Improving Comprehension Of Capital Sentencing Instructions: A Bias Reduction Approach

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IMPROVING COMPREHENSION OF CAPITAL SENTENCING INSTRUCTIONS: A BIAS REDUCTION APPROACH

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Program of Public Affairs in the College of Health and Public Affairs at the University of Central Florida Orlando, Florida

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ABSTRACT

Previous research has demonstrated that judicial instructions on the law are not well understood by jurors tasked with applying the law to the facts of a case. The past research has also shown that jurors are often confused by the instructions used in the sentencing phase of a capital trial. Social scientists have used two different methods to improve juror understanding of legal instructions, psycholinguistic rewrites and bias-reduction techniques. Psycholinguistic rewrites of legal instructions have been shown consistently to improve juror comprehension of general legal instructions and instructions used in the sentencing phase of a capital trial, however, there has been a call in the literature to not only improve the clarity of judicial instructions but to address comprehension biases that interfere with jurors’ ability to understand the instructions.

Because a bias-reduction approach has received limited empirical testing and has never been tested on capital-sentencing instructions, this research sought to test the effectiveness of a bias-reduction approach with those instructions. Participants were randomly assigned to hear either Florida’s pattern instructions used in the penalty phase of a capital trial or the same instructions with additional statements that mentioned and refuted biases thought to be associated with established areas of miscomprehension. After participants heard the judicial instructions, their understanding of the law on capital punishment decision-making was assessed. Additionally, the participants were asked to render a verdict in a hypothetical case.

The results revealed that comprehension was higher for participants exposed to the bias-refutation statements than for participants who were exposed to only the pattern instructions. Among all participants, greater understanding of capital sentencing instructions was associated
with an increased likelihood that mock jurors recommended a life sentence, but this observed association was not statistically significant when examining capital-juror eligible participants. The results of this study suggest that efforts should be undertaken to improve specific areas of Florida’s capital sentencing instructions.
For my mother, Marilyn Otto
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**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>viii</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER 1: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Overview of the Chapter</td>
<td>1</td>
</tr>
<tr>
<td>The Purpose of the American Jury</td>
<td>2</td>
</tr>
<tr>
<td>The Capital Jury</td>
<td>4</td>
</tr>
<tr>
<td>A Brief History of the Constitutional Role of the Capital Jury</td>
<td>4</td>
</tr>
<tr>
<td>The Current State of the Capital Jury</td>
<td>7</td>
</tr>
<tr>
<td>CHAPTER 2: LITERATURE REVIEW</td>
<td>10</td>
</tr>
<tr>
<td>Overview of the Chapter</td>
<td>10</td>
</tr>
<tr>
<td>Jury Comprehension of Legal Instructions</td>
<td>10</td>
</tr>
<tr>
<td>Jury Comprehension of Fact-Finding Instructions</td>
<td>11</td>
</tr>
<tr>
<td>Jury Comprehension of Capital Penalty Phase Instructions</td>
<td>14</td>
</tr>
<tr>
<td>Efforts to Improve Juror Comprehension of Legal Instructions</td>
<td>18</td>
</tr>
<tr>
<td>Psycholinguistic Principles</td>
<td>19</td>
</tr>
<tr>
<td>Jury Bias and Acceptance of Legal Instructions</td>
<td>22</td>
</tr>
<tr>
<td>Jury Bias and Capital Sentencing Instructions</td>
<td>26</td>
</tr>
<tr>
<td>Impact of Jury Comprehension on Verdict Decision</td>
<td>29</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>32</td>
</tr>
<tr>
<td>CHAPTER 3: METHODOLOGY</td>
<td>35</td>
</tr>
<tr>
<td>Participants</td>
<td>35</td>
</tr>
<tr>
<td>Procedure</td>
<td>36</td>
</tr>
<tr>
<td>Stimulus Materials</td>
<td>37</td>
</tr>
<tr>
<td>Dependent Measures</td>
<td>41</td>
</tr>
<tr>
<td>Verdict Recommendation</td>
<td>41</td>
</tr>
<tr>
<td>Comprehension of Capital Sentencing Instructions</td>
<td>41</td>
</tr>
<tr>
<td>Additional Measures</td>
<td>47</td>
</tr>
<tr>
<td>Validity Check</td>
<td>47</td>
</tr>
<tr>
<td>Covariates</td>
<td>47</td>
</tr>
<tr>
<td>Capital-Juror Eligibility</td>
<td>48</td>
</tr>
<tr>
<td>Demographics</td>
<td>50</td>
</tr>
<tr>
<td>Analysis Strategy</td>
<td>51</td>
</tr>
<tr>
<td>CHAPTER 4: RESULTS</td>
<td>52</td>
</tr>
<tr>
<td>The Relationship between Condition and Overall Comprehension</td>
<td>52</td>
</tr>
<tr>
<td>Responses to Individual Comprehension Items</td>
<td>53</td>
</tr>
<tr>
<td>Variables in the Multivariate Analyses</td>
<td>58</td>
</tr>
<tr>
<td>Comprehension Score</td>
<td>59</td>
</tr>
<tr>
<td>Subjects’ Belief in Mr. Butler’s Guilt</td>
<td>59</td>
</tr>
<tr>
<td>Concern about the Future of a Non-Executed Defendant</td>
<td>60</td>
</tr>
<tr>
<td>Multivariate Analysis on Verdict</td>
<td>61</td>
</tr>
<tr>
<td>All Subjects</td>
<td>62</td>
</tr>
<tr>
<td>Capital-Juror Eligible Subjects</td>
<td>63</td>
</tr>
</tbody>
</table>
CHAPTER 5: DISCUSSION.................................................................................................................. 65
  Overview of the Chapter.................................................................................................................. 65
  The Effect of the Treatment on Instruction Comprehension ...................................................... 65
    Burden of Proof For Mitigators ................................................................................................. 66
    Unenumerated Mitigating Factors ............................................................................................ 67
    Weighing Aggravating and Mitigating Factors ....................................................................... 68
    Unanimity on Mitigators ........................................................................................................... 69
    Perceived Personal Responsibility ......................................................................................... 70
  Instruction Comprehension and Verdict Recommendation .......................................................... 71
  Policy Recommendations ............................................................................................................. 72
    Burden of Proof for Mitigating Factors ................................................................................... 73
    Unenumerated Mitigating Factors ............................................................................................ 73
    Weighing of Aggravating and Mitigating Factors .................................................................... 74
  Future Research .......................................................................................................................... 74
    Psycholinguistics versus Bias-Reduction ............................................................................... 75
    Replicate with More Subjects .................................................................................................. 76
    Replicate with a Guiltier Defendant ......................................................................................... 76
    Replicate in a More Natural Environment .............................................................................. 77
    Replicate with a Randomly Selected Sample ......................................................................... 78
    Replicate with More Powerful Bias-Reduction Statements .................................................. 78
    Message Repetition as an Alternative Mediating Variable .................................................... 79
  Conclusion .................................................................................................................................... 80

APPENDIX A: DISTRIBUTION OF DEMOGRAPHIC VARIABLES ACROSS CONDITIONS .......................................................... 81
APPENDIX B: PATTERN INSTRUCTIONS ................................................................................. 83
APPENDIX C: PATTERN INSTRUCTIONS WITH BIAS-REFUTATION STATEMENTS ...................................................... 89
APPENDIX D: QUESTIONNAIRE .................................................................................................. 96
APPENDIX E: IRB APPROVAL LETTER .................................................................................... 105
REFERENCES ............................................................................................................................... 107
LIST OF TABLES

Table 3.1: Comprehension Levels on Individual Items for all Subjects................................. 55
Table 3.2: Comprehension Levels on Individual Items for Capital-Juror Eligible Subjects...... 57
Table 3.3: Subjects’ Belief in Mr. Butler’s Guilt.............................................................................. 60
Table 3.4: Concern About the Future of a Non-Executed Defendant........................................ 61
Table 3.5: Predicting the Probability of Recommending a Life Sentence For All Subjects ....... 63
Table 3.6: Predicting the Probability of Recommending a Life Sentence For Capital-Juror
Eligible Subjects ................................................................................................................................. 64
CHAPTER 1: INTRODUCTION

Overview of the Chapter

This dissertation examines juror understanding of judicial instructions. As will be demonstrated in the next chapter, the empirical literature has clearly shown that jurors do not understand many elements of standardized judicial instructions. With that question settled, social scientists have attempted to ameliorate those misunderstandings. Two approaches have been taken to improve comprehension. The first approach has been to rewrite standard judicial instructions with clearer language. Compared to standard judicial instructions, these rewritten instructions are more understandable, but they do not produce total comprehension. The second approach to improving comprehension is to refute juror biases that interfere with their ability to comprehend judicial instructions that are inconsistent with those biases. In other words, jurors have incorrect, pre-conceived notions about the law, and the only way to improve comprehension is for legal instructions to directly refute those notions. This approach has also improved comprehension. There are, however, a number of unresolved research questions in this area. This dissertation examines some of those questions and builds upon existing research that has looked at the relationship between comprehension of instructions and juror decision-making in one type of judicial proceeding – the penalty phase of a capital trial.

The judicial instructions for which there is the most information about juror biases are capital sentencing instructions. For this reason, these judicial instructions are used in the experimental manipulations. Because capital sentencing instructions are an integral part of the research, an explanation of the unique purpose of the capital jury, the current state of the capital
jury, and the constitutional issues surrounding the capital jury are offered. First, however, is a brief description of the American jury.

The Purpose of the American Jury

In examining the Bill of Rights, it is clear that the framers of the Constitution valued the right to a trial by jury. The Sixth Amendment guarantees a trial by an impartial jury in criminal prosecutions. The Seventh Amendment guarantees a trial by jury in civil matters that exceed twenty dollars.

Even before the Sixth and Seventh Amendments to the Constitution, Americans have supported the right to be tried by a jury. American colonists embraced jury trials from the earliest days of colonization (Levine, 1992). Jury trials were popular in part because colonial jurors were able to protect colonists from the Crown through jury nullification. During the ratification of the Constitution, the principal debate regarding the right to a trial by jury concerned the degree to which jurors should be drawn from the locale in which the crime was committed. Anti-Federalists, who watched King George sometimes take colonists to England to face unsympathetic juries, were concerned that the new federal government could shop for a favorable jurisdiction in which to hold a trial. Anti-Federalists concluded that local juries were essential to protect citizens from the reach of an oppressive federal government (Abramson, 1994).

The role of the jury is to protect citizens from the excesses of the government. It is not enough to trust the government to correctly conclude that a defendant is guilty; the government must prove that a defendant broke the law, and this proof has to be accepted by selected
members of the community (i.e., the jury). The decision of a jury to either accept or reject the
government’s case is a form of democratic protection against government oppression.

Practically, this protection may be expressed through jury nullification. “Jury
nullification takes place when juries refuse to convict because they dislike a law or the use to
which the law is being put” (Levine, 1994, p. 101). Levine points out that jury nullification can
occur with unpopular laws and policies, trifling offenses, and crimes that jurors believe are
common (e.g., income tax evasion). In addition, jury nullification can happen when jurors
believe that the punishment for the charged offense is not warranted by the defendant’s actions
(e.g., failing to convict a defendant on a charge of first-degree murder for a mercy killing).

Over time, there has been an effort to minimize jury nullification and get juries to make
decisions that are consistent with the law. These changes have been brought about by a
formalization of the process. This formalization involves more specific legal instructions and
prohibitions on jurors personally knowing any of the parties (Abramson, 1994; Levine, 1992).
Currently, as Luginbuhl and Howe (1995, p. 1161) observe, “The role of the jury in a criminal
trial is to determine the facts from the evidence and then to apply the law to those facts.” The
sine qua non of application is comprehension. For a jury to apply the law, it is necessary that it
understand the law. If a jury does not understand and/or apply the law then its decision, while
possibly being legally binding, will not necessarily be one that is in accordance with the law.
The question of how well jurors comprehend and apply the law is an empirical one that has been
the subject of a fair amount of scrutiny from academics, journalists, and social scientists.
The Capital Jury

In most criminal proceedings the jury’s job is to consider the facts of the case and apply the appropriate criminal law to determine whether an accused person is guilty. However, the criminal jury is sometimes charged with another task: determining whether a capital murder defendant who has already been found guilty should live or die. Since 1976, more than 6,000 people have been sentenced to death (Dwyer, Neufeld, and Scheck, 2000). Admittedly, capital trials make up a small percentage of those tried for murder. For example, Paternoster (1984) found that only 18% of all homicides occurring during a four and one-half year period in South Carolina were capital murders (i.e., death-eligible murders), and the death penalty was sought in only 36% of those cases (also see Baldus, Woodworth, and Pulaski, 1990). Though capital trials are relatively rare, any mistakes in such cases can be critical because the ultimate outcome of the trial is whether the defendant lives or dies. While this dissertation examines jury comprehension of legal instructions in general, it pays special attention to jury instructions involving the possible imposition of the death penalty. Because a major focus of this research is to examine jury comprehension of capital penalty phase instructions, it is important to examine the history of the American jury’s role in the death penalty process.

A Brief History of the Constitutional Role of the Capital Jury

In McGautha v. California (1971), the petitioner was convicted of first-degree murder. The punishment was left to the jury’s absolute discretion, and the punishment was decided in a separate sentencing hearing. McGautha argued that because the jury was told that it had absolute discretion in deciding if he should live or die, the instructions were unguided, standardless, and
that his life was going to be deprived without due process of the law. The Supreme Court ruled that it was not constitutionally necessary to guide the discretion of capital jurors. The Court approved the process whereby capital juries were allowed to make completely subjective and idiosyncratic judgment calls about whether a capital defendant’s life should be spared. The majority in *McGautha* went even further by arguing that it was impossible to write clear, understandable legal instructions that enumerated which types of crimes were eligible for the death penalty. In other words, the Court argued that it was impossible to guide the discretion of capital jurors. Therefore, at the time of *McGautha*, capital juries were encouraged to make completely unguided decisions about whether a guilty capital defendant should live or die.

Only a year later, the Supreme Court completely reversed its position in *Furman v. Georgia* (1972). Furman, convicted of murder and sentenced to die, argued that the death penalty directly violated the Eighth and Fourteenth Amendments to the Constitution. A majority of justices agreed that capital punishment as it was administered in the United States at the time was cruel and unusual punishment in violation of the Eighth and Fourteenth Amendments to the Constitution. Although the justices agreed that the death penalty as practiced violated the Constitution, there was little agreement about why then-current death penalty laws were unconstitutional. This case produced nine separate opinions and at the time was the longest in Supreme Court history (Bohm, 1999). Still, in reading the plurality opinion, it appeared that capital punishment laws could be rewritten so that they would pass constitutional muster. The centrist justices (i.e., those justices who did not believe that capital punishment was inherently unconstitutional but had voted to strike down capital punishment as practiced in *Furman*) argued that because of unfettered jury discretion, sentences were being handed out in an arbitrary and
capricious manner. *Furman* led state legislatures to rewrite their death penalty laws to be consistent with the views of the centrist justices. There were two approaches that state legislators thought would be consistent with the views of the swing justices: one was to enact mandatory sentences of death for certain enumerated crimes and the other was to provide guidelines for judges and juries to follow in determining whether death was the appropriate punishment in a particular case. This discretion was guided in a bifurcated trial, which consisted of a guilt phase and a penalty phase. If the defendant was found guilty of a capital crime during the guilt phase, a penalty hearing was held. It was during this part of the trial that judges informed juries of the relevant statutes, guiding jurors’ discretion to render either a sentence of life or death.

The Court, in *Gregg v. Georgia* (1976), *Proffitt v. Florida* (1976), and *Jurek v. Texas* (1976), held that states’ laws that guide jury discretion result in death sentences that are not in violation of the Eighth and Fourteenth Amendments to the Constitution. States that had legislated mandatory death sentences were not successful. In two cases involving defendants who were sentenced under mandatory sentences of death, *Woodson v. North Carolina* (1976) and *Roberts v. Louisiana* (1976), the Court rejected as unconstitutional, in violation of the Eighth and Fourteenth Amendments, any attempt to have certain crimes carry a mandatory death sentence.

The Court has held that unguided discretion in capital cases results in arbitrary and capricious decisions, and that mandatory death sentences are also unconstitutional because they do not fulfill *Furman*’s requirement that jury discretion be guided by objective, reviewable standards. In addition, the Court has rejected mandatory death sentences because they do not allow juries to consider mitigating evidence. The Court has ruled that the only constitutional
way to decide if a criminal defendant is sentenced to death is through guided discretion. This raises the question of whether and how jury discretion can be guided to conform to the law.

The courts have not been receptive to appeals based on social scientific evidence that argue that the capital jurors in a particular case did not understand the sentencing instructions (Lieberman and Sales, 1997). Still, research in this area is important for several reasons. First, some jurisdictions and courts may be amenable to altering the instruction process based on research results (see, for example, Taylor, Buchanan, Pryor, and Strawn, 1980). Second, attorneys could use the extant and future research to help them tailor their summations to the jury to address known areas of miscomprehension. Third, issues surrounding how jurors comprehend and apply instructions are important for theoretical insight into how people process and apply information. This basic theoretical insight is valuable because it could be useful for improving comprehension with subject matter other than the law.

