Using mortality salience to increase procedural fairness in the penalty phase of capital trials

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USING MORTALITY SALIENCE TO INCREASE PROCEDURAL FAIRNESS IN
THE PENALTY PHASE OF CAPITAL TRIALS

by

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Bachelor of Science
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A thesis submitted in partial fulfillment
of the requirements for the

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ABSTRACT

Using Mortality Salience to Increase Procedural Fairness in the Penalty Phase of Capital Trials

by

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Previous research suggests that jurors are more likely to emphasize aggravating circumstances and disregard mitigating circumstances during the sentencing phase of capital cases. This is not only contrary to the ideals of procedural fairness espoused in most death penalty statutes, but it also increases a capital defendant's likelihood of receiving the death penalty.

The current study explores whether mortality salience and worldview defense, key components of terror management theory, can increase procedural fairness in capital cases by increasing jurors' attention to mitigating circumstances. This is achieved through a factorial-design jury simulation in which mock jurors are exposed to varying levels of mortality salience and strength of mitigation circumstances. The analysis of the data is followed by a discussion of the key findings of the study, as well as implications and avenues for future research.
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CHAPTER 1

INTRODUCTION

Death penalty research suggests that jurors often disregard their court-given duty to consider all relevant evidence when determining which of two typical sentences—the death penalty or life-without-parole (LWOP)—a convicted defendant should receive for a capital crime (Butler and Moran 2002; Luginbuhl and Middendorf 1988). When this occurs, the death penalty is imposed in a manner antithetical to the fair and equitable manner envisioned by the Supreme Court (Gregg v. Georgia 1976; Woodson v. North Carolina, 1976). The purpose of the current study is to explore whether terror management theory (TMT; Greenberg, Pyszczynski, and Solomon 1986; Greenberg, Solomon, and Pyszczynski 1997) provides a solution for decreasing the likelihood of such an occurrence.

Generally speaking, TMT posits that humans beings’ unique ability to contemplate their own mortality influences, as well as motivates, them to invest in and defend certain cultural worldviews. Recently, TMT has been applied to a number of legally relevant issues and has been found useful in explaining why it is that jurors hold certain attitudes and how these attitudes influence different aspects of their decision-making (see, Arndt et al. 2005 for a review). Expanding upon this research, the current study explores whether TMT can be used to increase procedural justice and fairness during the penalty phase of
capital trials by increasing jurors’ willingness to consider all evidence that may be introduced during this phase of a capital trial.

Death Penalty Case Law

In Furman v. Georgia (1972), the Supreme Court, in a 5-4 decision, ruled the death penalty unconstitutional. They cited the Eighth Amendment’s prohibition against cruel and unusual punishment. While two justices regarded the death penalty to be inherently cruel and unusual, the remaining three justices in the majority only declared it to be unconstitutional because of the arbitrary and capricious manner in which juries were currently imposing it. Justice Potter Stewart maligned the death penalty as being “so wantonly and so freakishly imposed” (310) and compared it to “being struck by lightning” (309). Justice Byron White lamented the seeming absence of a “meaningful basis for distinguishing the few cases in which it [the death penalty] is imposed from the many cases in which it is not” (313). Despite these concerns, the overall disposition of the case hinted that a majority of the Supreme Court would reinstate the death penalty once states modified their current death penalty statutes to decrease the likelihood of its arbitrary imposition (see, Paternoster 1991 for a review).

Chief Justice Warren Burger proposed that legislative bodies could “bring their laws into compliance with the Court’s ruling by [either] providing standards for juries and judges to follow in determining the sentence” or by “providing mandatory death sentences in such a way as to deny juries the opportunity to bring in a verdict on a lesser charge” (Furman v. Georgia 1976, 400-401). In the subsequent four years, thirty-five states heeded Chief Justice Burger’s advice, implementing revised statutes that
incorporated either a guided discretion or mandatory sentencing approach (Paternoster 1991). In 1976, the Supreme Court ruled on the constitutionality of these revised statutes, providing what has become the foundation of modern capital jurisprudence. A brief review of a few of these cases is instructional to understanding the Court’s view on what constitutes fair and impartial imposition of the death penalty. This can then be contrasted with what the empirical literature suggests about the actual imposition of the death penalty.

Capital punishment, demanding as it does the ultimate penalty, is, when compared to other criminal offenses, “in a class by itself” (*Furman v. Georgia* 1972, 289), requiring added protections to ensure that it is only imposed upon those most deserving of it (*Roper v. Simmons* 2005). In *Woodson v. North Carolina* (1976), the Court ruled that mandatory death sentences, when judged according to this standard, are constitutionally deficient. These statutes not only offend “evolving standards of decency” (293), but, perhaps more importantly, they fail to “allow the particularized consideration of relevant aspects of the character and record of each convicted defendant….or mitigating factors stemming from the diverse frailties of humankind” (303-304). Partly due to their supposed ability to achieve this latter objective, guided discretion statutes that provided for a bifurcated trial process (i.e., separate guilt and penalty phases) and statutory circumstances (e.g., aggravating and mitigating) to guide the sentencing body in their penalty phase decision-making withstood constitutional scrutiny, leading the Supreme Court to reinstate the death penalty in a string of 7-2 decisions (*Gregg v. Georgia*, 1976; *Jurek v. Texas*, 1976; *Proffitt v. Florida*, 1976).
With these rulings, the Supreme Court envisioned “an ‘individualized’ sentencing process in which capital jurors would be instructed to consider [both] aggravating and mitigating circumstances—legally acceptable reasons for imposing either a death or life sentence—in reaching their verdicts” (Haney 2005, 13). Expressing his confidence in these guided discretion statutes, Justice White confidently declared, “It can no longer be said that the [death] penalty is being imposed wantonly and freakishly” (Gregg v. Georgia, 1976, 222). That the Supreme Court still considers the individualized consideration and weighing of these circumstances—especially those of a mitigating nature—an integral component of the fair and impartial imposition of the death penalty is illustrated by their recent ruling in Wiggins v. Smith, Warden, et al. (2003). Recognizing the potential of mitigating factors to temper jurors penalty phase decision, the Court ruled that defense counsel has an obligation to explore and, when possible, present mitigating evidence. In Wiggins, the failure to do so resulted in reversal and remand for re-sentencing.

Death Penalty Research

 Numerous strands of research suggest that the Court’s faith in guided discretion statutes as a remedy for the problems associated with arbitrary death penalty imposition may be misguided. Current death penalty law requires that capital juries be death-qualified (DQ), or composed entirely of individuals willing to impose the death penalty. In Witherspoon v. Illinois (1968), the Supreme Court ruled that individuals who will absolutely refuse to impose the death penalty despite the presented evidence could be excluded from capital jury service. Revisiting the issue two decades later, the Court, in
Wainwright v. Witt (1985), reaffirmed the constitutionality of death qualification and also lowered the threshold for excluding jurors from service. A potential juror could now be removed if his or her capital punishment views would “prevent or substantially impair the performance of his [or her] duties as a juror” (852). These rulings have stimulated much empirical research and the findings are a source of concern for psycholegal scientists. Findings from these studies suggest that the process of death-qualifying juries detrimentally impacts a capital defendant’s ability to receive a fair and impartial trial, both at the guilt phase and the penalty phase.

One source of concern stems from research demonstrating that death qualification facilitates the formation of non-representative capital juries composed of individuals that are, both attitudinally and behaviorally, different from non-death-qualified (NDQ) jurors. DQ jurors, when compared to NDQ jurors, are more conviction-prone (Allen, Mabry, and McKelton 1998; Jurow 1971; White 1973), exhibit a lower threshold for conviction, and express less regret concerning erroneous convictions (Thompson et al. 1984). These and similar findings may be explained by DQ jurors’ greater concern with issues of crime control rather than with issues of due process. This increased concern for crime control impacts how DQ jurors/juries approach, view, and utilize different types and sources of evidence presented during the course of a capital trial (Fitzgerald and Ellsworth 1984). For example, during the guilt phase of the trial, DQ jurors are more likely than NDQ jurors to favor the prosecution point of view, to mistrust criminal defendants and their counsel, and to take a punitive approach toward defendants (Fitzgerald and Ellsworth 1984). Additionally, at the jury level, research suggests that individuals serving on DQ juries, when compared to individuals serving on mixed juries (i.e., juries composed of
both DQ and NDQ jurors), are less critical of witnesses, less satisfied with their juries, and less able to remember presented evidence. All of these findings suggest a lack of diversity on DQ juries that negatively impacts the quality, depth, and accuracy of deliberations (Cowan, Thompson, and Ellsworth 1984).

Even more important for the purposes of the current study are findings of attitudinal and behavioral differences in how DQ and NDQ jurors utilize the evidence that is presented during the penalty phase of the capital trial. For example, Luginbuhl and Middendorf (1988) found that anti-death penalty jurors are significantly more receptive to mitigating circumstances than pro-death penalty jurors. Additionally, using the Witherspoon death-qualification standard, they found that DQ jurors are more likely than NDQ jurors to emphasize aggravating circumstances over mitigating circumstances when determining capital sentences. Butler and Moran (2002) found that these differences remain when the more recent Witt death-qualification standard is used. Findings from a number of other studies support these contentions (Durham, Elrod, and Kinkade 1996; Haney, Hurtado, and Vega 1994).

Along with the issue of jury representativeness, it has also been posited that the process of death qualifying jurors unfairly prejudices them and threatens their objectivity (Haney 1984). Mock jurors were exposed to a videotaped voir dire that either included or excluded the death-qualification process. Results revealed distinct differences in trial-relevant attitudes and outcomes as a function of the presence or absence of this process. Participants exposed to death qualification were more conviction-prone, more likely to believe that other trial participants (e.g., judge, attorneys) believed the defendant to be
guilty, more likely to impose the death penalty, and more likely to believe that the law disapproves of death penalty opposition.

Haney (1984) provides a number of possible social psychological explanations for these findings. First, the death-qualification process requires that the issue of the defendant's guilt be discussed at the commencement of the trial, providing jurors with cues that authority figures presiding over the trial (e.g., judges, attorneys) believe guilt to be an important issue. This is especially significant in light of research demonstrating the sensitivity of jurors to the behavior of these authority figures (O'Barr and Conley 1976). Second, the death-qualification process over-exposes jurors to the initially overwhelming idea of sentencing another person to death, potentially desensitizing jurors and making it easier to pass down an eventual death sentence (Wolpe and Lazarus 1967). Third, jurors witness the dismissal of NDQ jurors, falsely creating the perception that authority figures disapprove of death penalty opponents. Finally, death qualification requires an individual to publicly affirm their support for the death penalty, an act that may intensify their need and motivation to remain consistent by utilizing it in the current case (Lewin 1947).

Despite all of this empirical evidence, the Supreme Court has shown little inclination to reverse its position on the practice of death qualification. In its last decision addressing the practice of death qualification, *Lockhart v. McCree* (1986), the Court upheld its constitutionality. This occurred despite the presentation of findings from fifteen research studies, all suggesting that DQ jurors, when compared to NDQ jurors, are more conviction-prone. Lamenting the Court's ruling, Acker (1993) commented that, "A more complete repudiation of social science research could hardly have been accomplished" (76). Beyond the repudiation of social science research, the Court's ruling has an even
more significant consequence. It increases the likelihood that a capital defendant’s sentence will ultimately be determined by DQ jurors possessing criminal justice attitudes that increase their conviction-proneness and, more importantly, their reliance on aggravating circumstances over mitigating circumstances when determining capital penalties.

Present Study

The research above details significant trial-relevant attitudinal and behavioral differences between DQ and NDQ jurors. This research is, however, less vocal about how to alleviate the effects of these differences—especially those relating to DQ jurors’ heavy reliance on aggravating circumstances during the penalty phase of capital trials. Since the Supreme Court has consistently refused to modify its view on death qualification, the current study proposes that any potential solution to this problem must fit within the current DQ framework. Future research should focus less on the issues of jury representativeness and the DQ process. Instead, emphasis should be placed on exploring social psychological theories that can be applied to motivate DQ jurors to approach, integrate, and utilize penalty phase evidence in the fair and equable manner that was envisioned by the Supreme Court (Gregg v. Georgia 1976; Woodson v. North Carolina 1976). This study advances and empirically tests TMT as one theory suitable for this purpose.

