326	.025	.047	2.422	0.069	145
Defendant killed in self-defense	0.06	.095	.415	.016	1.954	1.909	146
Defendant killed in defense of others	0.01	.202	.567	.477	-0.548	-1.244	148
Defendant was provoked by the victim or others	0.15	.839	.341	.282	0.915	2.256	137
Crime was unintentional or impulsive	0.41	.000	.117	.000	3.850	4.629	142
Crime was an accident or mistake	0.20	.186	.120	.019	2.236	3.078	145
Defendant was mentally ill and could not fully appreciate the wrongfulness of his actions	0.37	.594	.117	.396	1.466	1.766	142
Defendant was insane	0.07	.611	.324	.146	0.862	1.544	145
Defendant simply was not proved guilty beyond a reasonable doubt	0.53	.135	.388	.191	-1.597	-1.770	142

NOTE: The dependent variable in the regression models is the remorse variable. The independent variables are the defense-acquittal reasons in each row plus a dummy variable for whether a death sentence was imposed. Jury-level results are based on 41 cases. A positive sign on the t-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

Other reasons reflecting the defendant's diminished culpability bore a similar relation to jurors' beliefs about the defendant's remorsefulness. Self-defense, provocation, lack of intent, accident or mistake, and mental illness all correlate with an increased belief among jurors in the defendant's remorse. The strongest effect occurs when the defendant claims that his killing was unintentional or impulsive. The correlation between this defense and jurors' belief in the defendant's remorse achieved significance in both life cases and all cases combined, and it approached significance in death cases. The relationship is also significant in the regression models (juror-level, p < .001; jury-level, p < .001).[46] Put another way, a defendant's claim of diminished culpability made his remorse more believable.

In contrast to defendants who emphasized diminished culpability, defendants who insisted that they had *no* role in the crime did not fare well. Table 2's first row shows that defendants advanced this argnment in 34% of the cases we studied. In the context of the particular case, this defense may have been the wisest strategy. But it is also a risky strategy, at least insofar as defendants who disclaim any role in the offense have a harder time convincing jurors of their remorse. Table 2 shows that denying responsibility correlates with reduced belief in the defendant's remorse. This correlation is significant in life cases, in all cases combined, and in the juror-level regression model (p = .013). Similarly, jurors were less likely to find remorse if defendants claimed that the State failed to prove its case beyond a reasonable doubt. Like the "no-involvement defense," this "not-proven" defense correlates with reduced belief in the defendant's remorse, although the effect is not statistically significant.

B. Defendant-Related Factors

We next explore the relation between jurors' belief in the defendant's remorsefulness and (1) their views of the defendant's demeanor and behavior at trial and (2) their beliefs about the defendant's life and character.

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46   These results mesh with the results of another question that asked jurors about their thoughts on the nature of the defendant's guilt. Jurors who thought that the defendant definitely had killed the victim, but might not have planned or intended to do so, were more likely to think he was remorseful. Fifty percent of the jurors reported thinking this way, which bears a highly statistically significant relation to their thoughts about the defendant's remorse. *See* Juror Interview Instrument, *supra* note 5, at 26 (Survey Question IV.2 (recoded to zero-one)). The significance level of the correlation is .004 in life cases and beyond .001 in death cases. The effect is also significant beyond .001 in regression models similar to those reported in Table 2.

1. *Behavior and Demeanor at Trial*

One naturally expects a defendant's demeanor and behavior at trial to influence jurors' impressions of his remorsefulness. Table 3 examines this expectation. For the demeanor variables, like the variables in Table 2, we used zero-one dummy variables. Table 3's "Mean" column reports the percentage of jurors stating that a factor was present. The next three columns, as in Tables 1 and 2, list the significance levels of the relation between the remorse variable and the particular demeanor variable. Finally, one can interpret the *t*-statistics in the same manner as before: a positive sign correlates with increasing remorse and a negative sign correlates with decreasing remorse.

Several questions asked jurors what impressions they formed about the defendant during trial. One question asked jurors point-blank whether they thought the defendant was sorry for what he had done. Another asked whether the defendant appeared sincere. Jurors' answers to both of these questions strongly correlate with their belief in the defendant's remorse. But this is not surprising. We expect remorse to correlate with itself and with variables similar to it.

Questions that relate to other aspects of the defendant's demeanor and behavior (and that do not overlap quite so obviously with the remorse variable) also correlate with jurors' beliefs about the defendant's remorsefulness. For example, jurors tended to believe in a defendant's remorse if he appeared "uncomfortable or ill at ease." This demeanor variable significantly correlates with the remorse variable in both death cases and all cases combined, and it approaches significance in life cases. Both regression models also illustrate the significance or near significance of this relation (juror-level, $p = .006$; jury-level, $p = .108$). We further found that jurors were more likely to believe in a defendant's remorse if they detected a change in his "mood or attitude" after the guilty verdict, and 30% of jurors did in fact detect such a change. This demeanor variable correlates with the remorse variable to near-significance in life cases and to high-significance in death cases, in all cases combined, and in the juror-level regression model ($p = .008$).

One thing a defendant should *not* do if he hopes to convince jurors of his remorse is look bored. Table 3 dramatically demonstrates that jurors who thought the defendant was bored were unlikely to think he was remorseful. This relation is highly significant in all classes of cases and in both regression models.

Finally, among the hardest questions facing a capital defendant is deciding whether to take the stand or make a statement during the penalty phase. Table 3's last row shows that nearly two-thirds of the defendants in the sample decided to take the stand or make a statement. The wisdom of that decision naturally depends on the facts and

TABLE 3

RELATION BETWEEN DEFENDANT'S DEMEANOR AND BEHAVIOR DURING TRIAL AND REMORSE

Did the defendant do the following, or appear like the following?