The Current State of the Capital Jury

Thirty-eight states, the federal government, and the military have the death penalty as a sentencing option. The remaining states and the District of Columbia do not (Bohm, 1999). Recently, in *Ring v. Arizona* (2002), the Supreme Court reaffirmed the role of the jury in capital sentencing. In that decision, the Court invalidated as being unconstitutional the death penalty process of those states where juries were completely excluded from the decision to sentence convicted murderers to death (Liptak, 2002). In light of this decision, the constitutionality of the death penalty process of states where the jury makes a non-binding recommendation to the court...
is not currently known. It is clear, however, that in the future, juries will have a role in all capital sentences.

There are essentially three different legal models for guiding the discretion of jurors. Acker and Lanier (1998) describe these models as balancing schemes, threshold schemes, and special sentencing issues. Under all three schemes, the prosecution must prove at least one aggravating factor beyond a reasonable doubt. If the prosecution does not do this, then the jury should give the defendant a sentence other than death. Under balancing schemes, jurors are required to weigh aggravating and mitigating circumstances and then recommend a sentence based upon the comparison of the aggravating and mitigating factors. If the aggravating factors outweigh the mitigating factors, then the defendant should be sentenced to death. If the jury finds that aggravators do not outweigh mitigators, an alternative sentence is imposed. The difference between balancing schemes and threshold schemes is that under threshold schemes, jurors are not specifically instructed to balance aggravating and mitigating factors. In other words, under threshold schemes, juries are instructed to consider mitigating factors, but they are not told to weigh the aggravating and mitigating factors. Threshold schemes do not guide juror discretion as specifically as balancing schemes. With special sentencing issues, jurors are required to answer yes or no to questions about the capital defendant (e.g., Will the defendant be dangerous in the future?). If the answers to these questions are “yes,” then the jury is instructed to sentence the defendant to death unless there are mitigating factors that sufficiently outweigh the affirmatively answered questions.

Because Florida’s capital sentencing instructions are used in this study, it is important to note the state of the capital jury in Florida. In a Florida death penalty case, the trial is bifurcated
into a guilt phase and a penalty phase. If during the guilt phase, the jury finds the defendant guilty of a capital crime, then a second trial is held to determine the penalty. During this trial, evidence of aggravating and mitigating circumstances is presented. After this evidence is presented, the jury is instructed to balance the aggravating and mitigating factors and render an advisory sentence of death or life without the possibility of parole. This advisory sentence does not have to be unanimous (F.S. 921.141). Because jurors are integral parts of capital sentencing in Florida and in other jurisdictions, their understanding of the legal process is critical.
CHAPTER 2: LITERATURE REVIEW

Overview of the Chapter

In this chapter, the empirical research addressing jury comprehension of legal instructions is analyzed. This section covers both fact-finding instructions and capital sentencing instructions. Next, efforts to improve the comprehension of these instructions are described. Psycholinguistic and bias-reduction approaches are reported. Included within this section is a discussion of the biases associated with capital sentencing instructions. After this, the empirical relationship between instruction comprehension and verdict is explored. Finally, hypotheses not tested in the extant literature are stated.

Jury Comprehension of Legal Instructions

Today, most jurisdictions use standardized or pattern instructions. These instructions were developed, “to guarantee uniformity and clarity in the presentation of the charge to the jury” (Buchanan, Pryor, Taylor, & Strawn, 1978, p. 32). Pattern instructions instruct the jury on the relevant substantive law and give the jury general instructions about their behavior. These instructions are given to the jury by the judge, typically at the end of the trial. These instructions have formalized the role of jurors into a specific one: jurors are to apply the law to the facts of the case. Even if a jury disagrees with the law, it is supposed to abide by it when making a decision. While juries sometimes ignore the law (i.e., jury nullification), the goal of most courts is for jurors to use the law when making their decisions (Levine, 1992). Presumably, legal instructions promote this objective by informing jurors about aspects of the law that they otherwise might not understand. If jurors, however, do not comprehend the legal instructions,
then they cannot apply those instructions. The next two sections examine how well jurors comprehend either criminal or civil fact-finding instructions and how well jurors understand capital sentencing instructions.

**Jury Comprehension of Fact-Finding Instructions**

Fact-finding instructions are those given to juries in either criminal or civil trials when they are asked to make a determination of either guilt or civil liability. All of the extant studies discovered through a review of the literature have demonstrated that jurors have a difficult time understanding fact-finding legal instructions. Many of these studies used mock jurors in an experimental setting. A major limitation of these studies is that the results may lack external validity or generalizability. In other words, asking research participants to pretend that they are jurors may not be the same psychological experience as being on an actual jury (Lieberman & Sales, 1997). This criticism would be stronger if it were not for the convergent findings of other research designs such as field research or surveys of former jurors. Field and survey researchers have also found that jurors do not understand the judicial instructions they are given; this congruent finding increases confidence in the findings of the mock juror studies.

**Mock Juror Studies.** One of the earliest mock juror studies was conducted by Buchanan et al. (1978). Using people who were called to jury service, but not used, they exposed research participants to either criminal pattern instructions or to no instructions at all. They found that the criminal pattern instructions significantly improved juror comprehension of the law, but that there were still a number of areas where jurors had difficulty with comprehension. These areas included both substantive definitions of the crime as well as other
legal terms such as “information,” “reasonable doubt,” and “material allegation.” Using similar procedures, Elwork, Sales, and Alfini (1977) reported that subjects who heard Michigan negligence instructions performed no better on a comprehension test than subjects who were not exposed to the negligence instructions. Other mock juror studies of fact finding instructions (Benson, 1985; Charrow & Charrow, 1979; Severance, Greene, & Loftus, 1984; Severance & Loftus, 1982; Steele & Thornburg, 1988) have also found that jurors have difficulty understanding many elements of the legal instructions to which they are exposed.

Field Research. Princeton historian Graham Burnett (2001) provided a unique piece of anecdotal evidence showing that juries have difficulty comprehending the law. Burnett served as a jury foreman in a murder trial in which the defendant claimed self-defense. In his account of the experience, Burnett described that many members of the jury incorrectly believed that they needed to find the defendant guilty of one of the charges (first-degree murder, second-degree murder, or manslaughter) before they could consider whether or not the defendant acted in self-defense. Burnett suggested that some of the jurors’ misunderstandings of both the law and the evidence were the result of inherent deficiencies on the part of some of the jurors. At one point he wrote:

At several moments I have felt that my refusal to accord with a guilty verdict will reflect as much [as anything else] a rejection of the competency of this body of jurors to reflect weightily on a matter of such seriousness. In different circumstances I can imagine having a certain kind of conversation that could bring me around to reject the justification of self-defense. But there are some jurors here who are such idiots, so thoroughly oblivious to good judgment, or so thick (regardless of their intentions), that it seems improper to aid them in depriving a man of his liberty. (p. 128)

Burnett, however, does not wholly blame the jurors for their misunderstanding. He also described how the oral presentation of instructions was not always easy to understand; the court
also refused to give the jury a written copy of the instructions. Burnett’s narrative implied that juror miscomprehension was the result of the delivery and content of the instructions and inherent deficiencies in some of the jurors.

Stephen Adler, a journalist for *The Wall Street Journal*, reported results consistent with Burnett’s findings. Adler (1994) interviewed jurors involved in a complex anti-trust case and reported a similar level of non-comprehension due to poor judicial instruction and juror inability to understand complex material.

**Surveys of Former Jurors.** Two groups of researchers have utilized a survey methodology to assess juror understanding of fact-finding legal instructions. Kramer and Koenig (1990) surveyed 884 Michigan citizens who were called to jury duty. Because those called were exposed to different instructions, the researchers had a naturally occurring comparison group and were able to determine if being exposed to judicial instructions improved comprehension. They found that more often than not instructions had no significant impact on how well former jurors answered true or false questions based on the relevant judicial instructions. Specifically, for the 22 questions where instructions could have had a significant impact, only nine questions showed a statistically significant relationship between exposure to judicial instructions and level of comprehension. When there was a significant relationship, the relationship was nearly always positive (i.e., the judicial instruction improved comprehension).

Utilizing a comparison technique similar to Kramer and Koenig (1990), Reifman, Gusick, and Ellsworth (1992) surveyed 224 Michigan citizens that were called to jury duty. The researchers reported that exposure to instructions on procedural law significantly improved juror
comprehension, but exposure to instructions on substantive law had no significant effect on juror understanding of the law.

**Jury Comprehension of Capital Penalty Phase Instructions**

Capital trials are unique among all other felony trials because they are bifurcated into two phases. In the guilt phase, jurors determine guilt or innocence; in the penalty phase, they determine sentence. As with fact-finding legal instructions, the weight of the social science research presents a clear picture: jurors are unclear about many aspects of these penalty phase instructions. For example, Haney and Lynch (1994) reported that college students after hearing California’s penalty phase instructions several times were not always able to define “aggravation” and “mitigation.” Mock juror studies and surveys of former jurors have yielded similar results.

**Mock Juror Studies.** Diamond and Levi (1996) described the pioneering work of Hans Zeisel. He became involved with a capital case involving a defendant named Free who had been sentenced to death and who was appealing his sentence in part because he felt the jury did not understand the capital sentencing instructions that were intended to guide its discretion. Exposing mock jurors to the instructions used in Free’s case, Zeisel demonstrated that many elements of these instructions were poorly understood. For example, on only 3 of the 16 comprehension questions did the majority identify the correct answer. Zeisel’s unpublished research was presented to the court, but Free’s appeals based upon this argument were denied. Zeisel’s research foreshadowed a consistent finding in the area of comprehension of capital jury instructions.
Mock juror studies have demonstrated that people have difficulty with capital sentencing instructions (Blankenship, Luginbuhl, Cullen & Redick, 1997; Diamond & Levi, 1996; Frank & Applegate, 1998; Luginbuhl, 1992; Wiener, Pritchard, & Weston, 1995). Among these studies, a pattern of miscomprehension can be observed: capital juries tend to be confused about four general areas. First, they tend to misunderstand the burden of proof for mitigating circumstances. Second, they are unclear about the appropriateness of using non-enumerated mitigating circumstances. Third, they do not understand that the jury does not have to unanimously believe that a mitigating factor exists in order for one juror to consider that mitigating factor as a reason not to sentence the defendant to death. Finally, jurors do not understand how to appropriately weigh aggravating and mitigating factors.

The Supreme Court in *Walton v. Arizona* (1990) ruled that a state could adopt any standard it wants for proving mitigating factors so long as that standard does not lessen the prosecution’s burden of proving all elements of its case beyond a reasonable doubt. Depending on the state, mitigating factors may have to be proven by a preponderance of the evidence or to a juror’s personal satisfaction. In the states where capital-juror comprehension of this issue has been assessed, the latter standard has been in effect. In these studies, jurors did not understand that mitigating factors needed to be proven only to their personal satisfaction (Blankenship et al., 1997; Frank & Applegate, 1998; Luginbuhl, 1992). For example, Frank and Applegate (1998) reported that while over 80% of mock jurors knew that a prosecutor must prove an aggravating factor beyond a reasonable doubt, fewer than eight percent knew that a mitigating factor only had to be proven to a juror’s personal satisfaction.
Looking at the issue of non-enumerated mitigating factors, four studies have demonstrated that mock capital jurors do not realize that they may consider not only the mitigating factors stated in the capital sentencing pattern instructions, but that they may also consider any other factor which they believe is a reason not to execute the defendant as long as the factor is supported by evidence (Blankenship et al., 1997; Diamond & Levi, 1996; Frank & Applegate, 1998; Wiener et al., 1995). These studies have demonstrated that many jurors believe that they can only consider those mitigating factors that are specifically stated in the legal instructions. For example, Blankenship et al. (1997) showed that less than 40% of mock jurors realized that the non-enumerated factor of remorse could be considered as a reason to sentence a capital defendant to life instead of death.

Regarding the issue of level of agreement on mitigating factors, all five of the mock juror studies of capital sentencing instruction comprehension demonstrated that capital jurors do not realize that they do not have to be unanimous in their consideration of a mitigating circumstance (Blankenship et al., 1997; Diamond & Levi, 1996; Frank & Applegate, 1998; Luginbuhl, 1992; Wiener et al., 1995). Capital jurors may consider a mitigating circumstance if it is proven to the personal satisfaction of only one member of the jury. As an example, Frank and Applegate (1998) reported that only a little more than 20% of mock jurors realized that they do not have to unanimously agree on a factor for it to be considered for a sentence of life.

Three studies demonstrated that jurors do not understand the appropriate method of weighing aggravating versus mitigating factors (Blankenship et al., 1997; Diamond & Levi, 1996; Frank & Applegate, 1998). For example, Blankenship et al. (1997) showed that many mock jurors erroneously believed it was appropriate to simply add up the number of aggravators
and mitigators to determine whether the aggravating circumstances outweighed the mitigating circumstances. Capital jurors seem to not understand that the weighing of aggravators versus mitigators is qualitative not quantitative.

**Surveys of Former Jurors.** In addition to the mock jury research, surveys of capital jurors have been conducted after they have completed their jury service. The most prominent of these studies is the Capital Jury Project (CJP). The CJP is a multi-jurisdictional effort to survey individuals who have served on capital juries (for an overview of the CJP, see Bowers, 1995). One part of the capital jury project involves asking ex-jurors comprehension questions regarding the capital sentencing instructions to which they were exposed. Using CJP data for North Carolina, Luginbuhl and Howe (1995) examined how well capital jurors understood that state’s capital sentencing instructions. Many of their findings are consistent with the findings of the mock jury research. First, they found that many jurors, 41%, incorrectly believed that mitigating factors must be proven beyond a reasonable doubt. Second, the same proportion of surveyed jurors did not know that non-enumerated mitigating circumstances can be considered. Third, only 47% of jurors realized that jurors do not have to agree unanimously on a factor for it to be considered in favor of a life sentence (also see Eisenberg & Wells, 1993).

Other research has demonstrated that capital jurors have another misunderstanding about capital sentencing instructions. Several surveys have demonstrated that capital jurors minimize their responsibility for a death sentence (Geimer & Amsterdam, 1988; Haney, Sontag, & Costanzo, 1994; Hoffman, 1995). For example, using CJP data for Indiana, Hoffman (1995) reported that jurors tend to minimize their perceptions of personal responsibility for a death
sentence by wrongly arguing that the capital sentencing instructions demand a particular sentence.

The survey research has clearly demonstrated that capital jury instructions are confusing and that there are consistent patterns of confusion. The survey results corroborate those of mock juror studies, calling into question the wisdom of instructing jurors on points of law using pattern instructions. If these instructions are incomprehensible or confusing, they cannot do their job of informing jurors about how to make decisions. The next section reviews efforts to improve the comprehensibility of jury instructions in general and capital sentencing instructions in particular.

**Efforts to Improve Juror Comprehension of Legal Instructions**

Because many elements of jury instructions are unclear to jurors, social scientists have attempted to improve jurors’ ability to comprehend jury instructions. The most prominent area of research has been in examining the effects of rewriting legal instructions using psycholinguistic principles, which draw upon the fields of psychology and linguistics. Elwork et al. (1977) gave this example of Michigan’s grammatically complex definition of proximate cause:

> When I use the words “proximate cause” I mean first, that there must have been a connection between that conduct of the defendant which plaintiff claims was negligent and the injury complained of by the plaintiff, and second, that the occurrence which is claimed to have produced that injury was a natural and probable result of such conduct of the defendant. (p. 168)

For another example, consider this capital sentencing instruction, cited by Diamond and Levi (1996), telling jurors how to weigh aggravating and mitigating circumstances. In this example, the use of long sentences and multiple negatives makes the instruction difficult to comprehend.
In deciding whether the defendant should be sentenced to death, you should consider all the aggravating factors supported by the evidence and all the mitigating factors supported by the evidence... If you unanimously find from your consideration of all the evidence that there are no mitigating factors sufficient to preclude imposition of a death sentence, then you should sign the verdict form requiring the court to sentence the defendant to death. If you do not unanimously find from your consideration of all the evidence that there are no mitigating factors sufficient to preclude imposition of a death sentence, then you should sign the verdict form requiring the court to impose a sentence other than death. (p. 229)

Based on examples like those above, it is intuitively reasonable to conclude that the writing style of pattern instructions is one barrier to juror comprehension of legal instructions. Efforts to improve the writing clarity are a reasonable starting point.

**Psycholinguistic Principles**

Imwinkeiried and Schwed (1987) describe the four techniques of psycholinguistics: choice of words, use of phrases and clauses, sentence structure, and overall organization of the instruction. With respect to word choice, psycholinguistic norms dictate that abstract words, legalistic words, and nominalizations (i.e., a noun formed from a verb) be avoided; in addition, homonyms and synonyms can also confuse jurors. Words common to legal instructions, such as “information” – meaning filing or charge – or “the court” – meaning the judge – can make instructions difficult for jurors to follow. The norms for phrases and clauses include ensuring that subordinate clauses are not missing the words “which is” and that clauses are not misplaced. With regard to sentence structure, “the draftsman should be conscious of sentence length, the voice of the sentence (active or passive), and the complexity of the sentence” (Imwinkeiried & Schwed, 1987, p. 145). Finally, psycholinguistic norms prescribe that an appropriate organizational pattern or combination of patterns be used.
Several research studies have examined whether these principles can be used to improve juror comprehension of legal instructions (Charrow & Charrow, 1979; Diamond & Levi, 1996; Elwork et al., 1977; Frank & Applegate, 1998; Severance et al., 1984; Severance & Loftus, 1982; Wiener et al., 1995). All of these studies demonstrated significant improvements in comprehension when psycholinguistic norms were applied to various types of legal instructions.