To provide a framework for understanding the rationale behind applying TMT to this particular issue, Chapter 2 will review the extensive TMT literature. The general propositions of TMT will be discussed, with special emphasis focused on how TMT
explains human motivation to hold certain attitudes and to behave in certain ways. The application of TMT to specific issues of legal decision-making will then be discussed. This discussion will culminate in a solid rationale for applying TMT to the issue of increasing jurors’ procedural fairness during the penalty phase of capital trials. This rationale will result in the formulation of specific hypotheses that are firmly rooted in the propositions of TMT and that are supported by previous empirical research exploring the validity of TMT.
LITERATURE REVIEW

General Propositions of Terror Management Theory

Terror management theory (TMT; Greenberg, Pyszczynski, and Solomon 1986; Greenberg, Solomon, and Pyszczynski 1997) posits that the motivation underlying a wide range of human attitudes and behaviors is best understood by humans' unique ability to contemplate their own mortality. Like other animal species, humans are influenced by basic, instinctual biological drives, one of which is the drive for self-preservation and continued experience. Unlike other animal species, though, humans possess wide-ranging, advanced cognitive abilities that allow them to make causal inferences, to contemplate future events, and to reflect upon self (Greenberg, Solomon, and Pyszczynski 1991). While aiding human survival through the enhancement of behavioral flexibility, these abilities also allow humans to contemplate the reality of their own mortality, a realization that is antithetical to the human drive for self-preservation and continued existence.

This antagonistic relationship between the yearning for continued existence and the inevitability of death is, according to TMT, a significant source of anxiety and terror for humans. Ernest Becker (1973), a cultural anthropologist whose work was integral to the formation of TMT, wrote, "This is the terror: to have emerged from nothing, to have a
name, consciousness of self, deep inner feelings, an excruciating inner yearning for life and self expression—and with all this yet to die” (p. xii). The objective of TMT is to explore and ultimately explain how humans cope with this anxiety and terror and how these coping strategies subsequently influence and determine various human attitudes, behaviors, and motivations.

That humans have developed an effective strategy for managing mortality-related terror is evidenced by their ability to lead meaningful and constructive lives that are, in most cases, seemingly unimpaired by thoughts of their own mortality. An essential component of this strategy, according to TMT, is an individual’s investment in and adherence to cultural worldviews, or “shared conceptions of reality” (Greenberg, Solomon, and Pyszczynski 1997, 71) that express the socially constructed beliefs, values, and standards of a particular culture. In expressing the values of a culture, these worldviews also provide meaning, order, and permanence to an otherwise meaningless, fleeting, and corporeal existence that inevitably terminates at death. As a result, these worldviews serve a death-denying function by convincing individuals “that they are beings of enduring significance living in a meaningful reality” (Pyszczynski, Greenberg, and Solomon 2003, 16). While the death-denying function of worldviews is integral to terror management, TMT also posits the importance of self-esteem, suggesting that individuals are most successful at managing mortality-related terror and anxiety when they perceive themselves as valued societal members who both contribute to and who meet the standards that are prescribed by a particular cultural worldview. Numerous studies support this second contention (Greenberg et al. 1992; Greenberg et al. 1993; Harmon et al. 1997).
These two psychological structures, cultural worldviews and self-esteem, serve as protective barriers (i.e., anxiety-buffers) against the terror of mortality and, when combined, create a cultural anxiety-buffer. This buffer allows individuals to manage and overcome their daily existential concerns by promising to those individuals who ascribe to, uphold, and protect accepted cultural worldviews the possibility of immortality through the literal and/or symbolic transcendence of death (Solomon, Greenberg, and Pyszczynski 1991). While literal death transcendence occurs via religious and spiritual beliefs that portend an afterlife, symbolic death transcendence occurs when an individual leaves his or her mark on a culture, either through contributions or accomplishments (e.g., inventions, works of art, awards) or through offspring who are viewed as living embodiments of one's own self and capable of further meaningful societal contributions (Lifton 1979/1983).

Because of the terror and anxiety associated with one’s own mortality, individuals are motivated to exhibit worldview defense, a process through which the anxiety-buffering and death transcending qualities of one’s own worldviews are protected and upheld through “more positive evaluations of those who help validate one’s worldview and more negative evaluations of those who challenge the validity of that worldview” (Pyszczynski, Solomon, and Greenberg 2003, 51). The motivation underlying worldview defense stems from social validation concerns. Because worldviews are formed and retained through social consensus, individuals that espouse competing worldviews represent a direct threat to the validity and anxiety-buffering qualities of one’s own worldviews. To the extent that competing worldviews are a more accurate representation of the beliefs, values, and standards that imbue earthly existence with meaning and
increase the likelihood of death transcendence, one’s own worldviews must be correspondingly inaccurate and incapable of achieving this objective. Individuals are therefore motivated to defend their worldviews against threats through the denigration of those with competing worldviews and the praising of those with similar worldviews. That participating in worldview defense stems from existential concerns has been demonstrated in numerous empirical studies. The typical research paradigm for such studies includes manipulating mortality salience among participants, having them evaluate individuals with similar or dissimilar worldviews, and measuring the extent to which worldview defense occurs.

For example, in one study (Greenberg et al. 1990), Christian college students were made mortality salient (MS) or not and were asked to evaluate the written work of another individual who was identified as being either a fellow Christian student or a Jewish student. Results showed that, although the written work evaluated by the participants was identical, students in the MS condition rated the written work of fellow Christian students more favorably than that of Jewish students. Students in the non-MS condition, on the other hand, evaluated the written work similarly regardless of the perceived religious status of the writer.

Greenberg et al. (1990, Study 3) used nationality instead of religion as a worldview and found that mortality salience influenced American college students’ evaluations of pro- and anti-American essays. When compared to students in the non-MS condition, MS students offered evaluations that were more positive toward the author of the pro-American essay and more negative toward the author of the anti-American essay. Additionally, American mock jurors induced into mortality salience were more likely
than non-MS jurors to assign culpability to the automobile manufacturer than the driver in a civil case, but only when the automobile manufacturer was Japanese (Nelson et al. 1997). That participants in each of these studies were more likely to exhibit worldview defense when mortality was salient than when it was not suggests that the underlying motivation to do so stems from a desire to manage the terror associated with death.

While the studies above demonstrate that mortality salience influences an individual’s evaluations of those with similar or dissimilar worldviews, additional research demonstrates its potential to influence behavioral responses as well. For example, after participating in a study in which mortality salience was randomly induced in some participants, German students were asked to wait for their payment in an adjacent room. In the adjacent room, subjects found nine seats arranged in a row, the middle one already occupied by a confederate dressed as either a German student or a Turkish exchange student. Using proximity as a measure of worldview defense, the researchers found that subjects in the MS condition sat further away from the “Turkish” student than students in the non-MS condition (Ochsmann and Mathy, unpublished manuscript). In another study (Greenberg et al. 1995a), MS participants, when compared to non-MS participants, took longer and found it more uncomfortable to complete a task that required them to use a cherished object (American flag, Catholic crucifix) in a sacrilegious manner. These latter findings, according to the researchers, suggest that cherished items serve as symbolic representations of an individual’s worldviews and their concomitant anxiety-buffering qualities. Using them in a sacrilegious manner thus conflicts with an individual’s need to buffer against death anxiety by protecting and bolstering their worldviews.
Even more telling are the findings of McGregor et al. (1998) who explored the effect of mortality salience on participants’ actual physical aggression towards individuals with competing worldviews. Participants were randomly induced into mortality salience or not and then asked to read political essays ostensibly written by another participant. These essays were manipulated to be either consistent or inconsistent with a participant’s own political views (i.e., conservative or liberal). As part of a purportedly unrelated second study exploring the relationship between personality and food preferences, participants were then given the opportunity to measure out a quantity of hot sauce to be ingested by the participant whose political essay they had read in the first study. The participant was told that the hot sauce was painfully spicy and that the taster had specifically expressed a dislike for spicy foods. Consistent with TMT, mortality salience influenced participants’ hot sauce allocations. When compared to non-MS participants, MS participants allocated larger amounts of hot sauce to be ingested by participants with political views contrary to their own. Though not statistically significant, they also allocated smaller amounts to be ingested by participants with political views similar to their own. These findings suggest that individuals’ need to protect and bolster their own worldviews is so strong that it can serve as a catalyst for physically aggressive behavior—in this case operationalized as the allocation of greater amounts of spicy hot sauce to be ingested by dissimilar others.

To date, the connection between mortality salience and worldview defense has been supported in over 200 studies (Arndt et al. 2005). Additionally, research conducted in eleven different countries (e.g., Australia, Canada, Germany, Israel, Italy, Japan, China, Korea, The Netherlands, United Kingdom, and the United States) suggests the cross-cultural impact of mortality salience on human behavior. It has also been instrumental to
exploring and explaining a wide range of human thoughts and behaviors including, but not limited to: creativity and guilt, conformity to norms, stereotyping, and disgust and feelings about sex and the body. Finally, mortality salience effects have been replicated using myriad operationalizations of mortality salience (e.g., death anxiety scales, gory automobile accident footage, proximity to a funeral home, and subliminal death primes) (see, Solomon, Greenberg, and Pyszczynski 2004 for a review).

Mortality Salience and Legal Decision-Making

Of the over 200 studies that have explored the impact of mortality salience on human behavior, several have focused on issues of legal decision-making. In fact, the seminal study exploring mortality salience and the worldview defense proposition of TMT was actually conducted in a legal setting. Rosenblatt, Greenberg, Solomon, Pyszczynski, and Lyon (1989), hypothesizing that most judges adhere to a “law and order” worldview, explored the effect of mortality salience on the bond decisions of 22 municipal judges in a simulated prostitution bond hearing (Study 1). They postulated that MS judges would display greater worldview defense than non-MS judges, as manifested by higher, more punitive bond amounts for lawbreakers (i.e., the prostitutes).

In a study ostensibly exploring the relationship between personality traits and bond decisions, half of the judges completed a questionnaire intended to induce mortality salience. All of the judges then heard the type of evidence typically presented in a bond hearing and were asked to determine a bond amount. Results showed that MS judges were substantially more punitive than non-MS judges, setting an average bond of $455, as compared to only $50 by non-MS judges. The researchers suggest that this
substantially significant difference in bond amounts resulted from the MS judges’ attempts at mortality-induced terror management. By behaving more harshly toward prostitutes, who, through their criminal behavior, exhibited values representative of a competing worldview, the judges defended the anxiety-buffering qualities of their own “law and order” worldview. This study provided initial confirmation of the core propositions of TMT—mortality salience and worldview defense—and illustrated their relevance to issues of legal decision-making.

Rosenblatt et al. (1989) replicated, expanded upon, and refined these initial findings. For example, they found that MS college students, like the judges, set higher bond amounts in a prostitution case, but only when they possessed pre-existing negative attitudes about prostitution. MS participants with worldviews amenable to prostitution were not motivated by existential concerns to protect their “law and order” worldview by harshly punishing the prostitutes (Study 2). Additionally, they found that MS participants also behave more favorably towards individuals with similar worldviews (Study 3). Since these initial studies, numerous others have replicated these MS effects and have found them to be applicable in explaining jurors’ increased punitive reactions toward lawbreakers accused of committing a number of offenses including armed robbery, traffic offenses, burglary, forgery, fraud, and malpractice (Cook, Arndt, and Lieberman 2004b; Florian and Mikulincer 1997).

Although the findings of Rosenblatt et al. (1989), Florian and Mikulincer (1997), and Cook, Arndt, and Lieberman (2004b) suggest that terror management via worldview defense fosters hyper-punitive reactions on the part of MS jurors, recent studies applying TMT to various legal issues hint at a more complicated relationship. These recent studies
assume that individuals, including jurors, can simultaneously espouse and, depending on the circumstances, be differentially influenced by competing worldviews (see, Arndt et al. 2005 for a review). As applied to jury decision-making, while defense of one worldview promotes juror hyper-punitiveness, defense of a competing worldview may actually promote increased leniency towards a defendant. It then becomes an issue of what particular worldview the juror is motivated to defend at a given time.