0 no   1 yes

(Survey Questions II.B.3, II.B.4, II.B.6, III.A.8, III.C.11) (rephrased)

Defendant demeanor and behavior during trial	Mean	Significance tests of relation between behavior and remorse			Regression models that control for sentencing outcome t-statistics		n
		Life cases	Death cases	All cases	Juror level	Jury level	
Wore suit	0.53	.666	.399	.564	0.213	0.035	146
Appeared uncomfortable or ill at ease	0.31	.143	.006	.000	2.887	1.648	151
Appeared bored (i.e., indifferent, remote)	0.51	.009	.000	.000	-4.325	-3.432	152
Appeared spruced up to make a good appearance	0.61	.126	.935	.515	-1.046	0.417	153
Appeared frightening (i.e., threatening, defiant)	0.20	.778	.370	.457	-0.713	-0.964	153
Appeared sorry for what he had done	0.30	.000	.000	.000	7.598	6.782	151
Sincere (i.e., honest)	0.29	.000	.000	.000	6.378	6.179	140
Self-confident	0.49	.604	.543	.188	-0.759	-1.199	148
Bitter (i.e., resentful)	0.22	.032	.638	.131	-1.697	-2.363	147
Mood or attitude changed after guilty verdict	0.30	.158	.000	.000	2.807	0.462	149
Testified at the guilt stage of the trial	0.23	.224	.672	.865	-0.612	-0.055	149
Testified or made statement at punishment stage	0.63	.388	.032	.005	1.932	1.389	145

NOTE: The dependent variable in the regression models is the remorse variable. The independent variables are the defendant demeanor variables in each row plus a dummy variable for whether a death sentence was imposed. Jury-level results are based on 41 cases. A positive sign on the t-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

circumstances of each particular case. But in general jurors are more likely to think a defendant is remorseful if he speaks on his behalf than if he says nothing. The relation between this variable and the remorse variable is significant in death cases and in all cases combined, and it approaches significance in the juror-level regression model ($p = .061$).

2. *Life and Character*

It stands to reason that jurors' belief in a defendant's remorse depends not only on how he acts at trial but also on what jurors think of him more generally. Table 4 examines the relation between various beliefs jurors may hold about a defendant and their belief in his remorse. As we did with the crime-descriptor variables in Table 1, we coded the defendant-characteristic variables in Table 4 on an ordinal one-to-four scale. A positive sign on the regression model t-statistic therefore correlates with jurors being more likely to believe in a defendant's remorse, and a negative sign correlates with jurors' being more skeptical of a defendant's remorse.

Some of the jurors' beliefs about the defendant closely relate to his crime. For example, we asked jurors if they would describe the defendant as "vicious, like a mad animal," "lack[ing] basic human instincts," or "crazy when he committed [the] crime." Not surprisingly, jurors who thought the defendant was vicious or lacked basic human instincts were disinclined to think he was remorseful. In contrast, jurors who thought the defendant went crazy tended to believe in his remorse, perhaps because they thought being crazy at the time of the crime diminished his culpability for the crime.

But jurors apparently distinguish between being momentarily crazed at the time of the crime and having a general background of mental disturbance, and the distinction influences what they think about a defendant's remorsefulness. For example, jurors' belief that the defendant is "mentally defective or retarded" or "emotionally unstable or disturbed" bore little relation to their sense that he was remorseful. In contrast, jurors' belief that the defendant is "dangerous to other people" or has "a history of violence and crime" correlated significantly with reduced belief in his remorse. In short, if jurors think the defendant is dangerous, they are highly unlikely to think he is truly sorry.

Conversely, if jurors think the defendant will not be dangerous, they are more inclined to think he is remorseful. For example, a strong correlation exists by all measures between jurors' belief that the defendant was basically "a good person who got off on the wrong foot" and their belief in his remorse. Jurors might think that such a defendant can learn from his mistakes and change his ways. Likewise,

TABLE 4

RELATION BETWEEN JURORS' VIEWS ABOUT THE DEFENDANT AND REMORSE

How well do the following words describe the defendant?
1 very well   2 fairly well   3 not so well   4 not at all
(Survey Question II.B.1)

Phrase describing defendant	Descriptive statistics		Significance tests of relation between words describing defendant and remorse			Regression models that control for sentencing outcome t-statistics		n
	Mean	Variance	Life cases	Death cases	All cases	Juror level	Jury level	
From a poor or deprived background	2.16	1.17	.337	.470	.126	0.612	0.018	150
A "loner" without many friends	2.39	1.20	.214	.606	.701	0.295	−0.220	148
Doesn't know his place in society	2.21	1.03	.082	.892	.209	1.185	0.582	145
Doesn't know right from wrong	3.14	1.04	.328	.700	.451	0.668	−0.679	152
Has gotten a raw deal from life	3.03	0.90	.273	.135	.075	1.679	0.092	150
Vicious like a mad animal	2.62	1.34	.015	.007	.000	−3.218	−0.686	153
Mentally defective or retarded	3.25	1.01	.524	.517	.900	−0.249	−0.369	153
Emotionally unstable or disturbed	2.60	1.16	.358	.999	.871	0.593	0.541	152
Dangerous to other people	1.73	0.93	.000	.004	.000	−4.400	−2.813	152
Went crazy when he committed the crime	2.68	1.40	.337 -	.038	.016	1.762	2.260	151
Severely abused as a child	2.84	1.34	.288	.279	.059	1.277	−0.173	135
Raised in a warm loving home	2.91	1.01	.357	.279	.280	1.509	2.193	140
Loved his family	2.40	0.78	.102	.008	.000	2.816	2.696	139
Lacks basic human instincts	2.63	1.07	.030	.286	.002	−2.379	−3.227	149
Drug addict	2.59	1.28	.675	.186	.882	0.511	0.296	132
Occasional drug user	2.47	1.26	.118	.274	.482	0.289	0.153	134
Alcoholic	2.60	1.39	.002	.442	.014	2.314	2.227	133
Occasional alcohol user	2.14	1.12	.006	.338	.084	2.061	3.493	141
Had a history of violence and crime	2.30	1.45	.002	.051	.000	−4.023	−3.951	146
A good person who got off on the wrong foot	2.78	1.11	.000	.000	.000	5.580	5.235	142

NOTE: The dependent variable in the regression models is the remorse variable. The independent variables are the words describing the defendant in each row plus a dummy variable for whether a death sentence was imposed. Jury-level results are based on 41 cases. A positive sign on the t-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

a strong correlation exists between jurors' belief in the defendant's remorse and their belief in his love for his family. Jurors perhaps think that defendants who are capable of showing love to their families also have the capacity to experience remorse.

Jurors' reactions to the defendant's drug and alcohol use present a puzzle. On the one hand, Table 4 shows only an insignificant correlation between the jurors' belief that the defendant is either a drug addict or an occasional drug user and their belief in his remorsefulness. On the other hand, Table 4 shows a significant correlation, in life cases and in both regression models, between the jurors' belief that the defendant is either an alcoholic or an occasional alcohol user and their belief in his remorse. One possible explanation for this difference might be that jurors can empathize with the use and untoward effects of alcohol, but not of drugs.