Three sets of researchers have rewritten death penalty sentencing phase instructions using psycholinguistic norms and assessed differences between currently used pattern instructions and the rewritten instructions on juror comprehension (Diamond & Levi, 1996; Frank & Applegate, 1998; Wiener et al., 1995). Frank and Applegate (1998) exposed individuals called to jury duty to either a set of instructions previously used in the penalty phase of an Ohio capital case or a rewritten version of the instructions. They then asked both groups to answer a series of comprehension questions. The jurors exposed to the rewritten instructions answered 68.4% of the questions correctly, while jurors exposed to Ohio’s pattern instructions only answered 49.7% of the questions correctly.

In another effort to measure the effectiveness of psycholinguistics, Diamond and Levi (1996) rewrote Illinois’ capital sentencing phase instructions with an emphasis on improving comprehension in three areas: unenumerated mitigating factors, non-unanimity on mitigating factors, and weighing. They also measured whether deliberations had a significant impact on comprehension. Their results indicated that the rewritten instructions significantly improved comprehension in all three subject areas. With regard to deliberation, mock jurors who deliberated did not differ significantly from non-deliberating jurors in two of three subject areas.
However, deliberation significantly improved comprehension with the questions that addressed non-unanimity on mitigators.

In a lone study that did not provide clear support for the effectiveness of psycholinguistics, Wiener et al. (1995) examined Missouri’s penalty phase pattern instructions versus psycholinguistically revised instructions. Using jury-eligible subjects, the researchers examined comprehension based on two different sets of facts (i.e., two different accounts of death-eligible homicides). The less heinous fact pattern involved the murder of a wife for pecuniary gain, while the more heinous fact pattern concerned the strangulation of a small child by a neighbor. Of the two fact patterns presented to subjects, the rewritten instructions produced significantly more comprehension only with the less heinous fact pattern. The researchers speculated that because this set of facts was less cognitively and emotionally demanding of subjects, it was easier for them to comprehend the jury instructions.

The weight of the social scientific research is clear: jury instructions can be made more understandable using psycholinguistic techniques. However, even those techniques alone do not produce total comprehension. In improving overall comprehension to slightly below seventy percent, the Frank and Applegate (1998) study, for example, is typical. Clearly, there are normative and potentially legalistic concerns that this level of comprehension is not high enough, and yet it is much higher than what courts can obtain without the use of psycholinguistic techniques. It is a concern with a potential comprehension ceiling (Wiener et al., 1995) associated with psycholinguistic rewrites that has caused some researchers to suggest that other techniques need to be developed to improve comprehension.
Jury Bias and Acceptance of Legal Instructions

Diamond (1993) has argued that simply improving the clarity of judicial instructions is not enough to successfully guide discretion in the penalty phase of a capital trial:

But even if the language and structure of the jury instructions are clarified, even if psycholinguists and social and cognitive psychologists contribute their skills, and even if courts and judicial committees are receptive to these efforts, instructions that simply use more user-friendly language are unlikely to dispel some major sources of lawlessness in capital sentencing. Unless social scientists...go beyond the passive sponge-like model of the jury and attend to juror expectations and beliefs about the court and the legal system, juror responses cannot achieve the predictability properly demanded of death penalty determinations. Jurors may resist even the most clearly worded directions. (p. 429)

The essential idea of Diamond’s argument is that when jurors are confronted with an instruction that is inconsistent with their preconceived notions about the court system then even the clearest of instructions can fail to instruct. She has argued that jurors have “schemas” or biases toward the judicial system that must be addressed in order to further improve comprehension. Diamond pointed out that research has demonstrated that one reason that jurors recommend death over life is because they are concerned about the future dangerousness of the defendant. Diamond reasoned that if jurors are instructed that a defendant who is not executed will receive life without any possibility of parole (LWOP), then those jurors should be more likely to vote for life than jurors who do not receive such an instruction. Diamond’s research, however, showed that simply instructing jurors in this manner does not significantly affect the death recommendation rate (Diamond, 1993). In an attempt to explain this non-significant difference, she argued that jurors resist this LWOP recommendation because they do not believe that a person who is sentenced to LWOP will actually die in prison. Simply giving jurors an instruction that contradicts a schema is not enough to overcome the effect of the bias.
Diamond’s work suggests that to truly have guided discretion, it is not enough to merely instruct jurors on the law. It may also be necessary to persuade them to accept and apply the law.

Diamond’s hypothesis that juror biases affect comprehension had already been demonstrated in the communication literature. Pryor, Taylor, Buchanan, and Strawn (1980) were the first to demonstrate that jurors’ attitudes toward the law affected their perceptions of the law’s accuracy. Pryor et al. showed that jurors were more favorable toward statements about the law that they believed were correct than statements they believed were incorrect. This effect existed even in those situations where the jurors were wrong in their belief about the legal statement. In a second experiment, the researchers established that this “affective-cognitive distortion” existed even after subjects had been exposed to the appropriate judicial instruction. Pryor et al. proposed that judicial instructions should mention and refute juror biases towards the law.

Smith (1991) provided additional evidence that jurors have biases that affect how they respond to judicial instructions. Smith asked mock jurors to list features associated with various crime categories (e.g., kidnapping). She found that many of these “naive representations” were legally incorrect. Using the results from these open-ended questions, Smith observed enough of a pattern to develop crime scenarios that were either consistent or inconsistent with jurors’ biases. The following is an example of a description of a kidnapping that is consistent with jurors’ biases about what they believe a kidnapping to be (i.e., a typical crime scenario):

Tony was playing ball with his friends in the playground of his elementary school one afternoon. Ken knew that Tony’s parents were very wealthy and very protective of their child. Ken called to Tony and waved him over to his car. When Tony came over, Ken asked if he wanted to go for ice cream. Tony said, “Sure,” and got in the car. Ken bought Tony an ice cream, then took him to a motel room, where he tied him to a chair,
gagged him, and told him if he made any noise he’d kill him. Ken then took a note demanding $500,000 for Tony’s safe return, and left it in the mailbox of Tony’s parents’ house. (Smith, 1993, p. 521).

The next example is of a kidnapping that is inconsistent with juror biases about what they believe a kidnapping to be (i.e., an atypical crime scenario):

Leon was an investigator with the Drug Enforcement Administration. He discovered the headquarters of a major drug ring and went there to gather evidence against them. He hid behind a stack of boxes and listened to their conversation. In their discussion, the dealers revealed everything Leon needed to bust them. When he tried to sneak out, he knocked over one of the boxes and was discovered. The dealers told Leon to tell them everything he knew or they would beat him until he did. Leon wouldn’t tell them anything, so the dealers locked him in their hideout and left him there. (Smith, 1993, p. 521-522)

Both scenarios met the legal definition of kidnapping for the state in which Smith’s research took place.

When Smith (1991) exposed mock jurors to the typical and atypical crime scenarios, she found that jurors were more likely to render guilty verdicts for the typical scenarios than for the atypical scenarios. After observing this effect, she attempted to ameliorate it. She found that giving mock jurors relevant pattern instructions did nothing to mitigate this effect (Smith, 1991; Smith, 1993). Consistent with the recommendation of Pryor et al. (1980), Smith decided to develop instructions that mentioned and refuted jurors’ biases towards the law (Smith, 1993).

Consider this example for the crime of kidnapping:

Many people believe that kidnapping requires a ransom demand. However, a person can be found guilty of kidnapping even when ransom is not demanded, and even when the motive for the crime is not money. (Smith, 1993, p. 529)

Smith was able to eliminate the increase in guilty verdicts for typical versus atypical crime descriptions by using judicial instructions that addressed and refuted the biases of jurors.
Smith’s (1993) approach for remedying the effect of juror comprehension biases is what is known in the communication literature as a refutational two-sided message strategy. A refutational two-sided message is one that mentions and refutes the opposing viewpoint. In contrast, a non-refutational two-sided message is one that mentions both sides of an issue without refuting the opposing viewpoint while a one-sided message does not state an opposing belief.

In research on persuasion, one empirical question that has received considerable attention is whether a persuader is best served by mentioning the opposing side of an issue under consideration. The existing communication literature has demonstrated that a refutational two-sided message strategy is the most effective. O’Keefe (1999), in a meta-analysis that included more than a hundred studies, reported that refutational two-sided messages are more persuasive than non-refutational two-sided messages or one-sided messages (also see Allen, 1991). A refutational two-sided approach is the one Smith used. Specifically, she was interested in improving comprehension by persuading subjects that their preconceived notions were incorrect. By using a refutational two-sided message in which she mentioned the incorrect bias and refuted it, it appears that she was able to improve comprehension.

Three conclusions can be drawn from the extant research. First, jurors do have incorrect preconceived beliefs about the law. Second, these biases can interfere with comprehension. Third, if these biases are addressed in the instructions then their effect can be minimized. These generalizations, however, have not been directly explored for juror comprehension of instructions in the penalty phase of capital trials. The next section discusses possible sources of bias in capital sentencing instructions.
Jury Bias and Capital Sentencing Instructions

Most people do not have personal experience with the criminal justice system; even fewer people have familiarity with the capital sentencing process. In the absence of direct encounters with the court system, people develop their knowledge of the judicial system based on the experiences of friends and the mass media with most knowledge coming from the latter (Surette, 1998). When examining the general area of miscomprehension of capital sentencing instructions, it becomes apparent that some of the jurors’ biases toward the instructions could have been gleaned from the mass media. Other comprehension biases can be reasonably inferred or are apparent from the extant literature.

It is important to note that there can be some state-by-state variability regarding the law as stated below. However, these statements of law are correct in a number of jurisdictions and some of them are universally correct as having been articulated by the United States Supreme Court as the only constitutional approach to juror-involved capital sentencing schemes.

Burden of Proof for Mitigating Factors. Jurors have a difficult time realizing that the standard of proof for mitigating factors is different than it is for most other elements of a criminal trial. Guilt must be proven beyond a reasonable doubt in a criminal trial; aggravating factors must also be proven beyond a reasonable doubt. However, a mitigating factor does not have to meet this high level of proof. The language used to describe this lower standard of proof varies among jurisdictions. In Florida if a juror is reasonably convinced that a mitigating factor has been proven then he or she may consider it as established (F.S. 921.141). Diamond (1993) contends that jurors who are familiar with shows like “L.A. Law” may have difficulty comprehending the lower standard unless the difference is explicitly pointed out to them.
It seems intuitively clear that one reason jurors may have difficulty comprehending the lower level of proof required for proving the existence of a mitigating factor is that there is a preconceived notion, which could be the result of exposure to the media, that in criminal trials any and all elements must be proven beyond a reasonable doubt.

**Non-enumerated Mitigating Factors.** Jurors do not always understand that when considering whether to spare an individual’s life they may consider any factor or factors that could outweigh the aggravating factor or factors that the prosecutor proved beyond a reasonable doubt (*Lockett v. Ohio*, 1978). In other words, jurors may consider any mitigating factor that is supported by evidence and not simply the ones listed in the jury instructions. In this case, the source of the bias may be inherent within the instructions. Jurors may only consider listed aggravating factors so it would be reasonable for them to conclude that they might only be able to consider listed mitigating factors.

**Unanimity on Mitigating Factors.** Another area of comprehension difficulty is the issue of unanimity on mitigating factors. A jury does not have to be unanimous that a mitigating factor exists for it to be considered by an individual juror in deciding whether a capital defendant should be sentenced to life (*Mills v. Maryland*, 1988). To put this another way, an individual juror can vote for a life sentence because he or she believes that a mitigating factor or factors outweighs the aggravating factor or factors even if the other jurors do not believe that the mitigating factor or factors were proven. This hypothesized bias could be the result of common portrayals in the media. Media depictions (e.g., the movie, *Twelve Angry Men*) of the jury process make it clear that jury decisions usually need to be unanimous. Because of this bias, it is
possible that jurors resist even clear instructions on this point because they believe that juries must be unanimous when considering a mitigating factor.

**Weighing Aggravating and Mitigating Factors.** One misunderstanding that jurors have towards the weighing issue is that they believe that it is appropriate to simply add up the aggravating and mitigating factors in order to see which quantity is bigger (Blankenship et al., 1997). Diamond and Levi (1996) directly addressed this bias when they rewrote the Illinois capital sentencing instructions. They included the following admonition:

> In order to weigh the aggravating factors, taken as a whole, against the mitigating factors, taken as a whole, you should NOT merely add up the number of aggravating factors and mitigating factors in order to see which number is bigger. Weighing the factors is not such a mechanical task, and there is no simple formula that you can apply to reach your decision. (p. 229)

The jurors were instructed to assign individual relative weights to each of the aggravating and mitigating circumstances to arrive at a final judgment. The rewrite improved comprehension on the weighing questions. This rewrite is also similar to the two sided message technique employed by Smith (1993) to address jurors’ biases towards sentencing instructions.

**Perceived Personal Responsibility.** The Supreme Court in *Caldwell v. Mississippi* (1985) ruled that a death sentence was invalid if jurors were led to believe that they were not responsible for their decision. Research has shown that capital jurors often believe that the law requires a death sentence upon conviction of a capital crime (Garvey, Johnson, & Marcus, 2000; Geimer & Amsterdam, 1988; Haney et al., 1994; Hoffman, 1995). In the studies that utilized a survey design, the researchers reported that jurors’ belief in a legally required death sentence was used to minimize their personal responsibility for the verdict (Geimer & Amsterdam, 1988;
Haney et al., 1994; Hoffman, 1995). The clear bias is that some jurors believe that they are not responsible for the death sentence when, in fact, they are.

Because of poorly written instructions and jurors’ own biases toward the law, it is clear that jurors can become confused about the meaning of legal instructions. An obvious question, however, is does the miscomprehension really matter? To put it another way, would jurors decide cases differently if they understood the law?

**Impact of Jury Comprehension on Verdict Decision**

Only a few studies have examined the relationship between juror comprehension of instructions and verdict decision (Diamond & Levi, 1996; Severance et al., 1984; Wiener et al., 1995; Taylor, Buchanan, Pryor, & Strawn, 1981). The earliest of these studies, by Taylor et al. (1981), had one of the most novel methodologies. Actual jurors were told they would be rendering a verdict in a taped burglary trial. The purpose of the taped trial, as it was deceptively explained to the jurors, was to improve efficiency by removing sustained objections. Because jurors thought they were listening to and making decisions in a real trial, external validity was greatly enhanced. All of the ten, six-person juries were shown a tape of a burglary trial. The juries were then randomly assigned to hear the currently used pattern instructions on burglary or rewritten process instructions on burglary.

Process instructions differ from the standard instructions in that they explain to the jury not only the law, but also provide a step-by-step process for the jury to follow in its deliberations. Each step in the process comprises a component issue in the case and must be resolved before the jury can move on to the next step. If each issue is resolved as alleged by the prosecution, the state has proven its case. If any one question is answered contrary to the charges, the state has not proven its case and the jury must find the defendant not guilty. (Taylor et al., 1981, p. 39)
After the juries were instructed, they were told to deliberate to reach a verdict. There were no significant differences in verdict decision by type of instruction. Nine of the ten juries reached a verdict of not guilty, while the tenth jury was deadlocked. Severance et al. (1984) discovered a similar relationship when they reported that psycholinguistically rewritten instructions did not reliably affect verdicts.

Researchers have argued that jurors’ confusion about the capital penalty phase process tends to favor the prosecution, although there is no unequivocal evidence that suggests that prosecutors favor juror miscomprehension (Eisenberg & Wells, 1993; Hoffman, 1995; Luginbuhl, & Howe, 1995). Luginbuhl and Howe (1995) reported three areas of miscomprehension that logically favor the prosecution. First, if jurors believe that only listed mitigating factors can be considered, then this limits the consideration of other factors that could save a defendant’s life. Second, if jurors believe that a mitigating factor has to be proven beyond a reasonable doubt, then the defendant’s attorney has a higher standard to meet than the one the law requires. Thus, it will be harder for him or her to convince the jury not to kill the defendant. Third, if the jury concludes that it has to unanimously believe that a mitigating factor exists for it to be considered, then this limits the scope of factors that a juror or jurors could consider as a reason to spare the defendant’s life. In addition, Hoffman (1995) has pointed out that if a jury believes that capital sentencing guidelines mandate a certain decision, which they do not, then it makes it easier to sentence a defendant to death.

Wiener et al. (1995), Wiener et al. (1998) and Diamond and Levi (1996) are the only researchers to empirically examine the relationship between juror comprehension of penalty phase instructions and recommendations for either life in prison or the death penalty. Wiener et
al. (1995) experimentally exposed jurors to two fact patterns – murder of a spouse and strangulation of a child – and different instruction types (Missouri’s currently used pattern instructions or psycholinguistically rewritten instructions). They then asked jurors to make a sentencing recommendation. Based on a post hoc comparison of verdict decision and comprehension test score, they reported that jurors who were “less confused” about the instructions were the least likely to inflict the death penalty on the defendant (Wiener et al., 1995, p. 463). In other words, jurors who tended to score high on the comprehension test also tended to recommend a life sentence instead of a death sentence. Based on this study, it appears that, all other things being equal, more understandable instructions would favor a defendant in the penalty phase of a capital trial. Wiener et al. (1998) replicated this finding.

Diamond and Levi’s (1996) results also suggest that miscomprehension may increase the chances of a death sentence. The researchers also examined the relationship between comprehension score and verdict preference. Their results were similar to those of Weiner et al (1995; 1998). Participants who understood the instructions were more likely to vote for a life sentence (r = .20).