One category of crime for which this may be especially true is hate crimes (Lieberman et al. 2001). This is because the worldviews of both the perpetrator and the victim are particularly relevant and salient during the adjudication of a hate crime. This is because it is the disparity between the perpetrator’s and the victim’s worldviews that defines what a hate crime is and also initially motivates its commission. Subsequently, jurors are likely to be exposed to these competing worldviews during the adjudication process and may subsequently be influenced by these competing worldviews in their decision-making. As illustrated in the studies above, hyper-punitive reactions towards hate crime perpetrators may result when jurors, through their decisions, adhere to and protect a worldview based on law and order (Rosenblatt et al. 1989; Florian and Mikulincer 1997). Conversely, more lenient reactions towards hate crime perpetrators may occur if a hate crime victim belongs to a group that espouses worldviews that are contradictory and, therefore, threatening to the worldviews of the jurors. That mortality salience leads individuals to derogate, stereotype, or negatively evaluate outgroup members who hold competing worldviews is strongly supported in the literature (Greenberg et al. 1990; Ochsmann and Mathy 1994; Schimel et al. 1999).
Building on this research, Lieberman et al. (2001) conducted two studies that empirically explored and found evidence supporting the role of terror management in jurors’ perceptions of and reaction to hate crimes. Specifically, they found that whether jurors reacted punitively or leniently towards hate crime perpetrators depended on whether jurors were MS and whether they received information indicative of the victim’s worldviews. When no information was revealed about the victim’s worldviews and participants simply responded to general attitude questions about hate crime legislation, MS participants adhered to a “law and order” worldview, as manifested by their greater support for stricter hate crime legislation when compared to non-MS participants (Study 1). However, when information indicative of a victim’s worldview (e.g., ethnicity, sexuality) was provided, MS participants, when compared to non-MS participants, displayed increased leniency towards perpetrators who attacked victims with cultural worldviews deviating from those of the participant (Study 2). In this specific study, MS-induced heterosexual participants, when compared to non-MS heterosexual participants, set significantly lower bail amounts for perpetrators accused of attacking a homosexual outside a Gay Pride rally. These two studies, when taken together, not only provide additional empirical support for TMT, but also expand upon and qualify it. While the results from Study 1 mirror the results of earlier studies showing juror hyper-punitiveness toward lawbreakers, Study 2 supports the contention that MS jurors may be differentially influenced by competing worldviews. In the case of hate crimes, leniency may replace punitiveness when a juror’s cultural worldviews are more similar to those of the hate crime perpetrator than to those of the victim.
The body of research discussed thus far paints a rather pessimistic view of legal decision-making. It suggests that key legal decision-makers (e.g., judges, jurors), in an effort to protect the anxiety-buffering qualities of their own worldviews, may often make decisions that are either overly punitive or overly lenient towards criminal defendants. In either case, one party is treated unfairly and justice is not served. Fortunately, there is research suggesting that this is not always the case. Individuals may also possess as part of their overall worldview a belief that people deserve to be treated fairly and justly. This belief is often referred to as procedural justice and its relationship to mortality salience and legal decision-making is discussed in the following section.

Mortality Salience and Procedural Justice

That the concepts of justice and fairness comprise an integral aspect of human existence and are potentially significant components of many individuals’ overall worldview is supported by an extensive literature. Perelman (1967) wrote that “justice is one of the most highly respected notions in our spiritual universe. All men, religious believers and non-believers, invoke justice, and none dare to disavow it” (as cited in Lerner 1975, 2). Psychologists and moral philosophers have extensively studied the origins and development of justice in humans, formulating explanations rooted in social learning theory, psychoanalytic theory, and cognitive developmental approaches (see, Berg and Mussen 1975 for a review). Empirical research further suggests that individuals’ personal views about justice often color how they perceive and make judgments about the hardships that befall other individuals (Lerner 1970; Rubin and Peplau 1975). Finally, in connecting the issue of mortality salience to procedural fairness,
van den Bos and Miedema (2000) and van den Bos (2001) found that MS participants, when compared to non-MS participants, expressed greater positive or negative affect about the outcome of a competitive exercise depending on whether they were permitted to voice their opinion concerning the fairness of the outcome. These results suggest that justice and fairness are components of a worldview that individuals are motivated to uphold and protect because of its anxiety-buffering qualities.

One legal situation in which procedural justice is very important is jurors' response to inadmissible evidence. Empirical research demonstrates that jurors are not only unable or unwilling to disregard inadmissible and prejudicial evidence when admonished by a judge to do so (Fein, McCloskey, and Tomlinson 1997; Wolf and Montgomery 1977), but also that admonishing them to do so actually increases the likelihood of a "backfire effect" (see Lieberman and Arndt 2000 for a review) in which inadmissible evidence is given more weight than it would otherwise be given barring the judicial admonition (Edwards and Bryan 1997). Cook, Arndt, and Lieberman (2004a) posit that an individual's reliance on a worldview that includes philosophies of procedural justice may, in some situations, offset jurors' tendency to utilize inadmissible evidence and to respond punitively to lawbreakers. When applied to inadmissible evidence, these philosophies compel jurors to recognize a defendant's constitutional right to a fair and impartial trial and to heed judicial admonitions to disregard evidence deemed inadmissible. According to TMT, MS jurors for whom procedural justice and fairness are integral components of their worldview should be less susceptible to the backfire effect. If this is the case, increasing mortality salience among jurors could facilitate a fair trial process in which jurors' deliberations are based on admissible, unbiased evidence.
To empirically explore whether MS jurors are less susceptible to the backfire effect due to motivations to protect a justice-oriented worldview, Cook et al. (2004a) randomly assigned participants to conditions in which both mortality salience and the admissibility of evidence were manipulated. Results of the study were suggestive, especially among participants whose pre-existing attitudes toward justice include a tendency to adhere to their own sense of justice rather than to the principles of justice as prescribed by law. These individuals are prone to nullification and are especially susceptible to the backfire effect (Lieberman and Sales 1997). Results from this study demonstrate that increasing mortality salience of these individuals reverses their susceptibility to the backfire effect. While typical backfire effects were found among non-MS, high nullification-prone participants, this trend was reduced among MS, high nullification-prone participants. Mortality salience increased fairness and procedural justice. As a result, these participants paid more attention to judicial admonitions to disregard inadmissible evidence.

According to Cook et al. (2004a), this increased attention to judicial admonitions to disregard inadmissible evidence resulted from jurors’ underlying motivations to manage the mortality-induced anxiety by defending, through their verdict, a worldview in which fairness and procedural justice play integral and significant roles. This increased attention to justice and fairness subsequently countered the normally punitive tendencies of nullification-prone individuals.

In summary, empirical studies applying TMT to legal decision-making paint a more complicated picture than suggested in initial studies. While early studies suggested that mortality salience would lead jurors to act more punitively towards defendants, more recent studies have suggested that jurors’ multi-faceted worldviews may lead to legal
situations in which it prompts the protection and bolstering of a worldview that fosters increased leniency and/or fairness towards a criminal defendant. The concluding section of this review will briefly explore the limited research applying TMT to capital punishment.

Terror Management Theory and Capital Punishment

Few studies to date have directly explored the impact of TMT on jury decision-making in capital trials. However, issues of mortality, as it relates to both the nature of the crime and the potential penalty awaiting a capital defendant, are highly relevant. The research that does exist (Judges 1999; Lieberman, Arndt, and Krauss, unpublished manuscript) suggests a pattern similar to that found in the research described above. When applied to capital punishment, mortality salience may differentially influence jury decision-making depending on the cultural worldviews that jurors are motivated to protect and uphold. As with hate crimes and inadmissible evidence, the defense of these worldviews may promote either juror hyper-punitiveness or increased leniency and/or fairness.

Noting that the practical reasons given to justify the retention and continued use of capital punishment—general deterrence, incapacitation, and retribution—lack empirical support, Judges (1999) claims that “capital punishment serves, through mostly non-conscious processes, more indirect and symbolic than direct and tangible purposes” (159). This symbolic purpose, according to Judges, is its role as an anxiety-buffer providing a “psychological defense against awareness of our own mortality” (161). Additionally, “Capital punishment expresses a reaction to community fears, often the
result of a state of general lawlessness” (185). When capital punishment is framed in
these terms, one better understands why capital jurors’ may react more punitively toward
capital defendants. In reacting punitively towards capital defendants, capital jurors
protect their law and order worldview by re-establishing and solidifying the sense of
lawfulness that imbues their existence with meaning, order, and stability. As evidence of
a relationship between mortality salience and increased juror punitiveness towards capital
defendants, Judges provides demographic evidence suggesting that death sentences for
capital crimes are more common during historical periods when death is more likely to be
salient (e.g., wars and economic and political upheaval) (as cited in Arndt et al. 2005).
While this evidence is suggestive, it lacks the weight of a controlled laboratory study.

Although no published studies to date have directly applied TMT as a means of
increasing procedural justice in capital cases, preliminary results from Lieberman, Arndt,
and Krauss (unpublished manuscript) suggest the possibility of doing so. Because
numerous jurisdictions consider future dangerousness as an important sentencing factor
in capital cases (Krauss, Lieberman, and Olson 2004), these researchers explored the
interaction of mortality salience and strength of expert witness testimony on capital
jurors’ perceptions of a defendant’s future dangerousness. Participants were made MS or
not and then all were exposed to a capital trial scenario that included testimony from an
expert witness testifying that a defendant posed a future danger to society and was thus
deserving of the death penalty. The strength of the cross-examination of the expert
witness was then manipulated. Participants were exposed to either a strong cross-
examination of the witness that focused on the quality and integrity of the evidence or to
a weak cross-examination of the witness that attacked the credibility of the witness while
leaving the substance of the original testimony uncontested. The results showed that although the strength of the cross-examination did not impact the perceptions of non-MS jurors, it did significantly impact the perceptions of MS jurors. MS jurors exposed to the strong cross-examination of the expert witness evidence expressed less inclination to impose the death penalty than did MS jurors exposed to the weak cross-examination of the expert witness. This is consistent with what one would expect from jurors that have considered the evidence in a procedurally fair manner. These preliminary results provide further support for the contention that justice is an integral component of some jurors’ worldviews and that increasing jurors’ mortality salience may subsequently increase capital jurors’ awareness and adherence to issues of procedural justice and fairness during the penalty phase of capital trials.

Current Study

This review of the literature demonstrates that our understanding of TMT, especially as it applies to issues of legal decision-making, has greatly evolved over the years. Mortality salience does not always motivate juror hyper-punitiveness; at times, it may actually increase juror leniency by increasing jurors’ motivation to adhere to issues of procedural justice and fairness. The findings of Cook et al. (2004a) and Lieberman, Arndt, and Krauss (unpublished manuscript) provide evidence of this mortality-induced leniency/fairness effect. The current study explores whether this mortality-induced leniency/fairness effect can be applied in order to increase the procedural justice and fairness with which jurors decide the fate of a capital defendant.
The current study will replicate and expand upon the research of Lieberman, Arndt, and Krauss (unpublished manuscript). Whereas their study focused on one specific sentencing factor (e.g., future dangerousness) used in a limited number of jurisdictions, this study explores whether mortality salience can increase the overall fairness of capital jurors’ penalty phase decision-making by increasing jurors’ motivation to consider and weigh all of the relevant factors—both aggravating and mitigating—that may be presented during the penalty phase of a capital trial. In this way, the current study has a broader objective than that of Lieberman, Arndt, and Krauss.

Similar to the findings of Lieberman, Arndt, and Krauss, it is hypothesized that mortality salience will interact with the strength of mitigation to influence jurors’ penalty phase decisions. More specifically, it is hypothesized that MS jurors exposed to strong mitigation will display greater procedural justice as manifested by increased leniency (i.e., less inclination to impose the death penalty) towards capital defendants when compared to MS jurors exposed to weak mitigation. Among non-MS jurors, it is hypothesized that the strength of the mitigating circumstances will not have a statistically significant impact on jurors’ sentencing determinations. In other words, there should be little difference in non-MS jurors’ inclination to impose the death penalty, regardless of the strength of the mitigating circumstances. This latter finding would be consistent with previous death penalty research demonstrating jurors’ tendency to be minimally influenced by mitigating factors.

One final point of interest will also be explored in the current study. There exists within the TMT literature some ambiguity as to whether MS effects are stronger when individuals are asked to think specifically about their own death as opposed to thinking...
about death in general or about the death of another individual (Greenberg et al. 1994; Pickle and Brown 2002). Capital cases provide a unique forum in which to address this question. Throughout the course of a capital trial, all participants are constantly bombarded with issues pertaining to death (e.g., homicide as a charge, death as a potential punishment). It is possible that these thoughts of death, while not specific to oneself, may be sufficient to activate MS effects. If this is the case, there should be no significant difference in results between MS participants and non-MS participants. On the other hand, if mortality salience effects are specifically activated by thoughts of one’s own death, MS participants should display greater MS effects than non-MS participants.
CHAPTER 3

METHODOLOGY

Participants and Design

Participants in this study included 34 male and 54 female criminal justice students from both lower and upper-division criminal justice courses at the University of Nevada, Las Vegas. As compensation, some participants received extra credit, while others received credit for a class assignment. In both instances, alternative options for receiving the extra credit or assignment credit were provided. The study was conducted in accordance with the prevailing ethical standards of the American Psychological Association (APA).