C. Juror-Related Factors

We next examine the relationship between remorse and (1) jurors' general attitudes toward the death penalty and (2) jurors' personal characteristics, such as sex, race, and education.

1. *Attitudes Toward the Death Penalty*

Table 5 examines the relation between jurors' beliefs about the morality, efficacy, and administration of the death penalty and their beliefs about a defendant's remorsefulness. For this Table, we coded juror attitudes on a one-to-six scale, with one indicating that the juror strongly agreed with the described attitude and six indicating that the juror strongly disagreed. A positive sign on the regression-model *t*-statistic indicates that agreement with the attitude correlates positively with belief in the defendant's remorse, and a negative sign indicates that it correlates negatively.

In general, if jurors expressed strong views in favor of the death penalty on either deterrence or retributive grounds, they tended not to think the defendant was remorseful. For example, jurors who thought more executions would mean fewer murders (deterrence jurors) generally did not believe in a defendant's remorse. Similarly, in life cases and in both regression models, jurors who thought "murderers owe something more than life in prison to society" (arguably retributivist jurors) were significantly less likely to believe the defendant's claim of remorse.[47] In contrast, if jurors expressed "moral doubts" about the death penalty, they tended to be more likely

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47   Similarly, jurors who thought the death penalty should be "*required*" for anyone "convicted of a serious intentional murder" were also less likely to believe the defendant was remorseful.

TABLE 5

RELATION BETWEEN DEATH PENALTY ATTITUDES AND REMORSE

Do you agree or disagree with the following statements about the punishment for convicted murderers?

1 agree strongly	2 agree moderately	3 agree slightly			
4 disagree slightly	5 disagree moderately	6 disagree strongly			
	(Survey Question VIII.1) (re-coded)				

Juror attitude toward the death penalty	Descriptive statistics		Significance tests of relation between attitudes and remorse			Regression models that control for sentencing outcome t-statistics		n
	Mean	Variance	Life cases	Death cases	All cases	Juror level	Jury level	
You wish we had a better way than the death penalty of stopping murders	1.84	2.10	.560	.070	.361	1.015	0.344	148
The death penalty is too arbitrary because some people are executed while others serve prison terms for the same crimes	1.65	1.28	.017	.282	.380	0.134	-1.504	142
If the death penalty were enforced more often there would be fewer murders in this country	2.38	3.21	.044	.055	.012	-2.640	-1.407	135
Even convicted murderers should not be denied hope of parole some day, if they make a real effort to pay for their crimes	3.45	3.01	.492	.338	.071	1.172	0.650	140
Murderers owe something more than life in prison to society and especially to their victims' families	1.88	1.72	.008	.232	.021	-3.618	-2.251	137
The death penalty should be required when someone is convicted of a serious murder	2.20	2.59	.010	.697	.077	-1.857	-0.777	138
You have moral doubts about death as punishment	4.03	3.70	.721	.005	.026	1.722	0.269	148
Persons sentenced to prison for murder in this state are back on the streets far too soon	1.95	1.80	.072	.756	.488	-0.963	-1.346	130
Defendants who can afford good lawyers almost never get a death sentence	2.84	3.14	.682	.436	.711	-0.126	-1.222	128

NOTE: The dependent variable in the regression models is the remorse variable. The independent variables are the juror attitudes towards the death penalty described in each row plus a dummy variable for whether a death sentence was imposed. Jury-level results are based on 41 cases. A positive sign on the t-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

to believe in the defendant's remorse, although this result is signifi-
cant only in death cases and in all cases combined.

2. Personal Characteristics

Jurors' sense of the defendant's remorse may depend not only on
what they think about the death penalty, but also on who they are.
Table 6 explores this possibility, looking at the relation between ju-
rors' belief in the defendant's remorse and the jurors' sex, race, activi-
ties, economic status, religion, employment, and education. We
coded most of these juror characteristics as zero-one dummy variables.
Table 6's "Mean" column therefore shows the proportion of jurors
who described themselves as having the stated characteristic. We
coded the last two variables in Table 6, age and income, differently.
We coded age on a continuous scale and income on an ordinal scale.
A positive sign on the regression-model *t*-statistic again indicates that
the presence of the factor correlates with an increasing belief in the
defendant's remorse, and a negative sign indicates that the factor's
presence correlates with a decreasing belief in the defendant's
remorse.[48]

Nearly half the jurors we surveyed were white females. Compared
to white males and black females, white females were the least likely to
think the defendant was remorseful. This result is significant in both
life cases and death cases, and significant or marginally significant in
both regression models.[49] Nevertheless, whatever role white-female
status has in explaining juror perceptions of defendant remorse, it has
no significant influence on the sentencing decision.[50]

In contrast to white females, black males (who comprised seven
percent of the jurors we surveyed) showed the opposite tendency.
The relation between being a black male and believing in the defen-
dant's remorse approaches significance in life cases and in the jury-
level regression model. Moreover, it is highly significant in death

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48   Because we coded the juror characteristics zero-one (and on an increasing ordinal
scale in the case of age and income) and the remorse variable on a decreasing one-to-four
scale, a positive sign on a *t*-statistic without adjustment would mean that the presence of a
juror characteristic corresponds with *reduced* belief in the defendant's remorse.

49   This "white female" effect may also explain the relation between the remorse varia-
ble and the "housewife-homemaker" employment characteristic insofar as most of those
jurors in our sample who described themselves as "housewife-homemaker" were also white
females.

50   This statement is based on regression models similar to those reported in Table 10,
infra, that include a variable for white-female status. *But cf.* Michael G. Rumsey, *Effects of
Defendant Background and Remorse on Sentencing Judgments*, 6 J. APPLIED SOC. PSYCHOL. 64, 66
(1976) (presenting results of experimental study in which "[s]exes did not differ in their
ratings of defendant remorse," but in which, to a marginally significant degree, "[f]emales
tended to give higher sentences than males" when the defendant was "in the non-remorse-
ful condition").