In sum, the small amount of research that has examined the relationship between comprehension and verdict or capital sentencing suggests that comprehension of legal instructions does not affect juries’ findings of guilt, but that comprehension is related to capital sentencing recommendations. Clearly, because only three studies have examined this question, the relationship between comprehension of instructions and verdict or capital sentencing decision is not well established and future research that examines this issue will contribute to the knowledge base.
The research on psycholinguistics has yielded positive results. Yet, as Diamond (1993) has pointed out, the success of psycholinguistics is limited. She argued for instructions that refute jurors’ preconceived notions. Smith (1993) demonstrated the success of this approach with decisions on guilt, but it is unclear whether this approach would be effective for capital jury sentencing instructions. In addition, English and Sales (1997) criticized Smith’s research in part because her design was too artificial to be usefully generalized to the real world courtroom setting. Specifically, they argued that her written descriptions of the crime scenarios and jury instructions were not very comparable to the process of sitting on a jury. The solution to this criticism is to replicate the research using a different operationalization of the independent variable and to carry out the experiment in a different, more natural environment (Campbell & Stanley, 1966). For example, having an audiotape of a judge read the judicial instructions and present a longer factual summary would be steps towards improving external validity.

To add insight where the extant research is limited, the current study seeks to test the following hypotheses:

**H1:** Capital sentencing instructions that include statements addressing juror biases will improve mock juror performance on comprehension measures.

**H2:** Capital sentencing instructions that include a statement mentioning and refuting juror bias regarding the level of proof required for mitigating circumstances will improve mock juror performance on relevant comprehension measures.
H3: Capital sentencing instructions that include a statement mentioning and refuting juror bias regarding consideration of non-enumerated mitigating factors will improve mock juror performance on relevant comprehension measures.

H4: Capital sentencing instructions that include a statement mentioning and refuting juror bias regarding the appropriate method of weighing aggravating and mitigating factors will improve mock juror performance on relevant comprehension measures.

H5: Capital sentencing instructions that include a statement mentioning and refuting juror bias regarding the level of agreement required to consider a mitigating factor will improve mock juror performance on relevant comprehension measures.

H6: Capital sentencing instructions that include a statement mentioning and refuting juror bias that the law demands a particular verdict will improve mock juror performance on relevant comprehension measures.

These first six hypotheses predict that comprehension of capital sentencing instructions will be improved by making subjects aware of their miscomprehension. The next hypothesis examines a different issue. It examines the relationship between instruction comprehension and verdict recommendation.

Scholars in this area have logically demonstrated how jurors’ misunderstandings of capital sentencing instructions hurt the defense. In addition, three studies have empirically assessed whether understanding is linked to sentencing decision. Wiener et al. (1995, 1998) demonstrated that the more confused jurors were, the more likely they were to vote for a death sentence. Diamond and Levi (1996) obtained similar results. Replication of this line of research
with a different operationalization of the independent variable (i.e., a revision of a judicial instruction that, instead of being psycholinguistically rewritten, mentions and refutes juror comprehension biases) should result in improved empirical insight into the relationship.

**H7:** Greater understanding of capital sentencing instructions will be associated with an increased likelihood that mock jurors will recommend a life verdict.
CHAPTER 3: METHODOLOGY

Participants

Participants were undergraduate students enrolled in communication or criminal justice/legal studies courses during the late summer and early fall of 2003. The use of college students may be criticized for lacking generalizability to actual jurors. This claim is contradicted by the empirical evidence. The research suggests that when exposed to the same legal instructions, undergraduates’ comprehension of those instructions is similar to actual jurors (Pryor, Taylor, Buchanan, and Strawn, 1980; Rose and Ogloff, 2003). Additional research suggests that using undergraduates for jury comprehension research is appropriate. Similar to actual jurors, college students have difficulty understanding capital sentencing instructions (Haney and Lynch, 1994), and the comprehension level of college students improves when they are given psycholinguistically rewritten judicial instructions (Elwork, Sales, and Alfini, 1977; Severance and Loftus, 1982).

One hundred and ninety-nine subjects participated in this study. Among these subjects, 144 were capital-juror eligible. The process for determining the capital-juror eligibility of each subject is briefly described in the next paragraph and in more detail later in the chapter. This experiment involved randomly assigning subjects to a treatment and control condition and examining the effect of the condition on a dependent variable that was measured at the interval level. Thus, an independent samples t-test was appropriate for analyzing much of the data. Data collection was halted when 144 capital-juror eligible subjects were observed. This number of subjects was deemed appropriate because employing an alpha at the .05 level, assuming a
medium effect size, and using an independent samples t-test, statistical power was 90.6% (Faul & Erdfelder, 1992).

Sixty-three percent of the subjects were female. Subjects’ ages ranged from 16 to 50 ($M = 21.5, SD = 4.6$). The majority of participants, 67%, indicated they were white. The next most common ethnic group was African American at 14%. Ninety-one percent of participants indicated that they had declared a major. Among these subjects, 40% were criminal justice/legal studies majors, and 60% were other majors. Capital-juror eligible participants are those who are over 18, believe they are eligible for jury service, and do not believe in always recommending either a life or death sentence for someone convicted of a capital crime. Seventy-two percent of the subjects were capital-juror eligible. Because subjects were randomly assigned to treatment and control conditions, it was expected that there would be no significant differences among these demographic variables across the conditions; for these variables, no significant differences were observed. Appendix A depicts this demographic information for each condition in a tabular format.

**Procedure**

Research participants were told that they were participating in a study on juror decision making in the sentencing portion of a capital trial. Specifically, they were told the following:

Thanks for participating in this research. We are interested in understanding juror decision-making in the sentencing portion of a capital case. In a trial where the defendant could receive the death penalty, the jury first decides guilt or innocence. If the jury finds the defendant guilty of a crime that could be punishable by death, a separate trial is held to determine the sentence. We want to understand how jurors make decisions in this part of the trial. We are also interested in your opinion about a hypothetical case. In a moment, we are going to play a tape of a judge summarizing the facts of the case for you.
and reading to you Florida’s capital sentencing instructions. Then we will ask you some questions. We will also collect some basic demographic data. Your responses will be confidential, and we will only use them for statistical purposes. It is important to pay close attention to the tape. The information on the tape will help you answer the survey questions. The tape will only be played once. Please do not take notes. Just do your best to listen to the judge’s instructions. We will now play the tape.

Research participants were randomly assigned to one of two conditions that were run simultaneously. In both conditions, research participants listened to an audiotape of a judge reading a fact scenario. In the pattern instruction condition \( n = 93 \), research participants heard a judge read Florida’s pattern capital sentencing instructions. In the pattern plus bias-refutation condition \( n = 106 \), research participants heard Florida’s pattern capital sentencing instructions with additional statements that mentioned and refuted comprehension biases toward these instructions.

All research participants, no matter what condition they were assigned to, filled out the same survey. This survey consisted of verdict recommendation questions and comprehension questions. Research participants also answered additional questions. The purpose of these questions will be described later in the chapter.

**Stimulus Materials**

All research participants were exposed to an identical fact scenario. The fact scenario used in this study is based on a summary of the fact scenario used by Wiener, Pritchard, and Weston (1995), although it differs from their summary in several ways. The language has been revised to make it more understandable for a verbal presentation. The facts have been altered to take place in Florida, and one of the aggravating factors was altered to make it consistent with
Florida law. Wiener et al.’s (1995) aggravating factor was “depravity of mind” because two shots were fired at point blank range. This was changed to having the prosecution describe this aspect of the offense as “heinous, atrocious, or cruel,” which mirrors the language of Florida’s capital sentencing statute (F.S. 921.141). An additional fact – the defendant trying to pawn his wife’s wedding ring – was added to make Mr. Butler’s guilt more apparent. This was done to ensure that if research participants rendered a life recommendation it was not done because they had doubts about the defendant’s guilt (Geimer & Amsterdam, 1988; Haney, Sontag, & Constanzo, 1994; Hoffman, 1995). The judge read a factual summary of both the guilt and penalty phase of the case. The summary of the guilt phase was as follows:

At 5:10 in the afternoon Steve Olin discovered Mrs. Betty Butler’s body on a gravel road in North Florida. Mrs. Butler had been shot in the head twice with a .22 caliber gun. Although the first shot killed her, a second contact shot was fired into Mrs. Butler’s temple. Fingerprints of Mrs. Butler and her husband Dennis Butler were found inside and outside the automobile that Dennis Butler drove, and tire tracks matching the car were found near Mrs. Butler’s body. Also found on the trunk of the car were three unidentified fingerprints.

When Mrs. Butler’s body was discovered, her $7000 diamond ring, which she reportedly never took off, was missing. After Mrs. Butler’s death, a pawnshop salesperson testified that Mr. Butler tried to sell him a diamond ring.

When interviewed by the police, Mr. Butler explained that on the day of his wife’s death he had driven down the gravel road after completing some errands. Mr. Butler stated that he had stopped at First City Bank at 4:00 p.m. and drove down the gravel road at about 5:00 p.m. on his way home. The medical examiner told the defense investigator Mrs. Butler died between 3:40 and 4:20 p.m., but later testified that the time of death was 5:00 p.m.

Mr. Butler also explained to the police that he owned several guns that were stolen from his home in Shreveport, Louisiana. In his insurance claim, Mr. Butler stated that except for a Ruger .22 automatic six shot, all the weapons had been recovered. However, Frank Arnold, a former boyfriend of Mrs. Butler’s daughter testified that when he had helped the Butlers move he had seen a Ruger .22 caliber weapon. Mr. Butler consented to a police search of his home which turned up six guns and some .22 caliber shells, but no .22 caliber weapon. The police did find Mrs. Butler’s missing diamond ring in Mr. Butler’s desk.
At the time of her death, Mrs. Butler had insurance policies with proceeds totaling $191,000 and a 401K plan valued at $177,000. Dennis Butler was the beneficiary named on the plans. Mrs. Butler had increased the coverage on the policies only four months prior to her death. Based on the foregoing evidence the jury unanimously found Mr. Butler guilty of first-degree murder.

The following fact scenario was given for the penalty phase:

The state had presented evidence of two aggravating factors that warranted the death penalty. The state claimed that the murder was committed for financial gain, and it had argued that the crime was especially “heinous, atrocious, or cruel” because excessive physical force was used. The prosecution noted the excessive physical force of firing two shots, the second at point blank range. Members of the defendant’s family testified to several mitigating circumstances including that Dennis is a polite man who, as a youngster, attended Catholic schools and participated in intramural sporting activities. After graduating, Dennis worked as a fireman and then in the oil business. When the oil business took a downfall, he went back to college and obtained his Bachelor of Science in computer programming. Mr. Butler had no prior convictions.

Both of the aggravating factors listed here are consistent with Florida Statutes, and Florida law does not place any restrictions on mitigating factors (F.S. 921.141).

Research participants in the pattern condition heard Florida’s standard capital sentencing instructions. Research participants in the pattern plus bias-refutation condition also heard the pattern instructions with additional statements that mentioned and refuted the biases described in Chapter 1. For the participants assigned to hear the pattern instruction plus bias-refutation statements, the following statements were added to Florida’s pattern instructions. To address jurors’ bias about the burden of proof for mitigating factors, the following statement was added:

Many jurors mistakenly believe that because other elements of a criminal proceeding must be proven beyond a reasonable doubt that the defense must prove a mitigating factor beyond a reasonable doubt. This is not the case. You need only be reasonably convinced that a mitigating factor exists in order to consider it established.
The following statement to address jurors’ comprehension bias on the issue of non-enumerated mitigating factors (i.e., jurors may consider any factor as a reason for a life sentence) was inserted in the instructions:

Many jurors falsely conclude that because they may only consider aggravating factors stated in these instructions that they also may only consider mitigating factors stated in these instructions. This is not the case. Jurors may consider any factor as a reason to recommend the defendant be sentenced to life without the possibility of parole.

As a way of addressing jurors’ propensity for simply adding up the number of aggravating and mitigating circumstances and making a quantitative judgment, this additional statement was included in the pattern plus bias-refutation condition:

Many jurors incorrectly believe that it is appropriate to add up the number of aggravators and mitigators and vote for a death sentence if there are more aggravators, or a life sentence if there are more mitigators. This is not correct. It is not appropriate to simply add up the aggravating and mitigating factors to see which side has more. For example, a jury may decide that one aggravating factor outweighs two mitigating factors or that one mitigating factor outweighs two aggravating factors.

To address jurors’ notion that the jury has to be unanimous that a mitigating factor exists in order to consider it, the following statement was added in the pattern plus bias-refutation condition:

Many jurors believe that the jury has to be unanimous that a mitigating factor exists in order for it to be considered. This is not true. If only one juror believes that a mitigating factor exists then that juror may still use it as a reason to recommend a life sentence without the possibility of parole.

The fifth two-sided message strategy inserted in the pattern plus bias-refutation condition addressed jurors belief that in particular instances the law demands a particular verdict. The following statement was included:

Many jurors believe that they are not responsible for their decision because the law demands a particular verdict. This is not the case. Each juror must consider the evidence
in the case to decide what sentence is appropriate. The weight of the evidence in this particular case should be used to decide whether to recommend a life sentence without the possibility of parole or a death sentence.

The full text of the pattern instructions is provided in Appendix B, and the full text of the pattern instructions with bias refutation statements is provided in Appendix C.

**Dependent Measures**

There were two dependent variables in this research. The first was verdict recommendation. The second was juror comprehension of the law.

**Verdict Recommendation**

Verdict recommendation was measured by asking research participants, “For Mr. Butler, toward which sentencing recommendation are you leaning?” Research participants had the option of selecting life in prison without the possibility of parole or death. This measure was similar to the one used by Diamond and Levi (1996) who asked subjects to indicate which verdict they were “leaning” toward rather than asking for a certain decision.

**Comprehension of Capital Sentencing Instructions**

Getting jurors to understand judicial instructions is similar to instructing students. It makes sense, therefore, to look to the educational literature for a conceptualization of comprehension. According to Bloom (1956, p. 89), the standard of comprehension is described as “when students are confronted with a communication they are expected to know what is being communicated and to be able to make some use of the materials or ideas contained in it.” Bloom
then defined two dimensions of comprehension that are relevant to the proposed study. The first is translation, which involves putting communication in “another language, into other terms, or into another form of communication” (p. 89). The second type of comprehension is interpretation, “which involves dealing with a communication as a configuration of ideas whose comprehension may require a reordering of the ideas into a new configuration in the mind of the individual” (p. 90).

The operational measures used by past researchers have face validity for these two dimensions of comprehension. Regarding translation, Charrow and Charrow (1979) had research participants paraphrase the instructions to which they were exposed (for another example of translation see Haney & Lynch, 1994). Concerning interpretation, Blankenship, Luginbuhl, Cullen, and Redick (1997) gave research participants jury deliberation scenarios and asked them if the actions in the scenario were legally correct (also see Frank and Applegate, 1998). In other words, research participants had to interpret whether or not the communication they heard (i.e., judicial instruction) was consistent or inconsistent with the scenario. On their face, it appears that past operational measures of comprehension are consistent with the conceptualization of the term in the educational literature.

In terms of the jury’s ability to apply the law to a particular case, interpretation is the most salient dimension. Translation, while an important aspect of comprehension, is not something jurors would be called upon to do in practice. By using measures previously developed to assess comprehension as interpretation, the present study has good face validity.

To assess comprehension of capital sentencing instructions, research participants were asked to evaluate jury deliberation scenarios and report on whether the hypothetical jury or juror...
followed the law. In addition, research participants were asked multiple choice comprehension questions. For both types of questions, research participants had the opportunity to select “I don’t know” as a response. In the comprehension areas of burden of proof for mitigators, non-enumerated mitigators, weighing, and unanimity on mitigating factors, the scenarios were taken from questions used by Blankenship et al. (1997). The perceived personal responsibility scenario and multiple-choice question were written for this study. The multiple choice questions used in the area of burden of proof for mitigators, non-enumerated mitigators, and unanimity on mitigating factors were used by Frank and Applegate (1998). So that research participants were not confused by the new facts in the scenarios, they were instructed that the examples in the question were unrelated to the facts given by the judge. This instruction was given to subjects because in the scenario questions participants were given examples of mitigation that were not relevant to the Butler case.