The data of 10 participants (5 male and 5 female) were excluded from analysis. Reasons for excluding the data of these participants included: previous exposure to the research materials (7 participants), non-completion of some of the research materials (2 participants), and completing research materials too quickly (1 participant).

Of the 78 remaining participants, 39% were male and 61% were female. The ethnic origin of the sample was as follows: 8% were Asian; 11% were Black; 18% were Hispanic; 4% were Native American; 52% were White; and 7% were of an ethnic origin other than what was specified on the demographic questionnaire. The median age of the participants was 21 years of age. Fifty-three percent of participants were Democrats; 21%
were Republicans; 20% were Independents; and 7% identified themselves as belonging to the Green Party or another party. Thirty-two percent of participants had served on an actual jury before.

Additionally, using the Witt standard (Wainwright v. Witt 1985), participants were classified as being either death-qualified (DQ) or non-death-qualified (NDQ). Specifically, participants were asked, “Do you feel so strongly about the death penalty (either for or against it) that your views would prevent or substantially impair the performance of your duties as a juror in a capital case?” Jurors who answered “yes” to this question were classified as NDQ participants. This was done in order to explore the effect or death qualification and its interaction with the primary independent variables—mortality salience and strength of mitigating circumstances. Of the 78 participants, 13 were classified as non-death-qualified based on their responses to this question.

Participants were randomly assigned to conditions in a 2 (mortality salience (MS): mortality salient vs. dental pain) x 2 (strength of mitigating circumstances: strong vs. weak) between-subjects factorial design. As described below, the necessary manipulations were accomplished using personality questionnaires and the penalty phase trial transcript.

Procedure

Individuals participated either individually or in groups of up to four people. Participants were told that the study would explore the relationship between personality characteristics, evidence, and jury decision-making in the penalty phase of capital punishment trials. They were informed that they would be completing a packet of
personality questionnaires, reading a summary of the penalty phase of a particular capital trial, and, acting as jurors, rendering a sentencing determination (e.g., death penalty or life without parole [LWOP]). Additionally, participants were informed that their responses would be anonymous and that they would be completing the research materials in private cubicles. After receiving informed consent, the experimenter provided the participants with the personality questionnaire packet, followed by the trial transcript, and, finally, the verdict packet. Upon completion of the research materials, participants were probed for suspicion, debriefed, thanked for their time, and dismissed.

**Personality Questionnaires**

In order to manipulate mortality salience and to preserve the credibility of the study’s cover story, participants were asked to complete a number of personality questionnaires, including the Just World Belief Scale (Lerner 1982), the Rosenberg Self-Esteem Scale (Rosenberg 1965; Appendix A), and the Positive and Negative Affect Schedule (PANAS-X) Mood Scale (Watson and Clark 1992).

**Mortality Salience Manipulation**

Embedded within these questionnaires was the Projective Life Attitudes Assessment, a bogus questionnaire designed specifically to manipulate mortality salience among participants. In the MS conditions, participants were asked to “Please briefly describe the emotions that the thought of your own death arouses in you” and to “Jot down as specifically as you can, what you think will happen to you as you physically die and once you are physically dead” (see Appendix B). Participants in the dental pain (i.e., control/non-MS) conditions were asked two similar questions pertaining to dental pain.
They were asked to "Please briefly describe the emotions that the thought of dental pain arouses in you" and to "Jot down as specifically as you can, what you think will happen to you as you experience dental pain and once you have physically experienced dental pain" (Appendix C). This method of manipulating mortality salience has been used successfully in a number of other studies (Arndt et al. 1997; Greenberg et al., 1990; Greenberg et al., 1993).

**Mood Assessment**

The PANAS-X was included in order to assess whether participants’ moods were altered by the mortality salience manipulation. The importance of this assessment is that it allows one to discount the possibility that the findings result from a change in mood accompanying the contemplation of one’s own death rather than from increased mortality salience and its concomitant worldview defense. The PANAS-X is a 60-item adjective list, scored on a 5-point scale ranging from 1 (low) to 5 (high). It consists of scales for overall positive and negative mood, as well as subscales for fear, shyness, happiness, hostility, self-assuredness, guilt, sadness, serenity, surprise, attentiveness, and fatigue. The psychometric properties of the PANAS-X have been reviewed and there is evidence that it is reliable and valid across several different samples (Watson and Clark 1991, 1992).

**Penalty Phase Transcript**

After completing the personality questionnaire packet, participants were presented with a summary of the penalty phase of a capital trial (see Appendix D). The transcript was developed, pilot-tested, and revised to ensure that the evidence presented was
ambiguous enough to allow for variation in participants’ sentencing determinations. Participants read a brief description of a bank robbery that resulted in the murder of one teller and the wounding of another. Participants were told that the defendant had already been tried and found guilty of first-degree murder by the jury and that it was now their responsibility to use the evidence presented during the penalty phase of the trial to determine whether the defendant should be sentenced to death or instead receive LWOP for his crimes. The evidence was presented in the format of the prosecution’s and defense’s closing statements and consisted of a summary of the aggravating and mitigating circumstances that jurors would be asked to consider when determining the defendant’s sentence.

Aggravating and mitigating circumstances for the current study were selected from the Nevada Revised Statutes (NRS) and used because they are frequently presented in actual cases. Two aggravating circumstances (felonious homicide, murder committed to prevent lawful arrest) were chosen for inclusion because they portrayed a realistic scenario that was sufficient to warrant the death penalty, but that was not too emotionally inflammatory. As a result, aggravating circumstances pertaining to the heinousness of the crime and the victimization of certain populations (e.g., the elderly, children, law enforcement agents) were avoided. The two aggravating circumstances presented by the prosecution remained constant across all conditions.

**Mitigating Circumstances Manipulation**

Mitigating circumstances were presented by the defense, and were manipulated to create a “weak mitigation” (WM) condition and a “strong mitigation” (SM) condition. For the purpose of the current study, the “weak” versus “strong” mitigation distinction
was operationalized as the number of mitigating circumstances presented by the defense to explain or justify the defendant’s criminal behavior. In the WM condition, the defense presented one mitigating circumstance—the defendant’s troubled childhood and adolescence. This included patriarchal abuse and abandonment, placement in emotionally and physically abusive foster-care environments, and criminal victimization while being homeless. The SM condition consisted of four mitigating circumstances—the defendant’s troubled childhood and adolescence (same as in the WMC condition), along with the defendant’s lack of a prior criminal record, the defendant’s good character and attempts to better his life, and the extreme emotional disturbance experienced by the defendant on the day of the crime.

Verdict and Manipulation Checks

After reading the trial transcript, participants received the verdict packet, which consisted of jury instructions, a verdict form, and two manipulation checks. Though the jury instructions were patterned primarily after those provided in the Nevada Revised Statutes (see NRS 175.554), the definitions for aggravating and mitigating circumstances were taken from the plain English version of the California Criminal Code. Participants read these instructions and then rendered a sentence of either LWOP or the death sentence. Participants were then asked to rate how confident they were in the sentence rendered. They responded on a 9-point scale with endpoints of 1 (not at all confident) to 9 (very confident).

After making their sentence determinations, participants completed two additional exercises intended to function as manipulation checks. The first exercise measured
whether participants understood the distinction between *aggravation* and *mitigation* and also the extent to which each of the aggravating and mitigating circumstances presented in their version of the trial transcript influenced their sentence determinations. It was important to include this manipulation check, as a wide body of research suggests that jurors understanding of sentencing instructions, especially those that apply to mitigating circumstances, is limited (see, Frank and Applegate 1998; Haney 2005 for reviews). Participants first answered two multiple-choice questions designed to gauge their understanding of what constitutes an *aggravation* and *mitigation*. These multiple-choice questions were taken from a study by Frank and Applegate (1998) that explored jurors’ comprehension of sentencing instructions in capital cases. Additionally, participants were given a list of the aggravating and mitigating circumstances presented in the trial transcript and asked to note whether each circumstance would be classified as an aggravating or mitigating circumstance. Finally, to measure participants’ attentiveness to the presented aggravating and mitigating circumstances, they were asked to rate on a 9-point scale how important each circumstance was in their final sentence determination (1 being *not at all important* and 9 being *very important*).

The second exercise measured the success of the mortality salience manipulation. Participants were given a list of 20 word fragments (e.g., s k _1 1) and asked to complete the word fragments with the first words that came to mind. Of the 20 word fragments, four could be completed by filling in letters that would create either a neutral word or a death-related word (e.g., skill vs. skull). The purpose of the exercise is to measure a participant’s level of death thought accessibility as a function of mortality salience. This
method has been used in a number of other TMT studies (Greenberg et al. 1994; Harmon-Jones et al. 1997).
CHAPTER 4

ANALYSIS

Primary Dependent Measure

The primary dependent measure was the verdict rendered by individual participants. Of the 78 participants, 41 returned a sentence of LWOP, while 37 returned a death sentence. Following methodology used in previous studies (Cook, Arndt, & Lieberman 2004; Edwards & Bryan 1997; Pyszczynski, Greenberg, & Wrightsman 1981), I created an index of participants' sentences by multiplying their sentences of LWOP (coded as -1) or death (coded as +1) by their level of confidence in that sentence (scored on a 9-point Likert scale). This sentencing index thus ranged from -9 (very confident that the defendant should receive LWOP) to +9 (very confident that the defendant should receive the death penalty). This creates a continuous variable that is a more sensitive measure of verdicts. Additionally, it allows the data to be analyzed using traditional experimental statistical techniques including Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) testing.

I conducted a 2 (mortality salience vs. dental pain) x 2 (strong vs. weak mitigation) ANCOVA with self-esteem serving as a covariate. Self-esteem was used as a covariate because numerous studies have shown that it moderates MS effects (Greenberg et al. 1992; Greenberg et al. 1993; Harmon et al. 1997). The analysis revealed no main effects for mortality salience or strength of mitigation. The lack of a significant main effect for
the strength of mitigation is important, as it indicates that, in general, increasing the number of mitigating circumstances did not affect jurors’ sentences (this issue is discussed in greater depth in the Discussion section). However, a marginally significant two-way interaction between mortality salience and strength of mitigation emerged, $F(1, 73) = 3.02, p = .086, \eta^2 = .04^1$. As demonstrated in Table 1, MS participants were more strongly influenced than dental pain participants by the strength of mitigation. A planned contrast indicated that MS participants exposed to strong mitigation ($M = -3.42$) were less confident that the defendant should receive the death penalty than those exposed to weak mitigation ($M = 2.53$), $t(73) = 2.39, p < .05$. However, within the dental pain condition (i.e., non-MS participants), the difference between the strength of mitigation conditions was not significant, suggesting that the sentencing determinations of dental pain participants were less influenced by the strength of mitigation. An additional contrast comparing the dental pain strong mitigation condition to the mortality salient strong mitigation condition was not significant ($p > .22$).² Taken together, these findings suggest that mortality salience may increase jurors’ attention to the strength of mitigation presented during the penalty phase of a capital trial.

Since jurors in capital trials are “death qualified” during the voir dire process, additional analyses were conducted after excluding NDQ participants from the sample. As mentioned above, the Witt standard was used to death-qualify participants. Using this standard, the data of thirteen participants who responded affirmatively that their views towards the death penalty would “prevent or substantially impair” their performance as a

¹ Self-esteem as a covariate was not significant, $F(1,73) = 2.20, p > .14$.
² This finding is likely attributable to the large variances associated with the means, as well as the small sample size.
juror were excluded. With this restricted sample, a 2 (mortality salience vs. dental pain) x 2 (strong vs. weak mitigation) ANCOVA with self-esteem as a covariate again produced

Table 1 Effect of MS and Mitigation on Sentencing (All)

<table>
<thead>
<tr>
<th>MS</th>
<th>Strength of Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong</td>
</tr>
<tr>
<td>Death</td>
<td>-3.42 (7.42) % = 30</td>
</tr>
<tr>
<td>Dental Pain</td>
<td>-0.35 (8.34) % = 47</td>
</tr>
</tbody>
</table>

Note: Higher numbers indicate greater confidence that defendant should be sentenced to death. Lower numbers indicate greater confidence that defendant should be sentenced to LWOP. Standard deviations presented in parentheses. % equals the percentage of participants in each condition who returned a sentence of death.

no significant main effects (ps > .20) or interactions (p = .48) for mortality salience or mitigation (see Table 2). Despite the absence of main effects or interactions, the results were still in the predicted direction, with MS participants exposed to strong mitigation still less likely to impose the death penalty than MS participants exposed to weak mitigation. Among non-MS participants, though there was a shift from leniency to punitiveness, there was still little difference in inclination to impose the death penalty, regardless of strength of mitigation. It thus appears that, at least from a statistical viewpoint, mortality salience affected responses to mitigation only when the full range of participants was examined, including those who were not supportive of the death penalty.
(i.e., NDQ participants).\(^3\) The significance of this will be discussed in more detail in the Discussion section.