TABLE 6
RELATION BETWEEN JUROR CHARACTERISTICS AND REMORSE

Juror Characteristics
0 no   1 yes (except last two rows)
(Survey Questions Part IX) (several re-coded)

Juror characteristic	Mean	Significance tests of relation between juror characteristic and remorse			Regression models that control for sentencing outcome t-statistics		n
		Life cases	Death cases	All cases	Juror level	Jury level	
General Demographics							
Female	0.56	.059	.121	.050	-2.609	-1.316	152
Black	0.17	.095	.002	.001	3.294	0.928	151
Black female	0.10	.575	.092	.094	1.367	0.367	153
Black male	0.07	.063	.009	.004	3.460	1.071	153
White female	0.46	.027	.020	.004	-3.542	-1.514	153
White male	0.36	.351	.605	.461	1.123	0.922	153
Ever married	0.89	.819	.002	.035	-2.379	-1.201	151
Now married	0.78	.028	.903	.173	1.886	0.287	134
Involved in school or parent-teacher association	0.24	.057	.670	.114	-1.772	-0.507	149
Involved in youth activities	0.14	.554	.370	.168	1.121	-0.462	149
Involved in political parties, candidates, or campaigns	0.05	.080	.198	.685	-0.506	-0.728	149
Involved in church or religious groups	0.64	.397	.874	.370	-0.550	-0.184	150
Involved in special interest groups	0.18	.437	.541	.369	-1.006	1.076	150
Religious beliefs had impact on decision	0.32	.609	.901	.429	0.323	-0.113	151
Home owner	0.13	.971	.045	.086	1.419	0.614	145
Southern Baptist	0.20	.260	.375	.038	-1.440	-2.127	153

							N
Education							
Less than 12th grade	0.08	.033	.776	.283	-2.265	-2.559	153
Finished high school	0.25	.380	.222	.780	-0.055	0.137	152
Some technical school beyond high school	0.12	.207	.952	.629	1.031	0.831	152
Some college but did not graduate	0.24	.540	.438	.362	0.943	0.282	152
Finished college	0.21	.979	.195	.333	-0.966	-0.607	152
Attended graduate or professional school	0.10	.178	.040	.905	0.529	0.668	152
Employment							
Full-time employee outside the home	0.72	.117	.003	.593	-0.648	0.634	153
Part-time employee outside the home	0.10	.818	.482	.868	0.564	0.491	151
Housewife, homemaker, child rearing	0.04	.023	.750	.046	-1.750	-2.462	151
Layoff or strike	0.02	.066	.572	.214	-1.183	-1.164	151
Retired	0.09	.955	.006	.085	2.064	0.646	151
Other nonemployee	0.03	.955	.020	.066	1.635	0.481	151
Continuous or ordinal variables							
Age	43.88	.921	.954	.993	0.313	-0.641	152
Income (1 to 6 scale, 6 = highest)	3.75	.890	.003	.029	-1.752	-0.328	138

NOTE: The dependent variable in the regression models is the remorse variable. The independent variables are the juror characteristics in each row plus a dummy variable for whether a death sentence was imposed. Jury-level results are based on 41 cases. A positive sign on the t-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

cases, in all cases combined, and in the juror-level regression model. Other personal characteristics showed no robust significant correlation with remorse.[51]

Does the fact that white females appear less likely to believe in a defendant's remorse depend on the defendant's race? For example, could it be that white females are just as inclined as other groups to believe in the remorse of white defendants, but especially *disinclined* to believe in the remorse of black defendants? It seems not. When we test this hypothesis we find that the reluctance of white females to believe a defendant is remorseful does not depend on the defendant's race. The effect is approximately the same for white defendants and black defendants alike. Indeed, this result is the same for all race and gender combinations of jurors. Another question is whether females and males are both more likely to find remorse in defendants of their own gender. Unfortunately, we cannot test this hypothesis because our data included only two female defendants.

D.   Race-Related Factors

Race has a profound influence on the administration of the death penalty. Empirical studies of capital sentencing have detected the influence of racial discrimination in prosecutorial charging decisions[52] and in jury decision making.[53] Here, we try to assess the influence, if any, of race on jurors' belief in a defendant's remorse. Table 7 presents our results. In the regression models, a positive sign for the *t*-statistic indicates that the existence of a particular racial factor correlates with an increased belief in the defendant's remorse.[54]

The data show some interesting, but not easily explained, effects. At the juror level in life cases, black-defendant status correlates more with weaker findings of remorse than white-defendant status. But this effect switches direction in death cases. In these cases, black-defendant status correlates with stronger findings of remorse than white-

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51   Juror income and education levels below 12th grade exhibit some statistical interest, but their relation with remorse fades in more complete regression models such as those explored in Part IV.

52   *See, e.g.,* DAVID C. BALDUS ET AL., EQUAL JUSTICE AND THE DEATH PENALTY 403 (1990) (describing prosecutorial discrimination in Georgia); John H. Blume et al., *Post-McCleskey Racial Discrimination Claims in Capital Cases,* 83 CORNELL L. REV. 1771, 1781-82 (1998) (describing prosecutorial discrimination in South Carolina).

53   *See, e.g.,* David C. Baldus et al., *Racial Discrimination and the Death Penalty in the Post-Furman Era: An Empirical and Legal Overview, with Recent Findings from Philadelphia,* 83 CORNELL L. REV. 1638, 1684-85 (1998) (finding that the victim's or defendant's race influences the jurors' weighing of aggravating and mitigating factors).

54   Since we coded the racial characteristics zero-one and the remorse variable on a decreasing one-to-four scale, a positive sign on a *t*-statistic without adjustment would mean that the presence of a racial characteristic corresponds with *reduced* belief in the defendant's remorse.

defendant status. These effects tend to cancel one another out, leaving no significant results for the combined group of life and death cases. A similar pattern exists in cases with black defendants and white victims. The jury-level regression model shows a significant race-of-victim effect (p = .061). A black victim correlates with decreased belief in the defendant's remorse. In models not reported here, however, this effect becomes insignificant when we control for other factors about the crime related to remorse, such as the cold-bloodedness of the crime. Moreover, because our study included only three black-victim cases, one should regard any race-of-victim findings with caution.