**Burden of Proof for Mitigating Factors.** The following multiple-choice question and scenario were used to assess whether the research participants understood the law with regard to burden of proof for mitigating circumstances:

**Burden of Proof for Mitigating Factors – 1**
Based on your understanding of the judge’s instructions, for a factor in favor of a life sentence to be considered, it has to be …

A. proved beyond a reasonable doubt 
B. proved by a preponderance of the evidence 
C. proved so that a juror is reasonably convinced that it exists 
D. I don’t know 
(Correct Answer = C)

**Burden of Proof for Mitigating Factors – 2**
The jurors hear evidence that the defendant cooperated with the police. The jurors agree that this is mitigating evidence, but they do not believe it has been proven beyond a
reasonable doubt. The jury therefore does not consider the defendant’s cooperation as a mitigating circumstance. Did the jury follow the law? (Correct Answer = No)

Unenumerated Mitigating Factors. The following multiple-choice question and two scenarios were used to assess whether the research participants understood the law with regard to consideration of non-enumerated mitigating circumstances:

Unenumerated Mitigating Factors – 1
Based on your understanding of the judge’s instructions, what factors in favor of a life sentence instead of a death sentence can the jury consider?
A. any mitigating factor that made the crime not as bad
B. only a specific list of mitigating factors mentioned by the judge
C. only mitigating factors that would excuse the crime
D. I don’t know
(Correct Answer = A)

Unenumerated Mitigating Factors – 2
The jurors hear evidence that the defendant was well-behaved as a boy. They also believe this is mitigating evidence. However, one juror notes that being a good child is not one of the mitigating circumstances that the judge specifically mentioned. For this reason she concludes that she cannot consider this as a mitigating circumstance. Did the juror follow the law? (Correct answer = No)

Unenumerated Mitigating Factors – 3
The jurors decide from the evidence that the defendant felt great remorse for committing the murder. They also decide that remorse is a mitigating circumstance, even though remorse was not one of the mitigating circumstances specifically mentioned by the judge. In deciding whether to recommend a life sentence or the death penalty, they consider the defendant’s remorse as a mitigating circumstance anyway. Did the jury follow the law? (Correct answer = Yes)

In the latter scenario, the word “impose” which was used by Blankenship et al. (1997) was replaced with the word “recommend” because in Florida the jury renders an advisory verdict (F.S. 921.141).
**Weighing Aggravating and Mitigating Factors.** The following scenarios were used to assess research participants’ understanding of the appropriate method of weighing aggravating and mitigating factors:

*Weighing of Aggravators and Mitigators – 1*
The jury finds the existence of three aggravating circumstances and only two mitigating circumstances. Since the jury counted more aggravating circumstances than mitigating circumstances, the jury votes to recommend a death sentence. Did the jury follow the law? (Correct answer = No)

*Weighing of Aggravators and Mitigators – 2*
The jurors unanimously agree that the murder was especially heinous, atrocious, or cruel. They also agree that this is an aggravating circumstance, and that it is not outweighed by the mitigating circumstances that exist as they interpret the instructions. This means they must vote to recommend the death penalty, and they do so. Did the jury follow the law? (Correct answer = Yes)

The wording of the above scenarios was altered from the original to make it consistent with the jury’s advisory role (F.S. 921.141).

**Unanimity on Mitigating Factors.** The following multiple-choice question and two scenarios were used to assess research participants’ understanding of the issue of jury unanimity on the existence of mitigating circumstances:

*Unanimity on Mitigators – 1*
Based on your understanding of the judge’s instructions, for a factor in favor of a life sentence without the possibility of parole over a death sentence to be considered by the jury in making their sentencing decision…
A. all jurors have to agree on that factor
B. jurors do not have to agree unanimously on that factor
C. I don’t know
(Correct Answer = B)

*Unanimity on Mitigators – 2*
Eleven jurors decide from the evidence that the defendant was abused as a child. The same eleven jurors decide that this history of child abuse is a mitigating circumstance. One juror disagrees that such abuse is a mitigating circumstance. Since the jurors cannot
unanimously agree that being abused as a child is a mitigating circumstance, they do not consider it any further. Did the jury follow the law? (Correct answer = No)

**Unanimity on Mitigators – 3**
The defendant was only 25 years of age when he committed the murder. A juror decides that the defendant’s age is a mitigating circumstance. However, the other eleven jurors disagree and insist that his age is not a mitigating circumstance. This one juror believes that she cannot consider a mitigating circumstance unless the entire jury unanimously agrees that it exists. She therefore votes for the death penalty. Did the juror follow the law? (Correct answer = No)

**Perceived Personal Responsibility.** The following multiple-choice question and scenario were used to assess whether jurors understand that the law does not demand a particular verdict:

**Perceived Personal Responsibility – 1**
Based on your understanding of the judge’s instructions, which of the following sentences does Florida law say should be the penalty for capital murder?
A. death sentence  
B. life in prison without the possibility of parole  
C. the jury must decide in each individual case which sentence to recommend  
D. I don’t know  
(Correct Answer = C)

**Perceived Personal Responsibility – 2**
One juror feels uneasy about recommending a death sentence. The other jurors explain to this holdout juror that the law demands a death recommendation and that the advisory sentence is out of the jury’s hands. The holdout juror joins the majority. Did the jury follow the law? (Correct answer = No)

All measures were coded as either correct or incorrect (i.e., correct = 1 and incorrect = 0). A selection of “I don’t know” was coded as incorrect. An overall comprehension score was computed by calculating the percent of questions that a participant answered correctly. Two subjects did not respond to all of the comprehensions questions. These subjects were excluded from all analyses that examined total comprehension score.
Additional Measures

There were four additional types of measures in this research. The first set of measures was designed as a validity check. The second group of measures assessed covariates that could be related to one of the dependent variables. The third set of measures assessed subjects’ capital-juror eligibility. The fourth type of measures collected basic demographic data.

Validity Check

As a type of validity check, research participants were asked other comprehension questions not related to the areas of miscomprehension that the pattern plus bias-refutation instructions addressed. Research participants were asked about the meaning of “aggravating factors” and “mitigating factors.” These questions came from Frank and Applegate (1998). Because no particular biases were apparent on the meanings of aggravation and mitigation and no effort was made to improve comprehension of these areas, it was expected that research participants in the treatment and control conditions would show similar levels of comprehension of the meaning of aggravating and mitigating circumstances.

Covariates

Participants were asked to assess the likelihood that Mr. Butler is guilty of murder. This was done to assess the possibility that participants recommended a life sentence without the possibility of parole because of doubts about Mr. Butler’s guilt (Geimer & Amsterdam, 1988; Haney, Sontag, & Constanzo, 1994; Hoffman, 1995).

In a series of five questions, participants were asked to indicate their level of worry about a non-executed defendant being released, escaping, harming another inmate, harming a guard,
and not getting as much punishment as he deserves. These questions were asked to assess the impact of these concerns on verdict recommendation. Previous research has suggested that concern about the future dangerousness of a non-executed capital defendant is one reason that jurors reach a sentence of death. For example, capital jurors often erroneously believe that a defendant sentenced to LWOP will be released. Because of this belief, jurors often sentence a defendant to death (Foglia, 2003).

Subjects were asked if they had declared a major, and if they indicated that they had, they were then asked in an open-ended question to state their major. These responses were then coded as either a criminal justice/legal studies major or a non-major. These questions were asked to assess the relationship between major and comprehension.

**Capital-Juror Eligibility**

To determine whether participants were eligible to serve on a jury, they were asked to answer “yes,” “no,” or “not sure” to the following question:

The following are the requirements to serve on a jury:

*Jurors must be United States citizens.*
*Jurors must be at least eighteen years old.*
*Jurors cannot be full-time law enforcement officers.*
*Jurors cannot be convicted felons unless they have had their civil rights restored.*

Based on the above requirements, do you believe you are eligible to serve on a jury? Answering “yes” to this question was necessary for subjects to be treated as juror-eligible (see F.S. 40.01 and F.S. 40.013). Meeting the requirement of juror eligibility was necessary for participants to be treated as capital-juror eligible.
To determine whether respondents were eligible to serve on a capital jury, they were death and life qualified. Death-qualified jurors are those jurors who would be able to vote for a death sentence if the evidence supported it. To put it another way, death-qualified jurors do not have any conscientious scruples that would prohibit them from voting for a sentence of death that was justified by the evidence. The practice of disqualifying jurors from serving on capital juries because they could not impose a sentence of death was allowed by the Supreme Court in Witherspoon v. Illinois (1968) and reaffirmed in Wainwright v. Witt (1985). In contrast, life-qualified jurors are those jurors who would be able to vote for a life sentence if the evidence supported it. In other words, life-qualified jurors do not have a belief that all defendants convicted of capital murder should be sentenced to death. The Supreme Court, in Morgan v. Illinois (1992), endorsed the practice of challenging jurors for cause who would always vote for a death sentence if the defendant were convicted of a capital crime.

The following question was used to death and life qualify subjects:

Please read each of the following statements completely and then indicate the one statement that comes closest to how you would feel if you were a juror in a death penalty case.

I am strongly in favor of capital punishment: I would vote for a sentence of death in all cases where the law allowed it and I was sure, beyond a reasonable doubt, that the defendant was guilty of the crime.

I generally favor the death penalty, but I would sometimes vote for a sentence of life in prison without the possibility of parole, if I believed that the evidence supported such a sentence.

I neither favor nor oppose the death penalty.

I generally oppose the death penalty, but would sometimes vote for a sentence of death if I believed that the evidence supported such a conclusion.
I strongly oppose the death penalty, and would never vote for it, even in the worst cases of murder.

Participants who selected any of the middle three options were treated as being both death and life qualified. Subjects who choose the first option were treated as being not life qualified. Subjects who choose the last option were treated as not being death qualified. This question was used by Frank and Applegate (1998).

**Demographics**

Research participants were asked to report their gender, age, and race. This information was only collected to describe the sample. There is no theoretical reason to suggest that these variables have an impact on comprehension. In examining the literature, Liberman and Sales (1997) concluded that there was no relationship between age or gender and comprehension. In addition to finding no relationship between age or gender and comprehension, Frank and Applegate (1998) found no relationship between race and instruction comprehension. A number of researchers have found a relationship between education and instruction comprehension (e.g., Buchanan, Pryor, Taylor & Strawn 1978; Charrow & Charrow, 1979; Diamond & Levi, 1996; Frank & Applegate, 1998). Because the college students used in this study were homogeneous with regard to education (i.e., they had some college), no education data was collected. A copy of the questionnaire, containing all measures, is included in Appendix D.
**Analysis Strategy**

The focus of this research is on the internal validity of the relationship between instruction type and comprehension of the instructions. Thus, the preference is to retain as many cases as possible. However, to give consideration to the possible generalizability of these results to actual capital juries, two sets of analyses were conducted, one for all subjects and one for capital-juror eligible subjects. This allows for a determination of whether the findings differ substantially when those who would not be eligible to serve on a capital jury are excluded from the analysis.

In the interpretation of the analyses to follow, consideration is given to whether observed relationships are statistically significant. Following convention, statistical tests are regarded as significant if the probability of a Type I error is less than or equal to 5 percent. Cohen (1994), however, observes that the traditional .05 level is arbitrary and that adherence to it can lead to erroneous conclusions about the generalizability of relationships. Recognizing these facts, results are reported that are near but not equal to or below the .05 cut off as “approaching significance,” “borderline significant,” or with other phrases that recognize a slightly higher risk of falsely rejecting the null hypothesis. Such terminology and interpretation are common in the literature on jury comprehension (see, for example, Buchanan, Pryor, Taylor & Strawn, 1978; Diamond & Levi, 1996; Smith, 1991). Here, the use of these terms reflects an a priori choice to be somewhat flexible in the interpretation of statistical significance. These phrases should not be understood as a change in the acceptable level of significance after-the-fact. Probability levels are reported throughout so that the reader may also apply his or her own interpretations.
CHAPTER 4: RESULTS

The Relationship between Condition and Overall Comprehension

Twelve questions assessed subjects’ comprehension of those five areas addressed by the bias-refutation statements. For each subject who responded to all twelve questions, a comprehension score was calculated by dividing the number of correct responses by twelve. Overall, participants answered 53.3% ($N = 197$, $SD = 24.4$) of the questions correctly. Subjects in the treatment condition were exposed to capital jury sentencing instructions that mentioned and refuted biases in known areas of miscomprehension, whereas subjects in the control condition heard the capital-jury instructions without the additional statements. Participants in the control condition answered 46.3% ($n = 92$, $SD = 21.0$) of these questions correctly. Participants in the treatment condition answered 59.4% ($n = 105$, $SD = 25.6$) of the questions correctly. This difference was statistically significant, $t(195) = 3.885$, $p < .001$.

A second analysis was performed for those subjects who were capital-juror eligible. Excluded from this analysis were subjects who indicated they were younger than 18, believed they were not eligible to be a juror, or confessed that they would always recommend either a death or life sentence regardless of the facts of any individual case. Overall, these participants answered 55.5% ($n = 142$, $SD = 24.3$) of the comprehension questions correctly. Subjects in the control condition answered 47.5% ($n = 62$, $SD = 21.2$) of the comprehension questions correctly, whereas those in the treatment condition answered 61.8% ($n = 80$, $SD = 24.9$) of the questions correctly. This difference was statistically significant, $t(140) = 3.623$, $p < .001$.

To assess the impact of major on comprehension, a 2 (treatment versus control) x 2 (criminal justice/legal studies major versus non-major) between-subjects ANOVA on
comprehension of the five areas addressed by the bias-refutation statements was calculated. For all subjects, a significant main effect was observed for condition with subjects in the treatment condition answering more questions correctly, $F(1, 177) = 11.227, p = .001$. A significant main effect was also observed for major, $F(1, 177) = 6.317, p = .013$. Criminal justice/legal studies majors answered 60.0% ($n = 71$, $SD = 23.0$) of the questions correctly, whereas non-criminal justice/legal studies majors answered 50.6% ($n = 107$, $SD = 24.7$) of the questions correctly. No interaction of treatment x major was observed.

The above analysis was repeated for capital-juror eligible participants. For these subjects, a significant main effect was observed for condition with subjects in the treatment condition answering more questions correctly, $F(1, 129) = 8.573, p = .004$. A borderline significant main effect was observed for major, $F(1, 129) = 3.724, p = .056$. Criminal justice/legal studies majors answered 62.2% ($n = 50$, $SD = 23.2$) of the questions correctly, whereas non-majors answered 52.8% ($n = 80$, $SD = 24.2$) of the questions correctly. For capital-juror eligible participants, no interaction of treatment x major was observed.

**Responses to Individual Comprehension Items**

Table 3.1 depicts the relationship between condition and comprehension of the individual items (The title of the items are matched with the individual questions in the methodology). Listed in this table are those comprehension questions that were addressed by the bias-refutation statements in the treatment condition. Significant differences were observed for 7 of these 12 items. Among all of these significant differences, the comprehension level was higher in the treatment condition than in the control condition. A closer examination of Table 3.1 reveals that
the bias-refutation statements were more successful in some areas than in others at improving comprehension of the law. One area of the law on which the bias-refutation statements had no apparent effect was in dispelling jurors’ notion that they were not responsible for their decision. In the other four comprehension areas, at least one of the questions measuring the legal concept showed significant improvement in the treatment condition. In two comprehension areas, burden of proof for mitigating factors and unenumerated mitigating factors, all of the comprehension questions were answered correctly more often by subjects in the treatment condition, and these differences were significant. Lastly, one question, the third on unanimity on mitigators, showed borderline statistical improvement in the treatment condition.
Table 3.1: Comprehension Levels on Individual Items for all Subjects

<table>
<thead>
<tr>
<th>Comprehension Item</th>
<th>Control</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burden of Proof for Mitigating Factors – 1**</td>
<td>25.8%</td>
<td>41.5%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
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<tr>
<td>Burden of Proof for Mitigating Factors – 2**</td>
<td>29.0%</td>
<td>43.4%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
</tr>
<tr>
<td>Unenumerated Mitigating Factors – 1**</td>
<td>39.8%</td>
<td>54.3%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 105</td>
</tr>
<tr>
<td>Unenumerated Mitigating Factors – 2***</td>
<td>12.9%</td>
<td>33.0%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
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<tr>
<td>Unenumerated Mitigating Factors – 3**</td>
<td>30.1%</td>
<td>45.3%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
</tr>
<tr>
<td>Perceived Personal Responsibility – 1</td>
<td>62.0%</td>
<td>66.7%</td>
</tr>
<tr>
<td></td>
<td>n = 92</td>
<td>n = 105</td>
</tr>
<tr>
<td>Perceived Personal Responsibility – 2</td>
<td>65.6%</td>
<td>71.7%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
</tr>
<tr>
<td>Unanimity on Mitigators – 1</td>
<td>61.3%</td>
<td>68.9%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
</tr>
<tr>
<td>Unanimity on Mitigators – 2***</td>
<td>44.1%</td>
<td>65.1%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
</tr>
<tr>
<td>Unanimity on Mitigators – 3*</td>
<td>60.2%</td>
<td>72.6%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
</tr>
<tr>
<td>Weighing of Aggravators And Mitigators - 1***</td>
<td>41.9%</td>
<td>67.0%</td>
</tr>
<tr>
<td></td>
<td>n = 93</td>
<td>n = 106</td>
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<tr>
<td>Weighing of Aggravators And Mitigators – 2</td>
<td>79.6%</td>
<td>80.2%</td>
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<td></td>
<td>n = 93</td>
<td>n = 106</td>
</tr>
</tbody>
</table>

*  $p < .10$, independent samples t-test
** $p < .05$, independent samples t-test
*** $p < .01$, independent samples t-test
A second analysis of the individual items examined only those subjects who were capital-juror eligible. Table 3.2 depicts the relationship between condition and comprehension of the individual items for capital-juror eligible subjects. As with Table 3.1, this table lists those comprehension questions that were addressed by the bias-refutation statements in the treatment condition. Statistically significant differences were observed for 4 of the 12 comprehension items. Among all of these statistically significant differences, comprehension was higher in the treatment condition. Additionally, three questions showed borderline statistical improvement in the treatment condition.