Table 2 Effect of MS and Mitigation on Sentencing (DQ)

<table>
<thead>
<tr>
<th>MS</th>
<th>Strength of Mitigation</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>-1.95 (7.56) % = 38</td>
<td>2.14 (7.63) % = 61</td>
</tr>
<tr>
<td>Dental Pain</td>
<td>0.11 (8.34) % = 50</td>
<td>1.24 (8.00) % = 63</td>
</tr>
</tbody>
</table>

Note: Higher numbers indicate greater confidence that defendant should be sentenced to death. Lower numbers indicate greater confidence that defendant should be sentenced to LWOP. Standard deviations presented in parentheses. % equals the percentage of participants in each condition who returned a sentence of death.

Attention to Aggravation and Mitigation

As mentioned above, most death penalty statutes instruct jurors to weigh issues of aggravation and mitigation when deciding upon and rendering a capital sentence. When jurors follow these instructions, they are adhering to the rules of procedural justice. To get an idea of whether participants in this study rendered their sentences in a procedurally fair manner, it was necessary to look at how jurors perceived and utilized the presented aggravating and mitigating circumstances. To do this, I conducted a series of one-way ANCOVAs with self-esteem as a covariate to explore the effect of mortality salience on jurors’ perceptions of the importance of each presented aggravating or mitigating circumstance. Recall that participants were asked to rate on a 9-point scale how important

\(^3\) It may also be that it is harder to get significant effects with the smaller sample created by removing NDQ participants. To some extent, this second possibility is offset by how the means are less extreme in the DQ sample.
each circumstance was in their final sentence determination (1 being *not at all important* and 9 being *very important*). If mortality salience were increasing participants' attention to issues of mitigation, one would expect to find higher importance ratings for mitigating circumstances among MS participants than among non-MS participants. Though results were in this predicted direction, they were not significant for any of the mitigating circumstances ($ps > .14$), with the exception of importance of no criminal record, $F(1, 36) = 5.98, p < .05, \eta^2 = .14$ (see Table 3). The importance ratings for aggravating circumstances also did not produce significant results, though, participants, regardless of mortality salience, judged aggravating circumstances to be significantly more important to their sentencing determinations than the mitigating circumstances (see Table 3).

Table 3 Effect of MS on Perception of Aggravation/Mitigation (All)

<table>
<thead>
<tr>
<th>Aggravator/Mitigator</th>
<th>MS</th>
<th>Dental Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felony murder</td>
<td>8.08 (1.38)</td>
<td>8.08 (1.71)</td>
</tr>
<tr>
<td>Prevent identification</td>
<td>8.08 (1.27)</td>
<td>8.05 (1.96)</td>
</tr>
<tr>
<td>Troubled childhood</td>
<td>5.36 (2.59)</td>
<td>5.26 (2.68)</td>
</tr>
<tr>
<td>Good character</td>
<td>5.90 (2.25)</td>
<td>5.42 (2.24)</td>
</tr>
<tr>
<td>Emotionally disturbed</td>
<td>6.45 (2.46)</td>
<td>5.42 (2.55)</td>
</tr>
<tr>
<td>No prior criminal record</td>
<td>6.90 (2.29)</td>
<td>5.26 (2.56)</td>
</tr>
</tbody>
</table>

Note: Higher numbers indicate greater importance in sentence determination. Standard deviations presented in parentheses.

Though it did not achieve statistical significance, the mitigating circumstance, emotionally disturbed at the time, did approach marginal significance, $F(1, 36) = 2.31, p < .14, \eta^2 = .06$. With a larger sample size, it is likely that this finding would approach statistical significance.

The overall trends of these findings remained with a DQ sample, with the exception that importance of no criminal record shifted from significant to marginally significant, $F(1, 28) = 3.22, p < .10, \eta^2 = .10$. 

40
Comprehension of Aggravation and Mitigation

Two measures of comprehension were included in the study. The first measure of comprehension explored participants’ general understanding of the concepts of *aggravation* and *mitigation*, as measured by the accuracy of their responses to two multiple-choice questions from Frank and Applegate (1998). These questions asked participants to identify the correct definitions of these two concepts. Based on these responses, participants were grouped into the following four categories: (1) those participants who understood the concept of *aggravation*, but not *mitigation*, (2) those participants who understood the concept of *mitigation*, but not *aggravation*, (3) those participants who understood neither concept; and (4) those participants who understood both concepts. These four categories were subsequently collapsed into two categories titled *Partial/No Comprehension* and *Full Comprehension*. Participants in categories 1-3 were placed into the partial/no comprehension category, while those in category 4 were placed into the full comprehension category. Fifty-one participants, or 65 percent, fell into the full comprehension category, while the remaining 27 participants, or 35 percent, fell into the partial or no comprehension category.

To test the effect of general comprehension on the participants’ sentencing decisions, I conducted a 2 (mortality salience vs. dental pain) x 2 (strong vs. weak mitigation) x 2 (partial/no comprehension vs. full comprehension) ANCOVA with self-esteem as a covariate. Though no significant three-way interaction was found, an interesting pattern emerged among full comprehension participants (see Table 4). Full comprehension MS participants were more strongly influenced by the strength of the mitigation than were

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6 The non-significance of this interaction is possibly due to small cell sizes. Increasing the number of participants may increase the likelihood of a significant interaction.
full comprehension non-MS participants. For example, full comprehension MS participants that were exposed to strong mitigation ($M = -3.71$) were significantly less inclined to impose a death sentence than full comprehension MS participants exposed to weak mitigation ($M = 4.63$). Among non-MS participants with full understanding, there was a trend towards leniency regardless of whether the mitigation was strong ($M = -2.50$) or weak ($M = -1.28$). These findings suggest that mortality salience, at least among participants who comprehend the distinction between aggravation and mitigation, may increase jurors’ awareness of and utilization of mitigation in making their sentencing determinations in death penalty cases. Among those participants with partial or no comprehension of the concepts of aggravation and mitigation, no consistent pattern was found (see Table 4).

To test the effect of death-qualification on the issue of general comprehension, NDQ participants were excluded from the sample and another 2 (mortality salience vs. dental pain) x 2 (strong vs. weak mitigation) x 2 (partial/no comprehension vs. full comprehension) ANCOVA with self-esteem as a covariate was conducted. Though there was still no significant three-way interaction, some changes were noted among participants with full understanding of the distinction between aggravation and mitigation (see Table 5). While the strong difference among full understanding MS participants remained, there was a shift among full understanding, non-MS participants. This shift created a pattern similar to, but still significantly weaker than, the pattern for full understanding MS participants. As with the MS participants, non-MS participants exposed to strong mitigation ($M = -2.04$) were less inclined to impose the death sentence.

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7 MS participants exposed to strong mitigating circumstances ($M = -3.20$) were still significantly less inclined to impose the death sentence than MS participants exposed to weak mitigating circumstances ($M = 4.43$).
than non-MS participants exposed to weak mitigation ($M = 1.47$). Similar to the findings from the full sample, no consistent or predictable pattern was found among participants with partial or no understanding of the distinction between *aggravation* and *mitigation*.

Table 4 Effect of MS and Mitigation When Controlling for Comprehension (All)

<table>
<thead>
<tr>
<th>MS</th>
<th>Mitigation</th>
<th>Comprehension</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>Weak</td>
<td>Partial/No</td>
<td>-2.08 (7.31)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>4.63 (6.93)</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>Partial/No</td>
<td>-2.49 (8.82)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>-3.71 (7.00)</td>
</tr>
<tr>
<td>Dental Pain</td>
<td>Weak</td>
<td>Partial/No</td>
<td>.129 (7.94)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>-1.28 (8.75)</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>Partial/No</td>
<td>3.32 (7.96)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>-2.50 (8.00)</td>
</tr>
</tbody>
</table>

*Note: Higher numbers indicate greater confidence that defendant should be sentenced to death. Lower numbers indicate greater confidence that defendant should be sentenced to LWOP. Standard deviations presented in parentheses.*

As an additional check of participant understanding of aggravating and mitigating factors, participant comprehension of the specific circumstances described in this study was also measured. Participants were provided with a list of the aggravating and mitigating circumstances utilized by the prosecution and defense in their sentencing arguments and asked to mark whether each circumstance would be considered an
aggravating or mitigating circumstance. There was little variability in these responses, regardless of experimental condition. Of the 78 participants, only five participants (6 percent) misidentified a circumstance. Thus, it appears that participants are able to correctly report that a circumstance is aggravating or mitigating, without truly understanding how that information should be used (based on the results of the comprehension measure reported above).

Table 5 Effect of MS and Mitigation When Controlling for Comprehension (DQ)

<table>
<thead>
<tr>
<th>MS</th>
<th>Mitigation</th>
<th>Comprehension</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>Weak</td>
<td>Partial/No</td>
<td>-4.02 (6.38)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>4.43 (6.93)</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>Partial/No</td>
<td>2.55 (8.72)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>-3.20 (7.09)</td>
</tr>
<tr>
<td>Dental Pain</td>
<td>Weak</td>
<td>Partial/No</td>
<td>1.04 (7.74)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>1.47 (8.74)</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>Partial/No</td>
<td>3.46 (7.96)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full</td>
<td>-2.04 (8.13)</td>
</tr>
</tbody>
</table>

Note: Higher numbers indicate greater confidence that defendant should be sentenced to death. Lower numbers indicate greater confidence that defendant should be sentenced to LWOP. Standard deviations presented in parentheses.
Mortality Salience Manipulation

If the mortality salience manipulation was successful, participants in the MS condition should have completed more death-related words on the word fragment exercise than participants in the non-MS condition. Analyses found that this was not the case. On average, MS participants ($M = 1.28$) and non-MS participants ($M = 1.31$) created similar numbers of death-related words. The difference between the means is not significant ($t = .120, df = 76$). Given the marginally significant effects of mortality salience on the primary dependent measures, these results are a bit surprising. The absence of this effect may be a result of decay. The mortality salience manipulation was presented at the beginning of the study and it is possible that its influence may have dissipated by the time participants were asked to render their sentences and provide a confidence rating in that sentence. Alternatively, the sentence completion test may simply be an unreliable manipulation check. In this study, mortality salience was clearly manipulated. A content analysis revealed that those asked to think about their own death did write down death related thoughts, while those in neutral condition did not.