TABLE 7

RELATION BETWEEN RACIAL FACTORS AND REMORSE

(Survey Question II.A.4.c)

Racial factor	Mean	Significance tests of relation between racial factor and remorse			Regression models that control for sentencing outcome t-statistics		n
		Life cases	Death cases	All cases	Juror level	Jury level	
Race of defendant (0 = white, 1 = black)	0.39	.034	.158	.733	−0.566	0.820	150
Race of victim (0 = white, 1 = black)	0.07	.376	.215	.399	−1.925	−2.033	150
Black defendant-white victim	0.32	.101	.034	.892	0.071	0.734	150

NOTE: The dependent variable in the regression models is the remorse variable. The independent variables are the racial factors in each row plus a dummy variable for whether a death sentence was imposed. Jury-level results are based on 41 cases. A positive sign on the t-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

IV

WHAT MAKES JURORS THINK HE'S REMORSEFUL?: A
MULTIVARIATE ANALYSIS

Because many factors can influence jurors' beliefs about a defendant's remorsefulness, sorting out their relative influence requires multivariate analysis. Unfortunately, with forty-one cases and 153 interviews it is impossible to construct meaningful models using most, or even a fraction, of the available variables. For example, Table 1 reports jurors' responses to twelve different crime descriptors, thus yielding twelve possible variables that we could use in a model. Some of those variables (e.g., "bloody," "gory," and "vicious") are far from mutually exclusive.

A. Factor Analysis

We use factor analysis to reduce the number of variables in our models to a subset of variables that measure different aspects of juror

responses. "Factor analysis is a mathematical technique for reducing a complex system of correlations into fewer dimensions."[55] It identifies a subset of common factors from a larger set of original variables.

For example, the crime-descriptor variables reported in Table 1 do not actually measure twelve distinct aspects of the crime. Factor analysis allows us systematically to reduce the number of crime descriptors in two ways. First, it allows us to identify which of the individual crime descriptors best represent the twelve descriptors as a whole. Second, it allows us to construct new, artificial factors that better capture the information contained in the crime-descriptor variables. We can then use these new factors themselves to model remorse. Because factor analysis requires continuous variables, we can only apply it to the jury-level models.

As applied to the crime characteristics in Table 1, factor analysis reduces the twelve different variables to two dimensions, which to-

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55   STEPHEN JAY GOULD, THE MISMEASURE OF MAN 275 (rev. ed. 1996). Factor analysis is based on a model in which the observed vector is partitioned into an unobserved "systematic" component and an unobserved "error" part. *See* RICHARD A. JOHNSON & DEAN W. WICHERN, APPLIED MULTIVARIATE STATISTICAL ANALYSIS 397 (3d ed. 1992) (describing the mathematical underpinnings of factor analysis). The model considers the components of the error vector to be uncorrelated or independent, while it considers the systematic part as a linear combination of a relatively small number of unobserved factor variables. *See id.* at 397-99. The analysis separates the effects of the factors from the errors. In contrast to principal component analysis, which describes or "explains" the variability observed, *see id.* at 403-09, factor analysis gives a description or explanation of the interdependence of a set of variables in terms of the factors without regard to the observed variability. *See id.* Statisticians originally developed factor analysis for the analysis of scores on mental tests, but the methods are useful in a much wider range of situations. *See id.* at 396-97. For example, one can use factor analysis to analyze sets of attitudes, sets of physical measurements, and sets of economic quantities.

To illustrate, consider a researcher who gives a battery of tests to a group of individuals. Here, the score of an individual on a given test is more related to his scores on other tests than to the scores of other individuals on the other tests. That is, the scores for any particular individual are usually interrelated to some degree. This interrelation is "explained" by considering an individual's test score made up of (1) a part which is peculiar to this particular test (called error) and (2) a part which is a function of more fundamental quantities (called "scores of primary abilities" or "factor scores"). Because each individual enters several test scores, their effect connects the various scores. Roughly, the idea is that a person who is "more intelligent" in some respects will do better on many tests than someone who is "less intelligent."

The interpretation of the factor loadings is most straightforward if each variable is loaded highly on at most one factor, and if all the factor loadings are either large and positive or near zero, with few intermediate values. The researcher then splits the variables into disjoint sets, each of which is associated with one factor, although perhaps some will be left over. He can then interpret a particular factor as an average quality over those variables for which the loading is large. The factors in a factor analysis model are mathematical abstractions and do not necessarily have any intuitive meaning. In particular, we may rotate the factors without affecting the validity of the model, and we can freely choose a rotation which makes the factors as intuitively meaningful as possible. Choosing a rotation subjectively is considered a disadvantage because the factor analyst may try to force the factor loadings to fit his own preconceived pattern. A convenient analytical choice of rotation is given by the varimax method, which we used here.

gether explain over eighty percent of the variation in the pattern of responses to the twelve questions. The two variables that best represent these two dimensions are "cold blooded" and "work of a 'mad man.'" We therefore include both of these factors in the multivariate models.

The variables in Table 2 relating to the defendant's explanation for the crime also reduce to two dimensions. The "defendant was insane" and "it was an unintentional or impulsive act" best represent these dimensions. Because the insanity variable substantially overlaps with the "work of a 'mad man'" variable, we exclude insanity from the models. We therefore include only the fact that the crime was unintentional or impulsive.

The variables reported in Table 3 relating to the defendant's demeanor or behavior reduce to one dimension. This dimension does not substantially differ from remorse itself. We therefore include none of the variables from Table 3 in the multivariate models.

The defendant-characteristic variables in Table 4 reduce to three dimensions. One is well represented by "emotionally unstable or disturbed," which we interpret as substantially overlapping with the "work of a 'mad man'" variable from Table 1. A second is represented by remorse itself, which we cannot sensibly use to explain remorse. The third is well represented by the description of the defendant as an "alcoholic," which neither overlaps with any other variable we propose to include in the model nor reduces to remorse itself. Accordingly, we include only "alcoholic" in the multivariate models.

Table 5's juror-attitude variables reduce to one dimension, best represented by the statement that "[m]urderers owe something more than life in prison to society and especially to their victim's families." We therefore include this variable in the multivariate models.

Table 6's juror-background characteristics are not so clearly amenable to factor analysis. Most of them represent distinct aspects of the jurors' backgrounds. We include a dummy variable for white females because that characteristic is the only juror characteristic (other than "housewife-homemaker") that is statistically significant or nearly so in both the juror-level and the jury-level regression models. We tested various education and employment dummy variables, but found that none has much explanatory power at either the jury level or the juror level.