Comparing this table to Table 3.1, it can be seen that two questions that were statistically significant for all subjects, the second question on burden of proof for mitigating factors and the second question on unanimity on mitigators, showed only borderline statistical improvement for capital-juror eligible subjects in the treatment condition. Another difference emerged between the subject groups: for capital-juror eligible subjects, the third question on unenumerated mitigating factors showed no significant difference between the treatment and control condition, although among all subjects, a significant difference was observed for this question. Because the pattern of results shown in Tables 3.1 and 3.2 are quite similar, the differences in statistical significance likely reflect the smaller number of cases – and, thus, reduced statistical power – of the analysis using only capital-juror eligible respondents.
Table 3.2: Comprehension Levels on Individual Items for Capital-Juror Eligible Subjects

<table>
<thead>
<tr>
<th>Comprehension Item</th>
<th>Control</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burden of Proof for Mitigating Factors – 1**</td>
<td>23.8%</td>
<td>44.4%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Burden of Proof for Mitigating Factors – 2*</td>
<td>31.8%</td>
<td>45.7%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Unenumerated Mitigating Factors – 1**</td>
<td>38.1%</td>
<td>58.8%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 80</td>
<td></td>
</tr>
<tr>
<td>Unenumerated Mitigating Factors – 2 ***</td>
<td>14.3%</td>
<td>33.3%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Unenumerated Mitigating Factors – 3</td>
<td>31.8%</td>
<td>44.4%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Perceived Personal Responsibility – 1</td>
<td>64.5%</td>
<td>66.3%</td>
</tr>
<tr>
<td>n = 62</td>
<td>n = 80</td>
<td></td>
</tr>
<tr>
<td>Perceived Personal Responsibility – 2</td>
<td>71.4%</td>
<td>74.1%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Unanimity on Mitigators – 1</td>
<td>63.5%</td>
<td>70.4%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Unanimity on Mitigators – 2*</td>
<td>50.8%</td>
<td>66.7%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Unanimity on Mitigators – 3*</td>
<td>58.7%</td>
<td>72.8%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Weighing of Aggravators And Mitigators – 1***</td>
<td>34.9%</td>
<td>74.1%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
<tr>
<td>Weighing of Aggravators And Mitigators – 2</td>
<td>81.0%</td>
<td>86.4%</td>
</tr>
<tr>
<td>n = 63</td>
<td>n = 81</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .10$, independent samples t-test
** $p < .05$, independent samples t-test
*** $p < .01$, independent samples t-test
Two additional questions, not listed in the tables, addressed subjects’ understanding of the meaning of “aggravation” and “mitigation.” Among all subjects (\(N = 198\)), 60.1% were able to correctly identify the meaning of a mitigating factor, and 82.3% were able to correctly identify the meaning of an aggravating factor. Among capital-juror eligible subjects (\(n = 143\)), 62.9% were able to correctly identify the meaning of a mitigating factor and 83.2% were able to correctly identify the meaning of an aggravating factor. Because the bias-refutation statements did not address the meaning of these words, it was expected that for these questions no significant differences would be observed between the treatment and control condition, and no significant differences were observed between the conditions for these variables. For the question on the meaning of an aggravating factor, there was no significant difference between the treatment and control group when examining all subjects, \(t(196) = -0.535, p = .593\), or capital-juror eligible subjects, \(t(141) = -0.705, p = .482\). For the question on the meaning of a mitigating factor, there was no significant difference between the treatment and control group when examining all subjects, \(t(196) = -0.320, p = .749\), or capital-juror eligible subjects, \(t(141) = -0.121, p = .904\).

**Variables in the Multivariate Analyses**

Hypothesis 7 predicted that increased comprehension of capital sentencing instructions would be associated with a sentencing recommendation of life in prison without the possibility of parole. To provide a test of this hypothesis and to examine other factors that may have been related to verdict recommendation, two logistic regressions – one for all subjects and one for
capital-juror eligible subjects – were calculated. Before the results of those regressions are presented, however, the variables in the equations are discussed.

**Comprehension Score**

The first independent variable included in the equation was the comprehension score for all 14 test questions including the questions on the meaning of aggravation and mitigation. Including these questions was deemed appropriate because understanding the meaning of these terms is necessary for comprehension of the other elements of capital sentencing instructions. Comprehension score was calculated by taking the number of questions the subject answered correctly and dividing by 14. This number was then multiplied by 100. Overall comprehension for this measure was 55.8% ($N = 197$, $SD = 22.7$). For capital-juror eligible subjects, the mean percentage correct was 58.1% ($N = 142$, $SD = 22.1$)

**Subjects’ Belief in Mr. Butler’s Guilt**

Participants were asked to express their belief in the likelihood that Mr. Butler murdered his wife. Table 3.3 depicts subjects’ responses to this question. As can be seen from the table, nearly all the responses fell into two categories. Most participants believed it was very likely that Mr. Butler murdered his wife. A sizable portion believed that it was somewhat likely that Mr. Butler murdered his wife. Because 96% of the respondents fell into two categories, the variable was recoded into a dichotomous variable. Subjects who indicated that they thought it very likely that Mr. Butler murdered his wife were put into one category, while all other
respondents were put into the other category (1 = those who were not sure that Mr. Butler committed murder, 0 = those who were sure Mr. Butler committed murder).

Table 3.3: Subjects’ Belief in Mr. Butler’s Guilt

<table>
<thead>
<tr>
<th>Likert Response Category</th>
<th>Frequency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Likely</td>
<td>61%</td>
<td>122</td>
</tr>
<tr>
<td>Somewhat Likely</td>
<td>35%</td>
<td>70</td>
</tr>
<tr>
<td>Neutral/No Opinion</td>
<td>2%</td>
<td>4</td>
</tr>
<tr>
<td>Somewhat Unlikely</td>
<td>2%</td>
<td>3</td>
</tr>
<tr>
<td>Very Unlikely</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

Concern about the Future of a Non-Executed Defendant

Table 3.4 depicts the level of worry respondents had about the future of a non-executed defendant. Scores on these variables can range from one to four (1 = not at all worried, 2 = slightly worried, 3 = somewhat worried, 4 = very worried). As can be seen from the table, respondents were most worried that a non-executed defendant would not be getting what he deserved. Respondents were least worried about a non-executed inmate harming another inmate or escaping from prison. Reliability analysis showed that these items were all measuring the same thing, Cronbach’s Alpha = .74. Reliability would not have been improved by dropping any one of these questions from the analysis. Because reliability was acceptable and would not have been improved by dropping a question, these five questions were combined into an index variable by summing the individual items and dividing by five. Descriptive statistics for the
index are also depicted in Table 3.4. Overall, participants were a little more than slightly worried about the possible negative effects of not executing a capital defendant.

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>How worried are you that a capital defendant who is not executed will be released from prison someday?</td>
<td>2.37</td>
<td>1.00</td>
<td>199</td>
</tr>
<tr>
<td>How worried are you that a capital defendant who is not executed will escape from prison?</td>
<td>1.87</td>
<td>.93</td>
<td>199</td>
</tr>
<tr>
<td>How worried are you that a capital defendant who is not executed will harm another prison inmate?</td>
<td>1.86</td>
<td>.94</td>
<td>198</td>
</tr>
<tr>
<td>How worried are you that a capital defendant who is not executed will harm a prison guard?</td>
<td>2.24</td>
<td>1.07</td>
<td>199</td>
</tr>
<tr>
<td>How worried are you that a capital defendant who is not executed will not get as much punishment as he deserves?</td>
<td>2.56</td>
<td>1.07</td>
<td>199</td>
</tr>
<tr>
<td>Index of the five “worried” questions</td>
<td>2.18</td>
<td>.68</td>
<td>198</td>
</tr>
</tbody>
</table>

**Multivariate Analysis on Verdict**

Two binary logistic regressions were calculated. The first was for all subjects. The second was for capital-juror eligible subjects. The dependent measure for both analyses was sentencing recommendation (1 = life, 0 = death). Among all subjects, 66.7% (n = 132) recommended life, and 33.3% (n = 66) recommended death.
All Subjects

For all subjects, logistic regression analysis was employed to predict the probability that a subject would recommend a life sentence instead of a death sentence. As stated earlier, the predictor variables were subjects’ perception of Mr. Butler’s guilt, subjects’ understanding of capital sentencing instructions, and subjects’ concern over the future of a non-executed defendant. A test of the full model versus a model with intercept only was statistically significant, $\chi^2 (3, N = 195) = 58.385, p < .001$. The model was able to correctly classify 55.4% of those who recommended a death sentence and 80.0% of those who recommended a life sentence for an overall success rate of 71.8%. Nagelkerke $R^2$ was .359.

Table 3.5 shows the logistic regression coefficient, Wald test, and odds ratio for each of the predictors. Subjects’ perceptions of Mr. Butler’s guilt and subjects’ comprehension score were significantly related to sentencing recommendation. Subjects who understood the instructions were moderately more likely to recommend a life sentence. Specifically, controlling for all other variables, every one-percentage point increase in comprehension score increases the odds of a life verdict by 1.6%. The odds ratio for subjects’ perception of Mr. Butler’s guilt shows that when holding all other variables constant a subject who is not sure Mr. Butler is guilty is over 20 times more likely to recommend a life sentence.
Table 3.5: Predicting the Probability of Recommending a Life Sentence For All Subjects

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>Wald $\chi^2$</th>
<th>$p$</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Guilt</td>
<td>2.998</td>
<td>28.806</td>
<td>.000</td>
<td>20.041</td>
</tr>
<tr>
<td>Comprehension Score</td>
<td>0.016</td>
<td>3.860</td>
<td>.049</td>
<td>1.016</td>
</tr>
<tr>
<td>Concern Over the Future of a Non-executed Defendant</td>
<td>-.484</td>
<td>3.263</td>
<td>.071</td>
<td>.616</td>
</tr>
</tbody>
</table>

Capital-Juror Eligible Subjects

The same analysis as above was performed for only capital-juror eligible subjects. A test of the full model versus a model with intercept only was statistically significant, $\chi^2 (3, n = 141) = 40.413, p < .001$. The model was able to correctly classify 43.2% of those who recommended a death sentence and 83.5% of those who recommended a life sentence for an overall success rate of 70.9%. Nagelkerke $R^2$ was .350.

Table 3.6 shows the logistic regression coefficient, Wald test, and odds ratio for each of the predictors. Among capital-juror eligible subjects, the only predictor variable significantly related to the dependent variable was subjects’ perceptions of Mr. Butler’s guilt. Controlling for the other predictor variables, uncertainty about Mr. Butler’s guilt increases the odds of a life sentence more than 27 times. As with all subjects, level of comprehension was related to verdict recommendation, but this relationship only approached significance ($p < .10$).
Table 3.6: Predicting the Probability of Recommending a Life Sentence For Capital-Juror Eligible Subjects

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>Wald χ²</th>
<th>p</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Guilt</td>
<td>3.319</td>
<td>18.923</td>
<td>.000</td>
<td>27.620</td>
</tr>
<tr>
<td>Comprehension Score</td>
<td>0.016</td>
<td>2.731</td>
<td>.098</td>
<td>1.016</td>
</tr>
<tr>
<td>Concern Over the Future of a Non-executed Defendant</td>
<td>-0.105</td>
<td>0.102</td>
<td>.750</td>
<td>.900</td>
</tr>
</tbody>
</table>
 CHAPTER 5: DISCUSSION

 Overview of the Chapter

In this dissertation, the prediction that a bias-reduction approach could improve juror understanding of capital sentencing instructions was tested. Additionally, the relationship between comprehension of capital sentencing instructions and verdict recommendation was assessed. Both of these predictions were tested by randomly varying the type of instruction (i.e., standard pattern instructions or standard pattern instructions plus statements that mention and refute comprehension biases) for individual subjects and then asking subjects to answer comprehension questions and render a hypothetical verdict.

In this section, the level of observed support for each of the seven hypotheses is discussed. Next, the practical implications of these findings are stated. Third, directions for future research are discussed. Within in this latter section, the weaknesses of the current study are noted.

 The Effect of the Treatment on Instruction Comprehension

Hypothesis 1 predicted that capital sentencing instructions that included statements addressing juror biases would improve mock juror performance on comprehension measures. The results of this experiment support the first hypothesis. Comprehension was higher for subjects exposed to the pattern instructions with bias-refutation statements than for subjects who were only exposed to the pattern instructions. When examining overall performance on the comprehension measures addressed by the bias-refutation statements, subjects in the treatment condition answered 13.1% more of the questions correctly than subjects in the control condition.
Among capital-juror eligible subjects, subjects in the treatment condition answered 14.3% more of the questions correctly than subjects in the control condition. It is unlikely that these differences were the result of chance.

Hypothesis 1 was supported. This supportive finding is consistent with the work of Smith (1993) who demonstrated that comprehension of judicial instructions could be increased by exposing subjects to statements that mention and refute comprehension biases. Smith’s research involved definitions of various crimes (e.g., kidnapping), while the present work demonstrates the efficacy of this bias-refutation approach with sentencing instructions for the penalty phase of a capital trial.

**Burden of Proof For Mitigators**

Hypothesis 2 predicted that capital sentencing instructions that included a statement mentioning and refuting juror bias regarding the level of proof required for mitigating circumstances would improve mock juror performance on relevant comprehension measures. Two questions measured subjects’ understanding of the rule that a juror need only be reasonably convinced that a mitigating factor exists for it to be considered as established. Among all subjects, comprehension was significantly higher for subjects exposed to the bias-refutation statement on burden of proof for mitigating factors. This effect was observed for both questions. Among capital-juror eligible subjects, comprehension was higher for subjects exposed to the bias-refutation statement on burden of proof for mitigating factors, but these differences were significantly different for only one of the two questions measuring this concept. However, the non-significant difference approached statistical significance ($p < .10$).
Although Hypothesis 2 was not supported by every analysis, the bulk of the findings suggest strong support. The only unsupportive finding was a difference that was borderline significant when examining only capital-juror eligible subjects. This finding could be a Type II error. For the measure that was borderline significant, the probability of finding a statistically significant difference if one actually existed was 38.7% (Faul & Erdfelder, 1992). Statistical power was low because the effect size between the treatment and control condition was smaller than expected. The number of capital-juror eligible subjects used in this experiment was based on an assumption of a medium effect size. The observed effect size for the measure that only approached statistical significance was small (for a discussion of “small,” “medium,” and “large” effect sizes see Cohen, 1988).

**Unenumerated Mitigating Factors**

Hypothesis 3 predicted that capital sentencing instructions that included a statement mentioning and refuting juror bias regarding consideration of non-enumerated mitigating factors would improve mock juror performance on relevant comprehension measures. Three questions measured subjects’ understanding of the rule that jurors may consider mitigating factors other than those enumerated in the instructions so long as the evidence supports them. When examining all subjects, significant differences emerged for all three of the comprehension items. For all of these statistically significant differences, comprehension was higher for subjects exposed to the bias-refutation statement on unenumerated mitigating factors. When examining capital-juror eligible subjects, significant differences were observed on two of the three comprehension measures. For these two statistically significant differences, comprehension was
higher for participants exposed to the bias-refutation statement on unenumerated mitigating factors.

The results suggest strong, although not unequivocal, support for Hypothesis 3. As with Hypothesis 2, the one non-significant result could be a Type II error. For this measure, statistical power was 33.1% (Faul & Erdfelder, 1992).

**Weighing Aggravating and Mitigating Factors**

Hypothesis 4 predicted that capital sentencing instructions that included a statement mentioning and refuting juror bias regarding the appropriate method of weighing aggravating and mitigating factors would improve mock juror performance on relevant comprehension measures. Two questions measured subjects’ understanding of the rule that the weighing process is qualitative rather than quantitative. For one of the questions, statistically significant differences were observed for all subjects and capital-juror eligible subjects. An examination of these statistically significant results revealed that comprehension was higher for participants exposed to the bias-refutation statement on weighing of aggravating and mitigating factors. For the other question on weighing of aggravating and mitigating factors, no significant differences were observed for either all participants or capital-juror eligible participants.

Hypothesis 4 received mixed support. The divergent findings among the comprehension questions may have been a function of the bias-refutation statement on weighing of aggravators and mitigators and the questions measuring understanding of this concept. Recall that the bias-refutation statement on weighing specifically addressed jurors’ propensity for adding up the number of aggravators and mitigators and using the quantitative result to make a sentencing
recommendation (e.g., because there are three aggravators and two mitigators, the misguided jury would recommend death). Significant differences and support for Hypothesis 4 were found when examining the question that directly measured participants’ understanding of the issue addressed by the bias-refutation statement. This question asked subjects if it was appropriate to add up the number of aggravators and mitigators as a method of making a sentencing recommendation. The question for which no significant differences were observed between the treatment and control group asked subjects if a death sentence was warranted when the aggravating factors outweighed the mitigating factors. This question asked about the weighing process, but it did not tap into the specific misconception addressed by the bias-refutation statement. In addition to the question not addressing the specific misconception addressed by the bias-refutation statement, it is logically possible for subjects to believe the quantitative approach is the correct one and still answer this question correctly.

**Unanimity on Mitigators**

Hypothesis 5 predicted that capital sentencing instructions that included a statement mentioning and refuting juror bias regarding the level of agreement required to consider a mitigating factor would improve mock juror performance on relevant comprehension measures. Three questions measured subjects understanding of the rule that a jury does not have to unanimously agree that a mitigating factor has been established for it to be considered by an individual juror or jurors who believe it has been established. For one of these three questions, no significant differences were observed between subjects exposed to the bias-refutation statement on unanimity on mitigators and those who were not. This non-significant finding was
observed when examining either all subjects or capital-juror eligible subjects. For the remaining two questions, among all subjects statistically significant differences emerged for one question, and a borderline statistically significant difference was observed for the other ($p < .10$). Among capital-juror eligible participants, borderline statistically significant differences were observed for both of these questions ($p < .10$). In all instances of statistically significant or borderline statistically significant differences, subjects exposed to the bias-refutation statement on the level of agreement required for consideration of a mitigating factor performed better on the relevant comprehension measures than those who were not exposed to this statement.