Affect

I assessed whether the mortality salience treatment had any effect on the self-reported mood of participants as measured by the PANAS-X. As mentioned above, the PANAS-X has subscales for overall positive and negative affect, as well as for fear, shyness, happiness, hostility, self-assuredness, guilt, sadness, serenity, surprise, attentiveness, and fatigue. With the present sample, all subscales had acceptable reliability levels (α ranged from .75 to .94 on all subscales except the surprise subscale, which had an alpha level of
.68). Because items on the positive and negative mood scales also appear in the other subscales, I first conducted a Multivariate Analysis of Covariance (MANCOVA) on the eleven other subscales, with mortality salience (death vs. dental pain) serving as the independent variable and self-esteem as the covariate. The omnibus results of this MANCOVA were not significant. I next conducted separate ANCOVAs on the positive and negative mood scales, again with self-esteem as a covariate. There was not a significant effect of mortality salience on the positive mood scale or on the negative mood scale. In other words, MS participants did not report significantly different levels of positive or negative mood than non-MS participants ($M_s = 2.99$ and 2.93; $M_s = 1.34$ and 1.43, respectively). These findings are consistent with extensive prior research finding that the effects of mortality salience are not mediated by self-reported affect (e.g., Arndt et al. 1997).
CHAPTER 5

DISCUSSION AND CONCLUSIONS

The primary purpose of this study is to address the effect of mortality salience on jurors’ decision-making during the penalty phase of capital trials. Specifically, the study examines whether increasing mortality salience among capital jurors will increase procedural fairness during the sentencing phase of capital trials. As it pertains to capital trials, procedural fairness, as established in current death penalty law, stipulates that capital jurors should consider any and all mitigating factors during the weighing process that culminates in a capital sentence. That mortality salience has the potential to achieve this end is based on previous terror management theory research suggesting that individuals possess and are motivated to uphold and defend a cultural worldview of which the concepts of justice and fairness are integral components. A secondary objective of this study is to explore the oft-debated question of whether MS effects are more likely to occur when individuals contemplate their own death rather than the topic of death in general or the death of another individual. Along with discussing findings pertaining to these two objectives, some interesting findings pertaining to the issue of juror comprehension will be discussed.
Procedural Justice

As to the issue of increasing procedural fairness during the sentencing phase of capital trials via increased mortality salience and worldview defense, the findings from the current study are mixed. When the full sample of participants is included for analysis, there is evidence to support the study's hypothesis that increasing mortality salience among jurors increases their attentiveness to the strength of mitigation presented during the penalty phase of a capital trial, with MS jurors exposed to strong mitigation less inclined than those exposed to weak mitigation to impose a death sentence. These findings replicate the previous research of Cook, Arndt, and Lieberman (2004a) on inadmissible evidence, as well as the preliminary findings of Lieberman, Arndt, and Krauss (unpublished manuscript) on expert witness testimony in capital trials. Like these two previous studies, the current study demonstrates the potential of mortality salience and resulting worldview defense to increase jurors' motivation, whether conscious or not, to act in ways that incorporate the ideals of procedural fairness. The findings of the current study also expand upon and generalize the preliminary findings of Lieberman, Arndt, and Krauss, as they apply to the general process by which jurors in most jurisdictions are instructed to determine a capital sentence (i.e., weighing of aggravation and mitigation). Recall that the findings of Lieberman, Arndt, and Krauss were narrower in scope, examining as they did the effect of mortality salience on only one capital sentencing factor—future dangerousness—used in a limited number of jurisdictions.

In regards to these findings, an important point pertaining to the absence of a main effect for strength of mitigation should be addressed in more detail. This finding not only replicates earlier studies suggesting that jurors are not receptive to or heavily influenced
by mitigation (Butler and Moran 2002; Luginbuhl and Middendorf 1988), but it also diminishes the possibility that participants' penalty phase decisions were simply the result of being exposed to varying strengths of mitigating circumstances. Instead, the marginally significant finding of an interaction between strength of mitigation—operationalized in this study as the number of presented mitigating circumstances—and mortality salience suggests that something more significant is occurring. MS participants, when compared to non-MS participants, are more receptive to and willing to utilize the strength of the mitigation in determining and imposing a sentence. From a terror management perspective, this difference in receptiveness to the strength of mitigation results from MS participants' anxiety-induced need to uphold and protect a worldview of which justice and fairness are integral components. The findings of van den Bos and Miedema (2000) and van den Bos (2001) provide evidence of the mortality-induced need and motivation to uphold and protect the concepts of justice and fair process.

The findings of mortality salience-induced procedural fairness effects discussed to this point must, however, be qualified. This is because evidence of these effects significantly diminished when NDQ participants were removed from the analysis. Recall that previous research on the practice of death-qualification suggests that this practice facilitates the formation of juries that are behaviorally and attitudinally different from NDQ juries (Allen, Mabry, and McKelton 1998; Butler and Moran 2002). The findings from this study replicate and add to this body of research. It is important to remember that mortality salience enhances an individual’s need and motivation to uphold and protect components of their belief system and the worldviews that comprise that belief system (Greenberg et al. 1990; Greenberg, Solomon, and Pyszczynski 1997). In terms of
how jurors approach, process, and utilize evidence, NDQ jurors are more likely to focus on issues of due process, while DQ jurors are more likely to focus on issues of crime control (Fitzgerald and Ellsworth 1984). These different criminal justice worldviews may help explain the absence of MS effects in the death-qualified sample.

According to Packer (1968), individuals with due process values are concerned with the rights of individuals and therefore stress procedural guarantees. Consequently, in the current case, excluded NDQ jurors, especially those who are mortality salient, would be especially conscientious of instructions to weigh both aggravating and mitigating circumstances when imposing a capital sentence. Crime control adherents, on the other hand, emphasize the need to deal with large numbers of criminals quickly and efficiently. As part of this quick and efficient process, the procedural guarantees advocated by due process adherents are devalued, potentially leading to a penalty phase in which instructions to weigh aggravating and mitigating circumstances are forgotten, or, worse yet, simply disregarded. When viewed from this perspective, the suppression of the mortality-induced procedural fairness effects in the death-qualified sample is not surprising. It may be that, with the exclusion of NDQ participants, the crime control and law-and-order values of DQ participants are enhanced to a point where they are sufficiently strong enough to resist and mortality salience-induced procedural fairness effects and any accompanying due process concerns that would emphasize procedural guarantees such as the consideration of issues of mitigation.

That mortality-induced procedural fairness effects diminish in the DQ sample is unfortunate, as one of the primary objectives of the current study is to examine whether terror management theory, through its mortality salience and worldview defense
components, can be utilized within the death-qualification framework to increase the likelihood that capital defendants will receive a fair trial in which all penalty-phase evidence—including that of a mitigating nature—is considered by the jury. The findings of the current study, at least as demonstrated in these initial analyses, suggest that this is not the case. Barring evidence of these effects, these particular findings provide support for and add to the findings of a long list of previous studies (Allen, Mabry, and McKelton 1998; Butler and Moran 2002; Cowan, Thompson, and Ellsworth 1984; Fitzgerald and Ellsworth 1984) demonstrating the detrimental impact that the death-qualification process has on a capital defendant’s chances of receiving a fair trial. In this particular case, the detriment stems from the tendency of the death-qualification process to create juries comprised or individuals that are more resistant to mortality-induced procedural fairness effects.

Self-Focused Mortality Salience

As for the second major research question—whether MS effects are more likely to occur when individuals contemplate their own mortality rather than mortality in general or the mortality of others—the current study provides some insight. Previous studies have produced mixed results on this issue. Greenberg et al. (1994) found weaker MS effects among participants asked to think about mortality in general or about the death of a loved one than among participants asked to think specifically about their own deaths. Similarly, Nelson et al. (1997) found that American mock jurors in a civil case displayed stronger

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As discussed in the section below on limitations, there is some concern that non-significant findings may be a result of small sample size. To examine this possibility, enough data to double the sample size has been collected and will, at a future date, be combined with the current data to see if significant findings can be achieved. The findings of this study should thus be viewed as preliminary findings.
MS effects (i.e., bias in favor of an American company) when they contemplated their own mortality than when they contemplated mortality in general. Conversely, Pickel and Brown (unpublished manuscript) found MS effects just as strong and sometimes stronger among participants asked to think about the death of another person.  

A capital case like the one in this study provides a scenario to further explore the ambiguity of these previous findings. In a capital case, both the crime committed and the penalty facing the accused force jurors to contemplate mortality issues. In the current study, half of the participants, along with being exposed to these general themes of mortality, were also instructed to specifically contemplate their own mortality. If MS effects occur from contemplating mortality in general rather than one’s personal mortality, the current study should have found little difference in MS effects between MS participants and non-MS participants. This was not the case. MS participants, as manifested through their greater attention to issues of procedural fairness, displayed greater MS effects than non-MS participants. The findings of the current study thus replicate the earlier findings of Greenberg et al. (1994) and Nelson et al. (1997). The current study does not specifically address why it is that personal mortality more readily facilitates MS effects than thoughts of one’s own mortality or mortality in general. Future research should explore this issue more fully.

Again, as with the findings pertaining to procedural fairness, these findings must be qualified. Recall that marginally significant MS effects were found when the full sample of participants was analyzed, but not when the DQ sample was analyzed. It thus appears that among DQ jurors, self-focused mortality salience was not sufficient to elicit

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9 The results from Pickel and Brown should be approached with caution. There were a number of limitations to the study that resulted in it not being published.
mortality-induced procedural fairness effects. This is not to say that mortality salience effects were not still present in the DQ sample. It may simply be the case that another worldview component became more dominant with the removal of the NDQ jurors from the sample. For example, it may be that law-and-order components of the remaining jurors’ worldviews became more powerful and influential, as manifested by increased punitiveness among mortality salient strong mitigation jurors in the DQ sample. Additional research should explore this possibility.

Comprehension

Though not a primary objective of the current study, the findings related to issues of juror comprehension of aggravation and mitigation are also noteworthy. That strong and consistent MS effects were not found among partial/no understanding participants is not surprising. Individuals lacking a clear understanding of what circumstances constitute aggravation or mitigation cannot be expected to weigh or apply these circumstances in a manner consistent with the ideals of procedural fairness. That mock jurors have a difficult time understanding and applying the concepts of aggravation and mitigation is well established in the empirical research (see, Haney 2005, 167-179, for a review). Participants in the current study also displayed difficulties understanding the concepts of aggravation and mitigation. Recall that one-third of the study’s participants displayed partial or no understanding of these two concepts. Interestingly, for those who displayed partial understanding, the majority of errors (75 percent) occurred in reference to the concept of mitigation. This supports previous research demonstrating that mock jurors have a poorer understanding of the concept of mitigation than of the concept of
aggravation—a fact that potentially biases capital jurors towards a death sentence rather than LWOP (Haney and Lynch 1994; Luginbuhl and Burkhead 1994). These findings are even more disconcerting when one considers that the current study’s sample consisted of a number of criminal justice majors (some from upper-level criminal justice courses) who, through their studies, have likely been exposed to these concepts. This suggests that the comprehension difficulties found in the current study are potentially greater in the general populace from which actual jurors are drawn.

Especially significant are the findings that mortality salience increases procedural justice among participants who possess a better understanding of the concepts of aggravation and mitigation. This finding, when combined with the findings discussed above, suggests that mortality salience does not increase jurors’ understanding of the concepts of aggravation and mitigation. Instead, the effect of mortality salience on sentencing determinations in death penalty cases is to increase procedural fairness among those jurors who already comprehend these concepts. The implication of these findings is that continued emphasis should be placed on increasing juror comprehension of capital case sentencing instructions. Though much work and research has explored and suggested procedural changes to ameliorate the issue of poor juror comprehension (Frank and Applegate 1998; Lieberman and Sales 1997; Severance and Loftus 1982), there is much research suggesting that substantial obstacles to juror comprehension of sentencing instructions, including those in capital cases, still, for a variety of reasons, pervade the criminal justice system (Blakenship et al. 1997; Diamond 1993; Tanford 1990). With

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10 Tanford (1990), in his research, explored the receptiveness of commissions, legislatures, and courts to procedural reforms that empirical research suggested would help ameliorate problems associated with jury incomprehension. His research found that commissions were more likely to implement reforms suggested
increased comprehension of capital sentencing instructions, jurors, especially those for whom procedural justice is an integral component of their worldview, will then possess not only the necessary knowledge, but also the motivation (bolstering and protecting their justice-oriented worldview), to approach their sentencing responsibilities in a way that is just and in accordance with the death penalty statutes of their respective states.

Limitations

A number of limitations in the current study should be briefly addressed. One possible limitation is the use of university students rather than a more community representative sample. Students may be less representative, thus limiting the ability to generalize this study’s findings to the general public. With this said, a number of points should be made. Many of the participants in this study were from a General Education introductory criminal justice course. As such, many participants were not criminal justice students and a number of departments from the university were represented in the sample. Additionally, the University of Nevada, Las Vegas campus is very diverse in terms of race, economic status, and, to some extent, age (i.e., non-traditional students). Finally, research by Bornstein (1999) suggests that, in most cases, sample (student versus representative community members) does not greatly affect outcome. For example, in a review of the past research on different samples of mock jurors (e.g., undergraduate vs. non-student/community), Bornstein found that in only 5 of the 26 studies was there a main effect of sample on participants’ verdicts. Also relevant to the current study were by the research, legislators enacted few of the recommended changes, and courts actually changed case law in directions opposite of those suggested by the empirical research.
his findings that the medium of presentation (e.g., written, live, video, or audio) did not affect outcome in mock jury studies.\textsuperscript{11}

A second limitation of the current study is the absence of a deliberation component. As is the case in actual jury trials, participants in the current study did not have the opportunity to discuss with other participants the penalty phase evidence presented and to collectively return a sentence of death or LWOP. Whether doing so would have changed the sentences rendered by individual participants is a matter of debate. An early and oft-cited study by Kalven and Zeisel (1966) suggests that deliberations play only a minor role in determining jury verdicts because the pre-deliberation or “first ballot” majority generally prevails in the end. In their words, “the real decision is often made before the deliberation begins” (488). More recent research suggests that this view may be overly simplistic, as it is likely that informal deliberation occurs before the first ballot is ever taken and that these informal deliberations may impact jury verdicts (Sandys and Dillehay 1995). Additionally, other studies have shown that deliberations can influence jury verdicts by creating a leniency shift in criminal trials using a reasonable doubt standard (MacCoun and Kerr 1988), increasing student jurors attention to judicial admonitions to disregard inadmissible evidence (Kerwin and Shaffer 1994), and by reducing biases that occur at the individual juror level (Kaplan and Miller 1978).\textsuperscript{12} In light of these findings, future research on this topic, in order to improve its ecological validity, should consider including a deliberation component.