B.   Multivariate Analysis

As in the prior tables, we employ two kinds of multivariate models: ordered logit models at the juror level and ordinary least-squares

models at the jury level.[56] We also include a logistic regression model that uses a binary remorse variable. In order to construct this binary variable, we treat responses of one and two to the remorse-variable question as an indication that the juror believes the defendant is remorseful. We treat responses of three and four as an indication that the juror believes the defendant lacks remorse. This binary variable allows us to account for the clustering by defendant of the data at the jury level. For each model of remorse, we include as an explanatory variable whether the defendant received a death sentence. Including this variable helps control for the possibility that jurors' beliefs about a defendant's remorse correlate with whether or not they imposed a death sentence. Table 8 presents the results. The t-statistics are in parentheses. We also report robust t-statistics for the ordinary least squares models.[57] We have adjusted the signs on the t-statistics so that the increased presence of a factor corresponds with greater remorse for all variables in all models.[58]

We find that the perceived cold-bloodedness and intentionality of the crime generally correlate strongly and significantly or near-significantly with the remorse variable. The nature of the crime and the defendant's mental state thus powerfully influence jurors' beliefs about the defendant's remorse, even in multivariate models.[59]

In addition, we find some evidence that a correlation exists between white-female status and disbelief in the defendant's remorse. This effect is significant in all juror-level models and moves in the same direction in the jury-level models. The alcoholic effect is not robust when we account for the clustered nature of the data, and the personal attitudinal variable ("murderers owe more to society than life in prison") loses significance in the jury-level model.

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56   *See supra* note 41.
57   *See* Peter J. Huber, *The Behavior of Maximum Likelihood Estimates Under Nonstandard Conditions, in* 1 PROCEEDINGS OF THE FIFTH BERKELEY SYMPOSIUM ON MATHEMATICAL STATISTICS AND PROBABILITY 221 (1967).
58   Because a value of one on the binary version of the remorse variable corresponds to the presence of remorse, the signs for the coefficients for models using this variable without adjustment would be the *opposite* of the signs for the coefficients in the other two kinds of models.
59   Factor analysis also allows us to construct new synthetic variables consisting of linear combinations of the real-world variables in the tables. In jury-level regression models using synthetic variables, we found that three of these variables were highly statistically significant: two synthetic variables constructed from Table 1's list of crime descriptors and one synthetic variable constructed from Table 2's list of acquittal-reasons. These synthetic variables roughly correspond with the real-world variables "cold-blooded," "work of a 'mad man,'" and "unintentional." Overall, models using the synthetic variables add little to the models using the corresponding real-world variables.

TABLE 8

REGRESSION MODELS OF REMORSE

Dependent variable = remorse (coded 1 to 4, with 1 indicating its strongest presence)

Independent variable	Ordered logit models of remorse (juror-level)		Logistic models of binary remorse variable (juror-level)		OLS regression models of remorse (jury-level)	
	1	2	3	4	5	6
Crime was cold blooded	−1.287 (−2.658)	−1.242 (−3.049)	−1.387 (−2.474)	−1.430 (−3.016)	−0.383 (−1.387)	−0.490 (−2.310)
Crime was unintentional	0.796 (1.939)	1.127 (3.192)	0.420 (0.814)	0.949 (2.185)	0.737 (2.299)	0.893 (3.753)
Crime was work of a "mad man"	— —	0.224 (1.501)	— —	0.253 (1.221)	— —	0.213 (2.132)
Juror was white female	−1.378 (−3.297)	−1.405 (−4.041)	−0.977 (−2.031)	−1.330 (−2.746)	−0.341 (−0.991)	−0.507 (−1.325)
Criminal offenders owe more to society than life in prison	−0.549 (−3.245)	— —	−0.548 (−2.852)	— —	−0.101 (−0.818)	— —
Defendant was an alcoholic	0.391 (1.774)	— —	0.161 (0.614)	— —	0.154 (1.386)	— —
Death sentence	−1.595 (−3.745)	−1.022 (−2.906)	−1.918 (−3.931)	−1.461 (−3.533)	−0.528 (−2.972)	−0.422 (−2.348)
Constant	— —	— —	−2.193 (−2.364)	−1.243 (−1.701)	3.081 (6.810)	2.972 (7.045)
Pseudo r^2 or adjusted r^2	—	—	0.330	0.270	0.579	0.580
Number of observations	114	137	114	137	40	41
Percentage correctly classified	—	—	83.3	80.3	—	—

NOTE: The dependent variable in the regression models is the remorse variable. A positive sign on the coefficients and *t*-statistics indicates that the presence of the factor correlates positively with the presence of remorse.

V

DOES REMORSE MAKE ANY DIFFERENCE TO THE SENTENCE?

Do jurors' beliefs about the defendant's remorse correlate with the sentence they impose? We examine this question using both bivariate and multivariate analysis. The short answer is yes. The more subtle answer is that remorse matters, but not as much as the perceived viciousness of the crime. If jurors think the crime is extremely vicious, their belief that the defendant is remorseful is unlikely to convince them to impose a life sentence. On the other hand, if jurors do not think the crime is extremely vicious, then remorse can make a difference.[60]

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[60] In an earlier study designed to examine the sentencing decision of capital jurors, William Geimer and Jonathan Amsterdam surveyed jurors who sat on five capital cases in Florida in which the jury returned a death sentence. *See* William S. Geimer & Jonathan

A. Bivariate Analysis

Table 9 summarizes juror responses to three questions that asked them about their belief in the defendant's remorsefulness. Question 1 forms the basis for our standard remorse variable. The responses ranged from one to four, with a response of one indicating that the juror strongly believed that the defendant was sorry for what he had done and a response of four indicating that the juror did not think that the defendant was sorry at all. Thus, the smaller the number the stronger the jurors' belief in the defendant's remorse.

TABLE 9
RELATION BETWEEN DEFENDANT'S REMORSE AND
DEATH SENTENCE

(Survey Questions II.B.1, IV.3, II.B.4)

Question	Mean	Variance	Significance of difference between life and death jurors	n
1. What was your impression of the defendant? Sorry for what he did? (1=very well . . . 4=not at all)	2.93	1.13	.0001	150
2. When you were considering punishment, did you believe defendant was truly sorry for the crime? (1=yes . . . 5=no)	3.80	1.78	.0000	148
3. How did defendant appear to you at trial? Sorry for what he had done? (1=yes, 0=no)	0.30	0.21	.0002	151

Question 1's mean of 2.93 (on a one-to-four scale) indicates that on average jurors did not believe defendants were remorseful. The difference, however, between jurors' beliefs about the defendant's remorse in life cases and in death cases is highly significant (p =