Hypothesis 5 received weak support. For the three measures, one measure failed to provide any support for the hypothesis. The other two measures provided support, but this support generally only approached statistical significance – in only one instance, when examining all subjects, was a statistically significant difference at the conventional .05 level observed for one of the three measures of this concept.

**Perceived Personal Responsibility**

Hypothesis 6 predicted that capital sentencing instructions that included a statement mentioning and refuting juror bias that the law demands a particular verdict will improve mock juror performance on relevant comprehension measures. Two questions measured subjects’ belief that they were not responsible for their decision and were merely following the law. Exposure to the bias-refutation statement that mentioned and refuted the bias that the law demands a particular verdict did not improve performance on either of the relevant
comprehension measures. This failure to reject the null hypothesis occurred when examining all subjects and capital-juror eligible subjects. Hypothesis 6 was not supported.

**Instruction Comprehension and Verdict Recommendation**

Hypothesis 7 predicted that greater understanding of capital sentencing instructions would be associated with an increased likelihood that mock jurors would recommend a life verdict. This hypothesis received mixed support. An increased level of comprehension was associated with a verdict recommendation of LWOP for all subjects and capital-juror subjects, but this association was only statistically significant when examining all subjects. The lack of statistical significance for capital-juror eligible subjects may have been a function of reduced statistical power. The variable that was most strongly associated with sentencing recommendation was certainty of the defendant’s guilt. Participants unsure of the defendant’s guilt were overwhelmingly more likely to recommend a life sentence.

With the exception of a borderline statistically significant finding for capital-juror eligible subjects, these results are consistent with the findings of previous research (Diamond & Levi, 1996; Wiener, Pritchard, & Weston, 1995; Wiener et al., 1998) that showed a small to moderate relationship between comprehension and verdict recommendation. The present study provides more evidence that suggests that juror miscomprehension of capital sentencing instructions puts the defense at a disadvantage.

Additionally, these findings are consistent with the past research that found that one reason that capital-jurors vote for a life sentence is because they have lingering doubts about the guilt of the defendant (Geimer & Amsterdam, 1988; Haney, Sontag, & Constanzo, 1994;
Hoffman, 1995). For all subjects and capital-juror eligible subjects, the multivariate analyses suggest that the mock verdict recommendations were largely a function of whether a participant had doubts about Mr. Butler’s guilt.

Policy Recommendations

These results suggest that Florida’s pattern capital sentencing instructions are not well understood, but because a convenience sample was used, the comprehension levels obtained in this study should be interpreted with caution. These findings also indicate that exposing subjects to statements that mention and refute the relevant comprehension biases can improve comprehension. Because both the present study and previous research (Diamond & Levi, 1996; Wiener, Pritchard, & Weston, 1995; Wiener et al., 1998) present empirical evidence consistent with the views of legal commentators that miscomprehension of capital sentencing instructions favors the prosecution (Eisenberg & Wells, 1993; Hoffman, 1995; Luginbuhl, & Howe, 1995), improving the comprehension of capital sentencing instructions will increase both the legality of capital sentencing decisions and the fairness of those decisions. Based on the results of this study, it is recommended that Florida’s judicial policy makers consider changing capital sentencing pattern instructions in the following three areas: burden of proof for mitigating factors, unenumerated mitigating factors, and weighing of aggravating and mitigating factors. These recommendations are based on the observations of capital-juror eligible subjects – those subjects who are most comparable to actual capital jurors.

The response of judicial policy makers to social scientific findings on the comprehensibility of legal instructions has been mixed (Tanford, 1991). Tanford’s findings
suggest that judicial commissions have been the most responsive to social science research on instructions comprehension, but that legislatures have made only a few changes in response to social scientific findings. Furthermore, the courts have not been receptive to appeals based on claims that the jury did not understand the sentencing instructions (Lieberman and Sales, 1997). Still, these findings can be useful for attorneys in capital cases. Attorneys could clarify the law using bias-refutation statements in their closing arguments.

**Burden of Proof for Mitigating Factors**

Understanding of the standard for proving mitigating factors was exceptionally low. Less than a quarter (23.8%) of subjects in the control condition were able to correctly answer one of the questions measuring understanding of the rule that jurors only need to be reasonably convinced that a mitigating factor exists to consider it established. Nearly half (44.4%) of the subjects exposed to the improved instructions were able to answer this question correctly. The other question measuring this concept showed a similar pattern of improvement, although this improvement showed only borderline statistical improvement. These findings suggest that judicial policy makers should set about making changes in Florida’s capital-sentencing instructions with regard to improving capital-juror understanding of the burden for proving mitigating factors. Substantial increases in comprehension are possible.

**Unenumerated Mitigating Factors**

Most participants did not understand that they could consider any factor supported by the evidence as a reason not to sentence a defendant to death, and that they were not bound to only
consider the mitigating factors stated in the sentencing instructions. For one of the questions measuring understanding of this concept, fewer than one out of five (14.3%) participants in the control condition understood this concept. However, one-third of subjects exposed to the relevant bias-refutation statement were able to answer this question correctly. Additionally, on one other measure of subjects’ understanding of this concept, comprehension was increased by over twenty percentage points (from 38.1% to 58.8%) for those subjects exposed to the relevant bias-refutation statement. These findings suggest that efforts need to be undertaken to increase capital-jurors understanding of the law regarding unenumerated mitigating factors.

**Weighing of Aggravating and Mitigating Factors**

Fewer than two out of five (34.9%) of subjects in the control condition understood that the weighing process was not a quantitative one. However, nearly three quarters (74.1%) of subjects exposed to the bias refutation statement on this matter recognized that a quantitative approach is legally incorrect. Of all the comprehension questions, the improvement on this weighing question was the most dramatic. As with the other two areas, because understanding of this area of the law is poor and can be improved, judicial policy makers ought to examine reworking the current pattern instructions to address this comprehension deficiency.

**Future Research**

The results of this dissertation suggest that juror comprehension of capital sentencing instructions can be improved by mentioning and refuting biases that jurors have towards capital sentencing instructions. The results of this study provides some support for the hypothesis that
comprehension of capital sentencing instructions is related to verdict recommendation. To address questions raised by these results, it is recommended that future research in this area focus on six issues. First, the relative efficacy of psycholinguistic rewrites should be compared to a bias-reduction approach, and the effectiveness of a combination approach should also be assessed. Second, this study should be replicated with larger sample sizes. Third, this study should be replicated with a defendant whose guilt is perceived as more certain. Fourth, this study should be replicated in a more natural environment. Fifth, this research should be replicated with a randomly selected sample. Sixth, this research should be replicated with more powerful bias-reduction statements. Seventh, message repetition should be tested as an alternative explanation for improved comprehension.

**Psycholinguistics versus Bias-Reduction**

Diamond (1993) argued that for capital-jurors to make legally guided sentencing decisions, it is necessary to rewrite capital sentencing instructions using a combination of psycholinguistic principles and statements that address juror biases toward capital sentencing instructions. Although the results of this dissertation indicate that the bias-reduction approach can improve comprehension of capital sentencing instructions, these results do not establish the effectiveness of a rewriting approach that includes both psycholinguistics and bias-reduction. Future research should attempt to establish the relative efficacy of each individual approach, and it should also establish the effectiveness of a combination approach.
**Replicate with More Subjects**

Among capital-juror eligible subjects, the treatment usually improved subjects’ performance on individual comprehension items, but often this improvement was non-significant. Additionally, level of comprehension was statistically associated with verdict recommendation when examining all subjects, but this association was not observed when examining capital-juror eligible subjects. Some of these non-significant findings could be Type II errors. If some of these non-significant findings are Type II errors, it would not be surprising because statistical power for a number of these measures was low. To test the proposition that these non-significant findings were Type II errors, this experiment should be replicated with a larger number of capital-juror eligible subjects. Increasing the number of capital-juror eligible subjects will increase the statistical power of future research.

**Replicate with a Guiltier Defendant**

The results of the multivariate analyses suggest that verdict recommendation was heavily influenced by doubts about the defendant’s guilt. Nearly 40% of the participants in this study thought it was less than “very likely” that the defendant was guilty of murdering his wife. This research should be replicated with a defendant who is perceived as definitely guilty. By replicating with a defendant who is perceived as guilty beyond any doubt, subjects will have to rely on issues other than lingering doubt about the defendant’s guilt to make a sentencing recommendation. Replicating with a defendant whose guilt is not in doubt will extend the external validity of this research.
Replicate in a More Natural Environment

Replicating this experiment in a more natural environment (e.g., perform the experiment in a courtroom, have jurors deliberate, use more detailed case material) has the obvious benefit of enhancing the generalizability of these findings. In addition, replicating this study in a more natural environment could clarify one of the findings in this research. Replicating these findings in a more natural environment could more effectively simulate jurors’ miscomprehension over their perceived personal responsibility.

Across both conditions, subjects’ performance on the perceived personal responsibility questions was fairly high relative to the other questions. Additionally, the relevant bias-refutation statement had no effect on performance on the perceived personal responsibility questions. It is possible that the rationalization of non-responsibility for a sentence of death only occurs when jurors actually sentence someone to death; it may not occur when a juror sentences an obviously hypothetical defendant to death. By replicating this research in a more natural environment, participants may get caught up in the events of the experiment and actually feel as though they are sentencing someone to either death or life in prison without the possibility of parole. In this type of experiment, there may be observable differences on subjects’ understanding of their sentencing responsibility between subjects exposed to a bias-refutation statement on perceived personal responsibility and subjects who are not exposed to this statement.
Replicate with a Randomly Selected Sample

These results suggest that overall comprehension of Florida’s capital sentencing instructions is low. Capital-juror eligible subjects exposed to Florida’s pattern instructions answered 55.5% of the comprehension questions correctly. For a number of individual measures, it was common for less than a third of subjects in the pattern instruction condition to answer the question correctly. Because this sample contained criminal justice/legal studies majors who were significantly more successful than non-majors at answering comprehension questions, these findings may overestimate the comprehension levels of actual capital jurors. Because a convenience sample was used, however, it is not appropriate to generalize the comprehension levels observed in this study to actual capital jurors. If Florida’s policy makers are interested in describing capital jurors’ comprehension of the pattern instructions used in the penalty phase of a capital trial more precisely, then this research should be replicated with a sample randomly selected from the population of Florida’s capital-juror eligible residents.

Replicate with More Powerful Bias-Reduction Statements

The bias-reduction statements that successfully improved comprehension often produced comprehension levels that may be viewed as unacceptably low for a fair trial. For example, for the first question on burden of proof for mitigating factors, 23.8% of subjects in the control condition answered this question correctly, whereas 44.4% of subjects in the treatment condition answered this question correctly. Although this difference was statistically significant, it could be argued that the level of comprehension obtained in the treatment condition was not acceptable to ensure that a capital-defendant receives a fair sentencing process.
Wiener et al. (1995) argued from their results that with capital sentencing instructions a comprehension ceiling exists. Proponents of a comprehension ceiling contend that there is a limit to how much comprehension can be enhanced through comprehension improvement strategies. The results of this study could be used to suggest the existence of a comprehension ceiling. The empirical research is still too limited, however, to conclusively support the existence of a comprehension ceiling. English and Sales (1997) argued that Wiener et al.’s conclusion that researchers who try to improve comprehension of capital sentencing instructions would face a comprehension ceiling was uncalled for based on the limited available empirical evidence.

The solution to the related criticisms that a comprehension ceiling exists and that improved comprehension levels are too low to ensure a fair trial is to replicate this research using more powerful bias-reduction techniques. It is possible that rewritten bias-reduction statements or bias-reduction statements used in combination with psycholinguistic techniques could improve comprehension to higher levels than those obtained in the present study. There has not been enough research in this area to conclude that a comprehension ceiling exists.

**Message Repetition as an Alternative Mediating Variable**

The explanation for the results reported in Chapter 4 is that the observed comprehension improvements were the result of overcoming comprehension biases. However, an alternative explanation for some of these results is that the improved comprehension was the result of message repetition. Message repetition has been shown to improve message comprehension (Cacioppo & Petty, 1989). In the areas of burden of proof for mitigating factors and non-
enumerated mitigating factors, the bias reduction statements repeated using different words statements that exist in Florida’s pattern instructions. These statements using somewhat different words repeated points that were already made in the pattern instructions. It is possible that the observed comprehension improvements were the result of the message repetitive element and not the bias-reduction element. Future research can address these differing explanations by implementing competitive experiments that test the differing explanations.

**Conclusion**

The American jury is the cornerstone of the U.S. legal system. Within this system, the capital jury has a most serious role of determining whether a defendant should be executed. Because of the American jury’s importance in the legal system, it is no wonder that the behavior of the jury has been the focus of so much empirical research.

This dissertation presents a modest empirical contribution in the area of jury comprehension of legal instructions. The results suggest three very broad conclusions. First, comprehension of legal instructions can be improved with a bias-reduction approach. Second, this approach can be used to improve comprehension of Florida’s capital sentencing instructions. Third, additional research is needed to clarify a number of lingering questions about the best ways and extent to which jury comprehension of legal instructions can be improved.
APPENDIX A: DISTRIBUTION OF DEMOGRAPHIC VARIABLES ACROSS CONDITIONS
### Distribution of Demographic Variables Across Conditions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35.5%</td>
<td>37.7%</td>
</tr>
<tr>
<td>Female</td>
<td>64.5%</td>
<td>62.3%</td>
</tr>
<tr>
<td><em>(n = 93)</em></td>
<td><em>(n = 106)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>69.9%</td>
<td>65.1%</td>
</tr>
<tr>
<td>Non-White</td>
<td>30.1%</td>
<td>34.9%</td>
</tr>
<tr>
<td><em>(n = 93)</em></td>
<td><em>(n = 106)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Major</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice/Legal Studies Major</td>
<td>39.3%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Non-Criminal Justice/Legal Studies Major</td>
<td>60.7%</td>
<td>59.4%</td>
</tr>
<tr>
<td><em>(n = 84)</em></td>
<td><em>(n = 96)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Capital-Juror Qualified <em>(N = 199)</em></strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>67.8%</td>
<td>76.4%</td>
</tr>
<tr>
<td>No</td>
<td>32.2%</td>
<td>23.6%</td>
</tr>
<tr>
<td><em>(n = 93)</em></td>
<td><em>(n = 106)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>21.1 <em>(SD = 4.18)</em></td>
<td>21.8 <em>(SD = 4.98)</em></td>
</tr>
<tr>
<td><em>(n = 93)</em></td>
<td><em>(n = 106)</em></td>
<td></td>
</tr>
</tbody>
</table>

None of the differences between the treatment and control group were statistically significant.
At 5:10 in the afternoon Steve Olin discovered Mrs. Betty Butler’s body on a gravel road in North Florida. Mrs. Butler had been shot in the head twice with a .22 caliber gun. Although the first shot killed her, a second contact shot was fired into Mrs. Butler’s temple. Fingerprints of Mrs. Butler and her husband Dennis Butler were found inside and outside the automobile that Dennis Butler drove, and tire tracks matching the car were found near Mrs. Butler’s body. Also found on the trunk of the car were three unidentified fingerprints.

When Mrs. Butler’s body was discovered, her $7000 diamond ring, which she reportedly never took off, was missing. A pawnshop salesperson testified that, two days after Mrs. Butler’s death, Mr. Butler tried to sell him a diamond ring.

When interviewed by the police, Mr. Butler explained that on the day of his wife’s death he had driven down the gravel road after completing some errands. Mr. Butler stated that he had stopped at First City Bank at 4:00 p.m. and drove down the gravel road at about 5:00 p.m. on his way home. The medical examiner told the defense investigator Mrs. Butler died between 3:40 and 4:20 p.m., but later testified that the time of death was 5:00 p.m.

Mr. Butler also explained to the police that he owned several guns that were stolen from his home in Shreveport, Louisiana. In his insurance claim, Mr. Butler stated that except for a Ruger .22 automatic six shot, all the weapons had been recovered. However, Frank Arnold, a former boyfriend of Mrs. Butler’s daughter testified that when he had helped the Butlers move he had seen a Ruger .22 caliber weapon. Mr. Butler consented to a police search of his home which turned up six guns and some .22 caliber shells, but no .22 caliber weapon. The police did find Mrs. Butler’s missing diamond ring in Mr. Butler’s desk.
At the time of her death, Mrs. Butler had insurance policies with proceeds totaling $191,000 and a 401K plan valued at $177,000. Dennis Butler was the beneficiary named on the plans. Mrs. Butler had increased the coverage on the policies only four months prior to her death. Based on the foregoing evidence the jury unanimously found Mr. Butler guilty of first-degree murder.

Ladies and gentlemen of the jury, the defendant has been found guilty of Murder in the First Degree. The punishment for this crime is either death or life imprisonment without the possibility of parole. Final decision as to what punishment shall be imposed rests solely with the judge of this court; however, the law requires that you, the jury, render to the court an advisory sentence as to what punishment should be imposed upon the defendant.