\textsuperscript{11} Of 11 studies reviewed by Bornstein, there were only three in which a main effect of medium of presentation on outcome was found. Furthermore, the three studies in which a main effect was found offer conflicting results.

\textsuperscript{12} For an instructive review of validity issues pertaining to jury simulations, see Diamond (1997).
A final limitation of the current study is its relatively small sample size. It was initially thought that the chosen sample size would provide sufficient data to explore the study's research questions. As analyses commenced, it was realized that exploring the issue of comprehension would require that three-way ANOVAs be conducted. This led to issues of small cell sizes with these analyses. While these analyses often produced findings in the predicted direction, it is difficult to establish the true significance of these analyses until sample size is increased and further analyses are conducted with these additional participants included. This additional research is currently being conducted and it is hoped that additional analyses will strengthen the findings of this initial analysis.

Conclusion

The criminal justice system has no greater or more permanent penalty than the death penalty. As such, its use should be reserved for those most deserving of it. That jurors render a sentence with life and death ramifications in a manner that is not only inconsistent with death penalty law, but that also disregards or trivializes the impact of the individualized circumstances and background of each defendant should be a matter of concern for all who value justice and fairness. The current study explores whether terror management theory, a well-researched and empirically supported social psychological theory, can be utilized to address this pertinent legal issue.

Unfortunately, the preliminary findings of the current study are mixed. While evidence of mortality-induced procedural fairness effects was found when the full sample of participants was analyzed, these effects diminished to the point of statistical non-

13 This, of course, assumes that capital punishment is a viable and useful form of punishment. For excellent discussions on this topic, see Bedau (1997) and Paternoster (1991).
significance when only the DQ sample was analyzed. While these findings add to the voluminous literature detailing the detrimental impact of the death-qualification process, they are also disappointing, as the primary objective of this research was to find a way to increase procedural fairness within the death-qualification framework of current capital jurisprudence. It should be noted that even though the findings from the DQ sample did not achieve statistical significance, they were in a direction suggesting mortality-induced procedural fairness effects. It is hoped that increasing the sample size of the current study will produce significant results in the DQ sample as well and provide a solid foundation for future research exploring avenues for increasing procedural fairness during the penalty phase of capital trials. The time and energy devoted to such an effort seems a small price to pay when one considers what is at stake.


Cook, Alison, Jamie Arndt and Joel D. Lieberman. “Backing off the Backfire Effect: The Effect of Mortality Salience and Justice Nullification Beliefs on the Influence of


Evidence That Increased Self-Esteem Reduces Mortality Salience Effects."


Lieberman, Joel D., Jamie Arndt, Jennifer Personius and Alison Cook. “Vicarious
Annihilation: The Effect of Mortality Salience on Perceptions of Hate Crimes.” 


Pickel, Kelly L. and J.R. Brown. “Mortality Salience and Jurors’ Evaluations of Criminal Defendants: The Effects of Thinking about One’s Own or Another Person’s Death.” Manuscript submitted for publication.


NOTICE TO ALL RESEARCHERS:
Please be aware that a protocol violation (e.g., failure to submit a modification for any change) of an IRB approved protocol may result in mandatory remedial education, additional audits, re-consenting subjects, researcher probation suspension of any research protocol at issue, suspension of additional existing research protocols, invalidation of all research conducted under the research protocol at issue, and further appropriate consequences as determined by the IRB and the Institutional Officer.

DATE: October 26, 2006
TO: Dr. Joel Lieberman, Criminal Justice
FROM: Office for the Protection of Research Subjects
RE: Notification of IRB Action
Protocol Title: Personality, Evidence, and Legal Decision Making
Protocol #: 0608-2058

This memorandum is notification that the project referenced above has been reviewed by the UNLV Social/Behavioral Institutional Review Board (IRB) as indicated in Federal regulatory statutes 45CFR46. The protocol has been reviewed and approved.

The protocol is approved for a period of one year from the date of IRB approval. The expiration date of this protocol is September 14, 2007. Work on the project may begin as soon as you receive written notification from the Office for the Protection of Research Subjects (OPRS).

PLEASE NOTE:
Attached to this approval notice is the official Informed Consent/Assent (IC/IA) Form for this study. The IC/IA contains an official approval stamp. Only copies of this official IC/IA form may be used when obtaining consent. Please keep the original for your records.

Should there be any change to the protocol, it will be necessary to submit a Modification Form through OPRS. No changes may be made to the existing protocol until modifications have been approved by the IRB.

Should the use of human subjects described in this protocol continue beyond September 14, 2007, it would be necessary to submit a Continuing Review Request Form 60 days before the expiration date.

If you have questions or require any assistance, please contact the Office for the Protection of Research Subjects at OPRSHumanSubjects@unlv.edu or call 895-2794.
TITLE OF STUDY: Personality, Evidence, and Legal decision making
INVESTIGATOR/S: Joel Lieberman and Jared Shoemaker
CONTACT PHONE NUMBER: 702-895-0249, Dr. Joel Lieberman (Primary Investigator)

Purpose of the Study
You are invited to participate in a research study on personality, evidence, and legal decisions in criminal trials. The purpose of this study is to see how different people use different types of evidence in reaching decisions.

Participants
Participation in this study is open to criminal justice students who wish to participate in order to fulfill the research requirement for their criminal justice courses. You are being asked to participate in the study because juror behavior in actual trials is closed to outside observers (jury deliberations are secret). In addition, no two actual court cases are exactly alike, so it is often hard to generalize information across trials. As a result, when we want to better understand factors that affect jurors, and when we want to study behavior in a controlled setting, we often use college students as participants. Although college students are demographically different from actual jurors, research has shown that they tend to behave just like real jurors do.

Procedures
If you volunteer to participate in this study, you will be asked to do the following: First, you will be given a few personality questionnaires. After you complete the questionnaires, you will be given case materials about a trial. You will be asked to make a sentencing decision about the defendant, and to provide your impressions about other aspects of the case. The study will take approximately 1 hour to complete.

Benefits of Participation
At the end of the study, we will give you some insight into factors that affect juror decision-making. You may find this knowledge is beneficial in better understanding the outcome of trials you may hear about in the news. Other than this increase knowledge, there may be no direct benefits to you as a participant in this study. However, the scientific and legal communities will benefit by gaining insight as to how jurors make decisions. Ultimately, this may allow for more effective trial procedures to be developed.

Risks of Participation
As with any study, there is always a potential for you to experience minimal risks or discomforts during your participation. For example, you might feel uncomfortable responding to some of the questions. You are, of course, free to not respond to any questions that make you feel uncomfortable, and you are free to withdraw from the study at any time.

Cost/Compensation
There will be no financial cost to you to participate in this study. The study will take less than 1 hour of your time. You will be compensated for your time by being given 2 research credits that
TITLE OF STUDY: Personality, Evidence, and Legal decision making
INVESTIGATORS: Joel Lieberman and Jared Shoemaker
CONTACT PHONE NUMBER: 702-895-0249, Dr. Joel Lieberman (Primary Investigator)

may be used as one of a number of ways of completing your Criminal Justice 104 Research Requirement.

Contact Information
If you have any questions or concerns about the study, you may contact Dr. Lieberman in the Criminal Justice Department at 895-0249. For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the UNLV Office for the Protection of Research Subjects at 895-2794.

Voluntary Participation
Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with the university. You are encouraged to ask questions about this study at the beginning or any time during the research study.

Confidentiality
All information gathered in this study will be kept completely confidential. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for at least 3 years after completion of the study. After the storage time the information gathered will be destroyed.

Participant Consent:

I have read the above information and agree to participate in this study. I am at least 18 years of age. A copy of this form has been given to me.

Signature of Participant ___________________________ Date ________________

Participant Name (Please Print) ___________________________

Participant Note: Please do not sign this document if the Approval Stamp is missing or expired.
Rosenberg Self-Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1. On the whole, I am satisfied with myself. **SA**   **A**   **D**
   SD

2. At times, I think that I am no good at all. **SA**   **A**   **D**
   SD

3. I feel that I have a number of good qualities. **SA**   **A**   **D**
   SD

4. I am able to do things as well as most other people. **SA**   **A**   **D**
   SD

5. I feel I do not have much to be proud of. **SA**   **A**   **D**
   SD

6. I certainly feel useless at times. **SA**   **A**   **D**
   SD

7. I feel that I'm a person of worth, at least on an **SA**   **A**   **D**
   SD equal plane with others.

8. I wish I could have more respect for myself. **SA**   **A**   **D**
   SD

9. All in all, I am inclined to feel that I am a failure. **SA**   **A**   **D**
   SD

10. I take a positive attitude toward myself. **SA**   **A**   **D**
    SD
Mortality Salience Manipulation (Death)

The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual’s personality. Your responses to the survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF YOUR OWN DEATH AROUSES IN YOU.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO YOU AS YOU PHYSICALLY DIE AND ONCE YOU ARE PHYSICALLY DEAD.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Mortality Salience Manipulation (Dental/Control)

The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual’s personality. Your responses to the survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF DENTAL PAIN AROUSES IN YOU.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO YOU AS YOU PHYSICALLY EXPERIENCE DENTAL PAIN AND ONCE HAVE PHYSICALLY EXPERIENCED DENTAL PAIN.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Trial Materials

Summary of Guilt Phase of Trial

Immediately before closing, on the evening of April 12, 2003, an individual entered a Bank of America located in Las Vegas. He approached the counter and pulled out a gun, demanding that the two tellers on shift empty the contents of their cash drawers into a bag. After the tellers finished emptying the money into the bag, the perpetrator shot each teller once in the chest. He then fled the scene of the crime in a black, late-model Honda. One teller died at the scene before paramedics arrived. The second teller was critically injured but survived.

A short time later, police pulled over a black Honda that fit the description of the perpetrator’s automobile. The driver and owner of the vehicle, a 21-year-old male, was arrested and subsequently charged with the first-degree murder of the deceased bank teller and attempted murder of the surviving teller. At the capital trial (i.e., death penalty is being sought by the prosecution), the prosecution presented the following evidence: (1) the man did not have an alibi for the time of the crime; (2) he was carrying $1000 in cash, the same amount stolen from the bank; (3) he was identified by the surviving teller; and (4) his fingerprints were found on the bank counter, placing him at the scene of the crime.

The defendant’s attorney argued the following: (1) the defendant had been paid $1000 that day for some work he had done for an acquaintance (could not be verified); (2) eyewitness testimony is often unreliable, especially in stressful situations such as bank robberies; and (3) the defendant had been in the bank the previous week and could have left his fingerprints on that occasion.

The jury deliberated for 3 hours before finding the defendant guilty of first-degree capital murder. You, acting as one of the jury members, will now read a brief summary of the arguments that were presented during the penalty phase of the trial.

You are not to consider the question of guilt, as that has already been decided. Instead, it is your responsibility to decide whether the defendant should be sentenced to death for his crime, or whether he should instead be sentenced to life in prison without the possibility of parole (i.e., he will never be released from prison).
Summary of Penalty Phase of Trial

Prosecution Arguments

Ladies and gentlemen of the jury, you will now hear evidence that will assist you in deciding what penalty the defendant should face for his crimes. You will hear evidence pertaining to both the aggravating and mitigating circumstances of the crime. Aggravating circumstances are those circumstances that are presented as evidence that the defendant’s actions are deserving of the death penalty. Mitigating circumstances, on the other hand, are those circumstances that may offset the aggravating circumstances and which may therefore make a defendant eligible for a lesser sentence such as life without the possibility of parole. Aggravating circumstances that can be considered are established by law and we intend to show you that the defendant’s actions clearly meet the requirements of two separate aggravating circumstances. These include: (1) the act of murder occurred during the commission of another felony crime; and (2) the murder was committed to avoid a lawful arrest.