Amsterdam, *Why Jurors Vote Life or Death: Operative Factors in Ten Florida Death Penalty Cases*, 15 AM. J. CRIM. L. 1, 2-9 (1988). They report that nine of 28 jurors (32%) indicated in response to an open-ended inquiry that the defendant's "[d]emeanor," which included among other things "lack of remorse," constituted an "[o]perative [f]actor[ ]" in the decision to return a death sentence. *Id.* at 40 & tbl.3. From among the factors Geimer and Amsterdam reported, "demeanor" was third most important, behind the jurors' belief that a presumption in favor of death existed at the penalty phase (54%) and the "manner of the killing" (64%). *Id.*

Other studies using controlled experiments involving noncapital offenses have also "reported more leniency for remorseful offenders." Chris L. Kleinke et al., *Evaluation of a Rapist as a Function of Expressed Intent and Remorse*, 132 J. Soc. PSYCHOL. 525, 534 (1992); *see also* W. Andrew Harrel, *The Effects of Alcohol Use and Offender Remorsefulness on Sentencing Decisions*, 11 J. APPLIED Soc. PSYCHOL. 83, 86 (1981) ("More severe sentences were given to non-remorseful than to remorseful individuals."); Rumsey, *supra* note 50, at 67 tbl.1 (providing data indicating that highly remorseful defendants received shorter sentences).

.0001).[61] Assuming that the jurors' responses accurately reflect the beliefs they held during the trial, we can therefore firmly reject the null hypothesis that no difference exists between life-case jurors and death-case jurors with respect to their beliefs about the defendant's remorse.[62] In short, if jurors believed that the defendant was sorry for what he had done, they tended to sentence him to life imprisonment, not death.

Like Question 1, Question 2 asked jurors whether they believed that the defendant was sorry for what he had done. But Question 2 focused more specifically on the jurors' thoughts as they were considering punishment. Once again, jurors do not believe on average that defendants are remorseful (mean = 3.80). However, the difference between the responses of life-case jurors and death-case jurors is statistically significant ($p < .001$). Consequently, if jurors do think the defendant is remorseful, they are more apt to sentence him to life imprisonment than to death. Question 3, which asked whether the defendant appeared "[s]orry for what he had done" during the trial, confirms the pattern of responses shown in Questions 1 and 2.

Moreover, these results are consistent with another Project study of South Carolina capital jurors.[63] According to that study, 39.8% of the jurors responded that the defendant's lack of remorse made or would have made them more likely to vote for death.[64] For the remainder, the defendant's remorse made or would have made little difference one way or another.[65] To put this result in perspective, among those aggravating factors relating to the defendant, the two most powerful in jurors' minds were the defendant's prior history of violent crime and the jurors' belief in his future dangerousness. Their belief in his lack of remorse was third.

B.   Multivariate Analysis

The bivariate analysis suggests a relatively strong correlation between jurors' belief in the defendant's remorsefulness and their sentencing decision. We now examine whether this correlation survives when we control for other factors that may influence the sentencing decision.

Prior research suggests that the three most important factors that influence the capital-sentencing decision are the jurors' beliefs about

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[61]   We used a Mann-Whitney test to measure statistical significance in Table 8. *See supra* note 44.

[62]   See *supra* note 40 for a discussion of the null hypothesis.

[63]   *See* Garvey, *supra* note 4.

[64]   *See id.* at 1560.

[65]   The responses of jurors who sat on juries returning verdicts of life imprisonment and those who sat on juries returning death sentences were not significantly different. *See id.* at 1571-72.

the seriousness of the crime, about the defendant's future dangerousness, and about the defendant's remorsefulness.[66] In our multivariate models of sentencing outcome, jurors' perceptions of the crime's viciousness served as a proxy for the crime's seriousness, though any one of several descriptions of the crime presented in Table 1 would serve about as well.[67] Jurors' beliefs about how long the defendant would be imprisoned if not sentenced to death served as a proxy for his future dangerousness.[68] Finally, the remorse variable served as a measure of the defendant's remorsefulness.

The first and third sentencing models reported in Table 10 use these three variables as explanatory variables. Models 1 and 2 use logistic regression to model sentencing outcome at the juror level, accounting for the fact that the sample is clustered by defendants. Models 3 and 4 use logistic regression to model sentencing outcome at the jury level. Models 2 and 4 add to the basic model a juror attitudinal variable—jurors' belief that defendants who can afford good lawyers do not receive death sentences—that correlates with sentencing outcome. We list robust *t*-statistics in parentheses. We adjusted signs on both the coefficients and the *t*-statistics so that the increasing presence of a factor correlates with a death sentence.

The juror-level models (Models 1 and 2) tell a consistent story. The positive sign on the viciousness variable in each juror-level model indicates that the more jurors thought the crime was vicious, the more likely they were to sentence the defendant to death. Likewise, the negative sign on the dangerousness variable in each juror-level model indicates that the less time jurors thought the defendant would spend in prison if sentenced to life imprisonment, the more likely they were to sentence him to death. The negative sign on the remorse variable indicates that the less jurors thought the defendant was remorseful, the more likely they were to sentence him to death.

But remorse's influence varies more at the jury level than at the juror level. In the simplest jury-level model (Model 3), the remorse variable has the expected sign, but it does not significantly correlate with sentencing outcome. Adding the personal attitudinal variable in Model 4 increases the size and significance of the remorse effect, thus mirroring its effect at the juror level.

Nonetheless, the classification results in Table 10's last two rows show that only in Model 3 does adding remorse as an explanatory

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66   *See id.* at 1654-55, 1659-61.

67   For example, as Table 1 demonstrates, "calculated" and "cold-blooded" also allude to the crime's seriousness.

68   For a discussion and detailed analysis of the role of future dangerousness in capital sentencing, see Eisenberg & Wells, *supra* note 2, at 4-9 ("In assessing dangerousness, the probable actual duration of the defendant's prison sentence is an important consideration.").