The state had presented evidence of two aggravating factors that warranted the death penalty. The state claimed that the murder was committed for financial gain, and it had argued that the crime was especially “heinous, atrocious, or cruel” because excessive physical force was used. The prosecution noted the excessive physical force of firing two shots, the second at point blank range. Members of the defendant’s family testified to several mitigating circumstances including that Dennis is a polite man who, as a youngster, attended Catholic schools and participated in intramural sporting activities. After graduating, Dennis worked as a fireman and then in the oil business. When the oil business took a downfall, he went back to college and obtained his Bachelor of Science in computer programming. Mr. Butler had no prior convictions.

Ladies and gentlemen of the jury, it is now your duty to advise the court as to what punishment should be imposed upon the defendant for his crime of Murder in the First Degree.
As you have been told, the final decision as to what punishment shall be imposed is the responsibility of the judge; however, it is your duty to follow the law that will now be given you by the court and render to the court an advisory sentence based upon your determination as to whether sufficient aggravating circumstances exist to justify the imposition of the death penalty and whether sufficient mitigating circumstances exist to outweigh any aggravating circumstances found to exist.

Your advisory sentence should be based upon the evidence that has been presented to you in these proceedings.

The aggravating circumstances that you may consider are limited to any of the following that are established by the evidence:

The crime for which the defendant is to be sentenced was committed for financial gain.

The crime for which the defendant is to be sentenced was especially heinous, atrocious or cruel. "Heinous" means extremely wicked or shockingly evil. "Atrocious" means outrageously wicked and vile. "Cruel" means designed to inflict a high degree of pain with utter indifference to, or even enjoyment of, the suffering of others.

The kind of crime intended to be included as heinous, atrocious, or cruel is one accompanied by additional acts that show that the crime was conscienceless or pitiless and was unnecessarily torturous to the victim.

The State may not rely upon a single aspect of the offense to establish more than one aggravating circumstance. Therefore, if you find that two or more of the aggravating circumstances are proven beyond a reasonable doubt by a single aspect of the offense, you are to consider that as supporting only one aggravating circumstance.
If you find the aggravating circumstances do not justify the death penalty, your advisory sentence should be one of life imprisonment without possibility of parole.

Should you find sufficient aggravating circumstances do exist, it will then be your duty to determine whether mitigating circumstances exist that outweigh the aggravating circumstances. Among the mitigating circumstances you may consider, if established by the evidence, are:

Mr. Butler has no significant history of prior criminal activity.

Any of the following circumstances that would mitigate against the imposition of the death penalty:

Any other aspect of the defendant's character, record, or background.

Any other circumstance of the offense.

Each aggravating circumstance must be established beyond a reasonable doubt before it may be considered by you in arriving at your decision.

If one or more aggravating circumstances are established, you should consider all the evidence tending to establish one or more mitigating circumstances and give that evidence such weight as you feel it should receive in reaching your conclusion as to the sentence that should be imposed.

A mitigating circumstance need not be proved beyond a reasonable doubt by the defendant. If you are reasonably convinced that a mitigating circumstance exists, you may consider it as established.

The sentence that you recommend to the court must be based upon the facts as you find them from the evidence and the law. You should weigh the aggravating circumstances against the mitigating circumstances, and your advisory sentence must be based on these considerations.
In these proceedings it is not necessary that the advisory sentence of the jury be unanimous.

The fact that the determination of whether you recommend a sentence of death or sentence of life imprisonment in this case can be reached by a single ballot should not influence you to act hastily or without due regard to the gravity of these proceedings. Before you ballot you should carefully weigh, sift and consider the evidence, and all of it, realizing that human life is at stake, and bring to bear your best judgment in reaching your advisory sentence.

You will now retire to consider your recommendation. When you have reached an advisory sentence in conformity with these instructions, that form of recommendation should be signed by your foreperson and returned to the court.
APPENDIX C: PATTERN INSTRUCTIONS WITH BIAS-REFUTATION

STATEMENTS
At 5:10 in the afternoon Steve Olin discovered Mrs. Betty Butler’s body on a gravel road in North Florida. Mrs. Butler had been shot in the head twice with a .22 caliber gun. Although the first shot killed her, a second contact shot was fired into Mrs. Butler’s temple. Fingerprints of Mrs. Butler and her husband Dennis Butler were found inside and outside the automobile that Dennis Butler drove, and tire tracks matching the car were found near Mrs. Butler’s body. Also found on the trunk of the car were three unidentified fingerprints.

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When interviewed by the police, Mr. Butler explained that on the day of his wife’s death he had driven down the gravel road after completing some errands. Mr. Butler stated that he had stopped at First City Bank at 4:00 p.m. and drove down the gravel road at about 5:00 p.m. on his way home. The medical examiner told the defense investigator Mrs. Butler died between 3:40 and 4:20 p.m., but later testified that the time of death was 5:00 p.m.

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At the time of her death, Mrs. Butler had insurance policies with proceeds totaling $191,000 and a 401K plan valued at $177,000. Dennis Butler was the beneficiary named on the plans. Mrs. Butler had increased the coverage on the policies only four months prior to her death. Based on the foregoing evidence the jury unanimously found Mr. Butler guilty of first-degree murder.

Ladies and gentlemen of the jury, the defendant has been found guilty of Murder in the First Degree. The punishment for this crime is either death or life imprisonment without the possibility of parole. Final decision as to what punishment shall be imposed rests solely with the judge of this court; however, the law requires that you, the jury, render to the court an advisory sentence as to what punishment should be imposed upon the defendant.

The state had presented evidence of two aggravating factors that warranted the death penalty. The state claimed that the murder was committed for financial gain, and it had argued that the crime was especially “heinous, atrocious, or cruel” because excessive physical force was used. The prosecution noted the excessive physical force of firing two shots, the second at point blank range. Members of the defendant’s family testified to several mitigating circumstances including that Dennis is a polite man who, as a youngster, attended Catholic schools and participated in intramural sporting activities. After graduating, Dennis worked as a fireman and then in the oil business. When the oil business took a downfall, he went back to college and obtained his Bachelor of Science in computer programming. Mr. Butler had no prior convictions.

Ladies and gentlemen of the jury, it is now your duty to advise the court as to what punishment should be imposed upon the defendant for his crime of Murder in the First Degree.
As you have been told, the final decision as to what punishment shall be imposed is the responsibility of the judge; however, it is your duty to follow the law that will now be given you by the court and render to the court an advisory sentence based upon your determination as to whether sufficient aggravating circumstances exist to justify the imposition of the death penalty and whether sufficient mitigating circumstances exist to outweigh any aggravating circumstances found to exist.

Your advisory sentence should be based upon the evidence that has been presented to you in these proceedings. Many jurors believe that they are not responsible for their decision because the law demands a particular verdict. This is not the case. Each juror must consider the evidence in the case to decide what sentence is appropriate. The weight of the evidence in this particular case should be used to decide whether to recommend a life sentence without the possibility of parole or a death sentence.

The aggravating circumstances that you may consider are limited to any of the following that are established by the evidence:

The crime for which the defendant is to be sentenced was committed for financial gain.

The crime for which the defendant is to be sentenced was especially heinous, atrocious or cruel. "Heinous" means extremely wicked or shockingly evil. "Atrocious" means outrageously wicked and vile. "Cruel" means designed to inflict a high degree of pain with utter indifference to, or even enjoyment of, the suffering of others.

The kind of crime intended to be included as heinous, atrocious, or cruel is one accompanied by additional acts that show that the crime was conscienceless or pitiless and was unnecessarily torturous to the victim.
The State may not rely upon a single aspect of the offense to establish more than one aggravating circumstance. Therefore, if you find that two or more of the aggravating circumstances are proven beyond a reasonable doubt by a single aspect of the offense, you are to consider that as supporting only one aggravating circumstance.

If you find the aggravating circumstances do not justify the death penalty, your advisory sentence should be one of life imprisonment without possibility of parole.

Should you find sufficient aggravating circumstances do exist, it will then be your duty to determine whether mitigating circumstances exist that outweigh the aggravating circumstances. Among the mitigating circumstances you may consider, if established by the evidence, are:

Mr. Butler has no significant history of prior criminal activity.

Any of the following circumstances that would mitigate against the imposition of the death penalty:

Any other aspect of the defendant's character, record, or background.

Any other circumstance of the offense.

Many jurors falsely conclude that because they may only consider aggravating factors stated in these instructions that they also may only consider mitigating factors stated in these instructions. This is not the case. Jurors may consider any factor as a reason to recommend the defendant be sentenced to life without the possibility of parole.

Each aggravating circumstance must be established beyond a reasonable doubt before it may be considered by you in arriving at your decision.

If one or more aggravating circumstances are established, you should consider all the evidence tending to establish one or more mitigating circumstances and give that evidence such
weight as you feel it should receive in reaching your conclusion as to the sentence that should be imposed.

A mitigating circumstance need not be proved beyond a reasonable doubt by the defendant. If you are reasonably convinced that a mitigating circumstance exists, you may consider it as established. Many jurors mistakenly believe that because other elements of a criminal proceeding must be proven beyond a reasonable doubt that the defense must prove a mitigating factor beyond a reasonable doubt. This is not the case. You need only be reasonably convinced that a mitigating factor exists in order to consider it established.

Also, many jurors believe that the jury has to be unanimous that a mitigating factor exists in order for it to be considered. This is not true. If only one juror believes that a mitigating factor exists then that juror may still use it as a reason to recommend a life sentence without the possibility of parole.

The sentence that you recommend to the court must be based upon the facts as you find them from the evidence and the law. You should weigh the aggravating circumstances against the mitigating circumstances, and your advisory sentence must be based on these considerations. Many jurors incorrectly believe that it is appropriate to add up the number of aggravators and mitigators and vote for a death sentence if there are more aggravators, or a life sentence if there are more mitigators. This is not correct. It is not appropriate to simply add up the aggravating and mitigating factors to see which side has more. For example, a jury may decide that one aggravating factor outweighs two mitigating factors or that one mitigating factor outweighs two aggravating factors.
In these proceedings it is not necessary that the advisory sentence of the jury be unanimous. The fact that the determination of whether you recommend a sentence of death or sentence of life imprisonment in this case can be reached by a single ballot should not influence you to act hastily or without due regard to the gravity of these proceedings. Before you ballot you should carefully weigh, sift and consider the evidence, and all of it, realizing that human life is at stake, and bring to bear your best judgment in reaching your advisory sentence.

You will now retire to consider your recommendation. When you have reached an advisory sentence in conformity with these instructions, that form of recommendation should be signed by your foreperson and returned to the court.
Please check one answer for each of the following questions. Remember, your answers will be kept completely confidential.

1. For Mr. Butler, toward which sentencing recommendation are you leaning?
   - life in prison without the possibility of parole
   - death

2. How likely do you think it is that Mr. Butler murdered his wife?
   - very likely
   - somewhat likely
   - neutral/no opinion
   - somewhat unlikely
   - very unlikely

To answer the following questions, please think about what the judge on the tape said. Please answer them as best you can.

3. Based on your understanding of the judge's instructions, for a factor in favor of a life sentence to be considered, it has to be…
   - proved beyond a reasonable doubt
   - proved by a preponderance of the evidence
   - proved so that a juror is reasonably convinced that it exists
   - I don't know
4. Based on your understanding of the judge’s instructions, the term “aggravating” means…

- something that is irritating or frustrating about the crime
- something that makes the crime worse
- I don’t know

5. Based on your understanding of the judge’s instructions, what factors in favor of a life sentence instead of a death sentence can the jury consider?

- any mitigating factor that made the crime not as bad
- only a specific list of mitigating factors mentioned by the judge
- only mitigating factors that would excuse the crime
- I don’t know

6. Based on your understanding of the judge’s instructions, which of the following sentences does Florida law say should be the penalty for capital murder?

- death sentence
- life in prison without the possibility of parole
- the jury must decide in each individual case which sentence to recommend
- I don’t know

7. Based on your understanding of the judge’s instructions, what is a “mitigating factor”?

- a reason not to sentence the defendant to death
- something that excuses the defendant’s behavior
- I don’t know
8. Based on your understanding of the judge’s instructions, for a factor in favor a life sentence without the possibility of parole over a death sentence to be considered by the jury in making their sentencing decision...

- all jurors have to agree on that factor
- jurors do not have to agree unanimously on that factor
- I don’t know

The following questions use hypothetical scenarios that are unrelated to the facts of the case you just heard. However, to answer the following questions, please think about the directions given to the jury on the tape.

9. Eleven jurors decide from the evidence that the defendant was abused as a child. The same eleven jurors decide that this history of child abuse is a mitigating circumstance. One juror disagrees that such abuse is a mitigating circumstance. Since the jurors cannot unanimously agree that being abused as a child is a mitigating circumstance, they do not consider it further. Did the jury follow the law?

- yes
- no
- I don’t know

10. The jury finds the existence of three aggravating circumstances and only two mitigating circumstances. Since the jury counted more aggravating circumstances than mitigating circumstances, the jury votes to recommend a death sentence. Did the jury follow the law?

- yes
- no
- I don’t know
11. The jurors hear evidence that the defendant was well-behaved as a boy. They also believe this is mitigating evidence. However, one juror notes that being a good child is not one of the mitigating circumstances that the judge specifically mentioned. For this reason she concludes that she cannot consider this as a mitigating circumstance. Did the juror follow the law?

- yes
- no
- I don’t know

12. The jurors unanimously agree that the murder was especially heinous, atrocious, or cruel. They also agree that this is an aggravating circumstance, and that it is not outweighed by the mitigating circumstances that exist as they interpret the instructions. This means that they must vote to recommend the death penalty, and they do so. Did the jury follow the law?

- yes
- no
- I don’t know

13. The jurors hear evidence that the defendant cooperated with the police. The jurors agree that this is mitigating evidence, but they do not believe it has been proven beyond a reasonable doubt. The jury therefore does not consider the defendant’s cooperation as a mitigating circumstance. Did the jury follow the law?

- yes
- no
- I don’t know
14. The defendant was only 25 years of age when he committed the murder. A juror decides that the defendant’s age is a mitigating circumstance. However, the other eleven jurors disagree and insist that his age is not a mitigating circumstance. This one juror believes that she cannot consider a mitigating circumstance unless the entire jury unanimously agrees that it exists. She therefore votes for the death penalty. Did the juror follow the law?

☐ yes
☐ no
☐ I don’t know

15. One juror feels uneasy about recommending a death sentence. The other jurors explain to this holdout juror that the law demands a death recommendation and that the advisory sentence is out of the jury’s hands. The holdout juror joins the majority. Did the jury follow the law?

☐ yes
☐ no
☐ I don’t know

16. The jurors decide from the evidence that the defendant felt great remorse for committing the murder. They also decide that remorse is a mitigating circumstance, even though remorse was not one of the mitigating circumstances specifically mentioned by the judge. In deciding whether to recommend a life sentence or the death penalty, they consider the defendant’s remorse as a mitigating circumstance anyway. Did the jury follow the law?

☐ yes
☐ no
☐ I don’t know

Now, we would like to know a little bit about you. Remember, this information is for statistical purposes only.

17. How old are you? _____ years
18. What is your gender?
- male
- female

19. What is your race?
- White
- African American
- Hispanic
- Asian/Pacific Islander
- Native American
- Other

20. The following are the requirements to serve on a jury:

Jurors must be United States citizens.
Jurors must be at least eighteen years old.
Jurors cannot be full-time law enforcement officers.
Jurors cannot be convicted felons unless they have had their civil rights restored.

Based on the above requirements, do you believe you are eligible to serve on a jury?
- yes
- no
- not sure

21. Have you declared a major?
- yes → If yes, what is your major? ____________________________
- no
We are nearly finished. We would like to know about your attitudes toward the death penalty.

22. How worried are you that a capital defendant who is not executed will be released from prison someday?

- very worried
- somewhat worried
- slightly worried
- not at all worried

23. How worried are you that a capital defendant who is not executed will escape from prison?

- very worried
- somewhat worried
- slightly worried
- not at all worried

24. How worried are you that a capital defendant who is not executed will harm another prison inmate?

- very worried
- somewhat worried
- slightly worried
- not at all worried

25. How worried are you that a capital defendant who is not executed will harm a prison guard?

- very worried
- somewhat worried
- slightly worried
- not at all worried
26. How worried are you that a capital defendant who is not executed will not get as much punishment as he deserves?

- very worried
- somewhat worried
- slightly worried
- not at all worried

27. Please read each of the following statements completely and then indicate the one statement that comes closest to how you would feel if you were a juror in a death penalty case.

- I am strongly in favor of capital punishment: I would vote for a sentence of death in all cases where the law allowed it and I was sure, beyond a reasonable doubt, that the defendant was guilty of the crime.

- I generally favor the death penalty, but I would sometimes vote for a sentence of life in prison without the possibility of parole, if I believed that the evidence supported such a sentence.

- I neither favor nor oppose the death penalty.

- I generally oppose the death penalty, but would sometimes vote for a sentence of death if I believed that the evidence supported such a sentence.

- I strongly oppose the death penalty, and would never vote for it, even in the worst cases of murder.

Thank you for your participation. Please stay seated until the proctor collects the questionnaire from everyone.
April 29, 2003

Charles W. Otto
2228 Rutledge Avenue
Orlando, FL 32817

Dear Mr. Otto:

With reference to your protocol entitled, "Improving Comprehension of Judicial Instructions: A Bias Reduction Approach," I am enclosing for your records the approved, executed document of the UCFIRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have any questions, please do not hesitate to call me at 823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Chris Grayson
Institutional Review Board (IRB)

Copies: Dr. Brandon Applegate
IRB File
REFERENCES


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