Murder during the commission of another felony: The defendant entered the bank on the afternoon of April 12, 2003 intending to commit armed robbery, a felony. To achieve his goal, he brought with him a loaded gun. During the guilt phase of the trial, you heard testimony detailing how the surviving teller heard the defendant say that he “wasn’t about to make the mistake of leaving any eyewitnesses alive.” From this testimony, it is clear that the defendant, before he even entered the bank that day, fully intended to commit more than just armed robbery. He was prepared to eliminate anyone who stood between him, the money, and his continued freedom. And that is what he did. He shot two individuals—killing one and severely injuring the other. Their only mistake was their bad fortune of being on shift that evening.

Murder committed to prevent lawful arrest: This circumstance is directly related to the first circumstance. The motive for the murder was completely selfish. Once the defendant had the money, he knew that the only way to avoid being arrested and held responsible for his crime was to make sure that nobody could identify him as the perpetrator. The easiest and most effective way to achieve this objective was to kill the tellers. If his aim had been a little more accurate that day, he might have been successful. Luckily, it wasn’t. One teller survived and has provided invaluable testimony about the pre-meditated actions of the defendant that evening.

Ladies and gentlemen of the jury, you now have the information that you need to make an informed decision. The law is very clear. Certain circumstances of a crime make that crime especially aggravating, or deserving of the death penalty. In this case, two of those aggravating circumstances are present. When making your decision, remember the aggravating circumstances of this crime and sentence the defendant to death as the law stipulates and as he so rightly deserves.
Ladies and gentlemen of the jury, there are two sides to every story. To this point in the trial, you have been exposed almost entirely to evidence detailing what occurred on the evening of April 12th and in the following days. What you have not yet heard about are the mitigating circumstances of the case. The law states that during this phase of the trial the defendant has the right to present any and all mitigating circumstances that he believes may offset the aggravating nature of the crime and which may make life without the possibility of parole a more appropriate sentence than death. It is our intention to provide you, the jury, with evidence that such mitigating circumstances apply in this particular case.

Troubled childhood and adolescence: To fully understand the events of April 12th, it is necessary to explore the defendant's background. In doing so, one finds a troubled childhood and adolescence filled with abandonment, as well as neglect and abuse.

The defendant's biological father was an alcoholic who physically abused his wife, as well as his three children. When the defendant was 11 years old, his father went out one night and never returned. The defendant's mother was forced to work two jobs to provide for the family. Despite her best intentions, the stress became too much and by the time the defendant was 13 years old his mother had become an alcoholic and completely unable to provide for her children. Child Protective Services removed the children from her care and each child was sent to live in separate foster homes.

Over the next 4 years, the defendant bounced from one foster home to the next, living in a total of 7 different homes. In some of these homes, the defendant's basic needs were barely met and at times he was a victim of emotional and physical abuse at the hands of his foster parents. At the age of 17, the defendant, after being severely beaten by his foster father, ran away from home and began living on the street. While living on the street, he worked odd jobs to get food and, when necessary, dug food out of dumpsters. On numerous occasions he was beaten up and robbed by other homeless individuals.

[Only in Weak Mitigating Condition: In the month preceding the murder, the defendant and a few of his friends decided that they wanted to find an apartment to rent out. Unfortunately, the defendant did not have his share of the first month's rent. He decided to get the money by robbing a bank. Upon entering the bank, his intent was robbery, not murder. Events quickly spun out of control and in one rash moment the defendant made a terrible decision.]

[Only for Strong Mitigating Condition: After being severely beaten and having his life threatened by another homeless individual, the defendant, fearing for his life, decided that he needed to find a way to turn his life around and to get off the streets.]

No prior record: The defendant has no significant history of prior criminal activity. In the time that he lived on the streets, he was never arrested for stealing or for
any type of violent crime. In fact, he was often a victim of violent crime (i.e., muggings, assaults).

Good character and attempts to overcome troubled background: In attempting to overcome his troubled background and to find a way to support himself, the defendant joined the National Guard when he was 18. During his short time in the National Guard he rose to the rank of Specialist (E4) and his evaluations describe him as being a hard-worker who was well-liked and who possessed strong leadership skills. While in the National Guard, the defendant completed his GED and took vocational courses to become a plumber. After leaving the National Guard he found a job as a plumber. This allowed him to rent an apartment and to provide for himself financially.

Emotional disturbance at time of crime: The two months leading up to the crime were especially difficult for the defendant. Due to cutbacks at the company where he worked, the defendant lost his job. He fell behind on his rent and was on the verge of being evicted from his apartment if he didn't come up with his back rent. The defendant became very upset at the possibility of losing his apartment and being forced to live on the streets again. He became extremely depressed. On the night of the murder, the defendant had taken both Paxil, an antidepressant medication, and Xanax, an anti-anxiety medication. This explains the agitated and irritable state that he was in when the police apprehended him.

Both Strong and Mitigating Conditions: We are not asking that you excuse the defendant of the responsibility for the crimes he committed. Instead, we only ask that you take into account the hardships he has experienced in his life and that you show mercy in light of these hardships. Allow him to live out the remainder of his life in prison where he will not be a threat to society.
Jury Instructions

You have convicted the Defendant of an offense which may be punishable by death. Using the evidence presented during the penalty phase of this trial, you must now decide whether the defendant should be sentenced to death or to life in prison without the possibility of parole.

According to Nevada Revised Statute (NRS) 175.554, jurors, in determining the appropriate sentence, shall determine the following:
(a) Whether an aggravated circumstance or circumstances are found to exist;
(b) Whether a mitigating circumstance or circumstances are found to exist; and
(c) Based upon these findings, whether the defendant should be sentenced to life in prison without the possibility of parole or to death.

The jury (or in this case, an individual juror) may impose a sentence of death only if it finds that at least one aggravating circumstance is present.

If the jury, in considering the evidence presented during the penalty phase, finds that the mitigating circumstances sufficiently outweigh the aggravating circumstances, the appropriate sentence is life in prison without the possibility of parole.
Individual Juror Verdicts

1.) Using the juror instructions provided above, please determine whether you believe that the defendant in this case should be sentenced to life in prison without the possibility of parole or sentenced to death. **Please use an X to mark your decision.**

- X Life in prison without the possibility of parole  
- Death penalty

2.) On the following 9-point scale (ranging from 1 being **not at all confident** to 9 being **very confident**), please circle the number that best expresses your level of confidence in your decision.

Not at all confident  1  2  3  4  5  6  7  8  9  Very confident
DEBRIEFING FOR TMT DEATH PENALTY STUDY  
(09/15/06)

O.K., the experiment is over. Thanks for participating in it. I'd like to take a few minutes to explain it in a bit more detail and get your reactions to it.

**Probe for suspicion** – to be expanded as necessary

Sometimes when students come to experiments they have certain expectations – perhaps their teacher, or a friend, or a classmate said something about experiments in general. Did you have any expectations before you got here?

Did you hear anything more specifically about this study?
What do you think this study was about?

As I said in the beginning, we're interested in types of evidence and legal decision making. Does anyone have any idea what types of evidence we are interested in?

If they say something - probe to see if they were suspicious.

If they say nothing – You read a trial transcript in which different types of evidence from a death penalty case were emphasized.

<table>
<thead>
<tr>
<th>Aggravating circumstances:</th>
<th>Circumstances supporting the death penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigating circumstances:</td>
<td>Circumstances supporting life in prison without parole</td>
</tr>
</tbody>
</table>

We wanted explore the role that these types of evidence play in the penalty phase of a capital trial, especially when jurors are asked to think about their own deaths.

**Explain Terror Management Theory**

A lot of previous research has shown that people tend to be very motivated to uphold the law after they have been reminded of their own mortality.

This might seem a little strange to you, so let me explain why that is the case.

1. There is a psychological theory called **terror management theory** that says people protect themselves from disturbing thoughts of their own death by investing in what is called a cultural worldview.
2. A cultural worldview is a view of reality that gives the world order, meaning, and permanence. It’s composed of beliefs that address such ideas as creation, what constitutes good and bad behavior, and what happens to us after we die.

3. We share these beliefs with other people in our culture, and we like people with similar beliefs and dislike people with dissimilar beliefs.

4. People with different beliefs threaten our worldview, because if what they believe is right then that implies that what we believe is wrong, and this undermines our sense of meaning.

Past research has shown that when people think about their own death, they react very negatively toward others who hold different beliefs or who violate cultural standards that are important to them, like laws.

So in the past we have seen that after people think about death they are more likely to convict criminals.

More recent research, though, has suggested that having people think about their own deaths may make them more likely to act fairly toward other people. This is because they may also adhere to a cultural worldview in which fairness in an important component. In these cases, people may actually behave more fairly towards defendants, leading to more lenient verdicts. For example, jurors may be more likely to disregard inadmissible evidence when they are asked to think about death because doing so is fair in terms of accepted legal processes.

**Explain This Study**

In this study, we are following up on that line of research and examining how people make decisions pertaining to the death penalty. According to law, jurors are supposed to consider both mitigating and aggravating circumstances when deciding whether a person should be put to death. Unfortunately, research has shown that jurors often disregard mitigating circumstances and emphasize aggravating circumstances in their penalty phase decisions, leading to the unfair imposition of the death penalty in some cases. The purpose of this study was to see if having people think about their own death would cause them to incorporate a fair process in which they weighed both mitigating and aggravating circumstances in deciding the fate of the defendant.

To study this, in the personality packet, we gave you a questionnaire that asked you to think about:
death

or a neutral topic (dental pain)

We then gave you a trial transcript that detailed the penalty phase of a capital trial. The aggravating circumstances in all of the transcripts were the same. The mitigating circumstances, though, were manipulated. In one condition, strong mitigating circumstances were presented. In another condition, weak mitigating circumstances were presented.

In the past, we have seen that normally people often disregard mitigating circumstances and pay more attention to aggravating circumstances when imposing a sentence in the penalty phase of a capital trial. This may increase jurors’ tendency to impose the death penalty.

We expect this same pattern to occur in the neutral (dental pain) condition. Because participants in this condition have not been made aware of their own death, they do not feel the need to protect themselves from the terror of death by defending a cultural worldview in which fairness is an integral component.

On the other hand, we expect participants who have thought about their own deaths (i.e., mortality salient) to behave differently. Because they have thought about their own death, they will be motivated to decrease the terror of death by protecting their cultural worldview that fairness in the legal process is important. They will do this by paying more attention to mitigating circumstances during the penalty phase of the trial. Additionally, we would expect participants who thought about their own death and who were exposed to strong mitigating circumstances to be more likely to vote for life than other mortality salient participants who were exposed to weaker mitigating circumstances.

So, we expect people who answered the questions about their own death to be less likely to sentence people to death than those who didn’t because they were more concerned about issues of fairness.

Now, you might think that everyone in the study would behave this way, because everyone thought about death in terms of the death penalty.

That’s true, but what we have seen in past research is that the effects of thinking about death, only happen when people think about their own mortality, and not the deaths of others (even close friends and relatives).

*Explain Deception*

I didn’t tell you all this detail at the beginning, because I didn’t want to bias you. If you knew that we were looking at these factors, then your responses probably wouldn’t be natural, and we wouldn’t really be able to learn anything.

Do you understand now why we did not lay out everything at the beginning of the study?
Okay, I’m happy to talk about things more or if you would like.

_Ask Them Not to Discuss It_

This research will provide insight ways of improving the fairness of the trial process. There are a number of things that can be done to reduce the effects associated with thinking about death that may be naturally triggered in death penalty cases.

Because this research is potentially important, I’d like to ask that you not discuss it outside this room. This is something that I and the people I work with have spent a lot of time on, and if other people hear about it and then come participate they might not be in a position to respond naturally. Can you agree to do that (get head nod)?

**REQUESTS TO REMOVE DATA FROM STUDY**

*If you are uncomfortable with having your data included and analyzed for this research study, you may request that your data be removed from the data set and destroyed.*
VITA

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Degrees:
Bachelor of Science, Psychology, 2003
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Thesis Title: Using Mortality Salience to Increase Procedural Fairness in the Penalty Phase of Capital Trials

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