TABLE 10

REGRESSION MODELS OF SENTENCING OUTCOME

Dependent variable = death sentence (coded 0, 1, with 1 indicating death)

Independent variable	Logistic regression models of sentencing outcome (juror-level)		Logistic regression models of sentencing outcome (jury-level)		"Low" viciousness cases (jury-level)
	1	2	3	4	5
Crime was vicious	1.043	1.521	3.921	4.786	11.140
	(3.077)	(2.424)	(2.311)	(2.076)	(2.678)
Expected time in prison if not sentenced to death	−0.065	−0.061	−0.148	−0.204	0.120
	(−2.513)	(−2.341)	(−1.950)	(−2.074)	(1.033)
Defendant was remorseful	−0.531	−0.517	−1.363	−2.123	−3.251
	(−2.223)	(−2.111)	(−1.406)	(−2.454)	(−1.733)
Defendants who can afford good lawyers almost never get a death sentence	—	−0.335	—	−1.466	—
	—	(−2.395)	—	(−2.653)	—
Constant	1.319	0.815	4.150	0.283	4.753
	(1.370)	(0.664)	(1.417)	(0.082)	(1.229)
Pseudo r^2	0.193	0.270	0.426	0.593	0.545
Number of observations	127	110	41	41	23
Percentage correctly classified, including remorse	—	—	87.8	87.8	87.0
Percentage correctly classified, excluding remorse	—	—	85.4	90.2	73.9

NOTE: A positive sign on the coefficients and t-statistics indicates that the presence of the factor correlates positively with a death sentence.

variable improve the power to predict the sentencing outcome of a particular case, and the improvement is modest. The model correctly classifies the sentencing outcome for 87.8% of cases if we include the remorse variable and 85.4% if we exclude it. Of course, the classification results without remorse as an explanatory variable are so powerful that little room exists for improvement. Even so, remorse improves the classification results less than the expected-length-of-prison-term variable. For example, an unreported model that includes only viciousness as an explanatory variable yields 73.2% correct classification. Consequently, the classification results for Models 3 and 4 indicate that adding the expected prison time substantially improves the models. Adding other variables, including remorse, does not add much, and including remorse instead of expected prison time does not improve classification as much as including prison time and excluding remorse. In sum, the jury-level evidence indicates that remorse matters less than the nature of the crime and the amount of time jurors expect a defendant will spend in prison if not sentenced to death.

Model 5 further explores the role of remorse. It focuses on cases in which the perceived viciousness of the crime is relatively low. The mean on the viciousness variable is 1.0 in eighteen cases, which indi-

cates that the jurors in those cases unanimously agreed that the crime was as vicious as they thought it could be. We define these crimes as "high" viciousness crimes. Conversely, we define a crime as a "low" viciousness crime whenever the mean jury-level value for the viciousness variable exceeds 1.0, which indicates that at least one juror did not give the crime the highest viciousness rating. Obviously, by "low" viciousness we mean relatively low, not absolutely low.

Focusing on the twenty-three low viciousness cases shows that remorse's predictive power is strongest and most concentrated in precisely these types of cases. In Model 5, the remorse variable's coefficient is large and significant at $p = .10$ in the twenty-three low viciousness cases. In unreported models limited to the eighteen high viciousness cases, we found the remorse variable to be insignificant. Thus in highly vicious cases (thirteen out of eighteen of which resulted in death sentences), a defendant's remorse may not be able to save him. But in lower viciousness cases (nine out of twenty-three of which resulted in death sentences), remorse may make all the difference. Moreover, the last two rows of Table 10 show that the remorse variable noticeably improves the predictive power of Model 5 for low viciousness cases. The model that excludes the remorse variable classifies 73.9% of the sentencing outcomes correctly. Including the remorse variable increases correct classification to 87.0%.

Focusing separately on the low viciousness cases yields another interesting result. Model 5 shows that our proxy for perceived dangerousness (expected length of a life sentence) has little explanatory power in the low-viciousness cases. Indeed, the *t*-statistic even changes sign. It moves from a negative value in all four of the full-sample models to a positive sign in Model 5. Dangerousness therefore matters most in high viciousness cases. It is much more important than remorse in explaining the sentencing outcome in these cases. Apparently, the more vicious the case, the more jurors care about the possibility that the State will release the defendant earlier than they would like, and the less they care about his remorsefulness. In contrast, dangerousness is less important to jurors in low viciousness cases, which leaves room for remorse to make a difference. Remorse matters—so long as the crime is not extremely vicious.[69]

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[69] Because race plays a prominent role in capital cases, we report here that we found no significant race-of-defendant or race-of-victim effects for sentencing outcome. We do note, however, that the racial makeup of our 41 cases confirms the finding that prosecutors seem more likely to seek the death penalty when blacks kill whites and less likely to seek the death penalty when blacks are the victims. Table 7 indicates that 32% of our cases had black defendants and white victims, and only seven percent of our cases had black victims. This sample overrepresents the population of interracial homicide cases and underrepresents the population of black-victim homicide cases. *See* Blume et al., *supra* note

We should note one final methodological issue bearing on the problem of modeling sentencing outcomes. Sentencing models that include remorse as an explanatory variable may suffer from an "endogeneity" problem. That is, the existence of remorse may not solely be a function of factors exogenous to the sentencing outcome. Consequently, a "system of equations" may be the best way to model sentencing outcome.[70] In other words, it may be necessary to use two equations, one that models sentencing outcome and one that models remorse, and then to solve those equations simultaneously. Indeed, it may even be that the remorse equation should contain sentencing outcome as an explanatory variable and that the sentencing equation should contain remorse as an explanatory variable, with those equations then being solved simultaneously. We leave these difficult modeling problems for another day.

CONCLUSION

This study represents but a beginning to the systematic analysis of the relationship between remorse and sentencing outcome. Professor Sundby's contribution to this Symposium already shows that ample room exists for additional research and analysis.[71] At the methodological level, one challenge for future research is to find ways to reduce the risk of hindsight bias. Efforts to identify the factors that explain why jurors sentence some defendants to life imprisonment and others to death will be of limited utility if the factors used to explain that decision are not independent of it.

With difficulties like this in mind, our results indicate that jurors' beliefs about a defendant's remorse are strongly linked to their impressions of his crime, especially the seriousness of the crime and the nature of the defendant's involvement in the crime. Moreover, our results show that one group of jurors—white females—may be less disposed to believe in the defendant's remorse than other jurors. We also confirm the widespread conviction that remorse makes a difference to the sentence a defendant receives—provided jurors do not think the crime is too vicious.

52, at 1781-82 (noting that in one study, prosecutors sought the death penalty in 40% of the interracial homicide cases and in 5.2% of the black-victim cases).

70   For a general discussion of systems of equations, see WILLIAM H. GREENE, ECONOMETRIC ANALYSIS 708-80 (3d ed. 1997).

71   *See* Scott E. Sundby, *The Capital Jury and Absolution: The Intersection of Trial Strategy, Remorse, and the Death Penalty*, 83 CORNELL L. REV. 1557, 1560 (1998) (analyzing "the role of remorse and its interaction with trial strategy, but with the recognition that a continued need exists to study the issues").