

University of Dayton

eCommons

Graduate Theses and Dissertations

Theses and Dissertations

2006

An examination of the roles of outcome severity, monetary anchors, and counterfactual thinking in determination of punitive damage awards

Tarika Daftary
University of Dayton

Follow this and additional works at: https://ecommons.udayton.edu/graduate_theses

Recommended Citation

Daftary, Tarika, "An examination of the roles of outcome severity, monetary anchors, and counterfactual thinking in determination of punitive damage awards" (2006). *Graduate Theses and Dissertations*. 2202. https://ecommons.udayton.edu/graduate_theses/2202

This Thesis is brought to you for free and open access by the Theses and Dissertations at eCommons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of eCommons. For more information, please contact mschlangen1@udayton.edu, ecommons@udayton.edu.

AN EXAMINATION OF THE ROLES OF OUTCOME SEVERITY, MONETARY
ANCHORS, AND COUNTERFACTUAL THINKING IN DETERMINATION OF
PUNITIVE DAMAGE AWARDS

Thesis

Submitted to

The College of Arts & Sciences of the
UNIVERSITY OF DAYTON

In Partial Fulfillment of the Requirements for

The Degree

Master of Arts in Psychology

By


Tarika Daftary

UNIVERSITY OF DAYTON

Dayton, Ohio

April, 2006

APPROVED BY:



Melissa Berry Cahoon, Ph.D.
Faculty Advisor



David W. Biers, Ph. D.
Committee Member



Donald J. Polzella, Ph. D.
Committee Member



David W. Biers, Ph. D.
Chair, Department of Psychology

ABSTRACT

Daftary, Tarika

University of Dayton

Advisor: Dr. Melissa Berry Cahoon

Punitive damage awards are designed to penalize the defendant for negligent behavior and deter others from acting in a similar manner. The effects of outcome severity and the provision of a monetary anchor on mock jurors' punitive damage award decisions in a medical negligence case were examined in the current study. Jurors often find it difficult to arrive at a dollar amount while making such decisions, and they tend to be influenced by extralegal factors such as outcome severity, as well as by various cognitive heuristics, such as counterfactual thinking. Results indicate that jurors are influenced by suggested monetary anchors while determining damage awards. Participants' decisions regarding monetary damages were not influenced by the severity of the outcome (which is in accordance with the law). This was also reflected in participants' open-ended responses. When asked about the key factors that influenced their decisions regarding damage awards, very few made reference to the outcome. Overall, the results indicate that participants were influenced by the provision of monetary anchors, but not outcome severity in their decision making process regarding damage award amounts.

Acknowledgements

I would like to thank my advisor, Dr. Cahoon for her continuous and undying support and enthusiasm throughout this project, and for going way beyond the call of duty. I'm especially grateful for the numerous hours she put in reading my revisions and making sense out of my confusion! I would also like to thank my committee members, Dr. Biers and Dr. Polzella for their direction, assistance, and guidance. Thanks are also due the *American-Psychology Law Society* Grants-in-Aid Program and the University of Dayton Summer Fellowship Program for financial support of this project. And finally, thanks to my family and friends for their support and belief in me, and for continuously asking "Are you done with your thesis?" which fueled me to go on!

TABLE OF CONTENTS

ABSTRACT.....	iii
ACKNOWLEDGEMENTS.....	iv
LIST OF TABLES.....	v
CHAPTER	
I. INTRODUCTION.....	1
Overview.....	1
Outcome Severity and Attribution of Responsibility.....	7
Damage Awards.....	13
Comparative Negligence.....	19
Counterfactual Thinking and Causality.....	22
Jury Simulation Studies.....	30
The Present Study.....	32
II. METHOD	
Participants.....	35
Design and Procedure.....	35
Materials.....	38
Legal Case Summaries.....	38
Verdict Forms.....	39

III. RESULTS

Descriptive Statistics.....	40
Manipulation Check.....	40
Medical Malpractice Scale.....	41
Hypothesis 1.....	43
Hypothesis 2.....	43
Hypothesis 3.....	45
Hypothesis 4.....	48
Hypothesis 5.....	49

IV. DISCUSSION

Effect of Outcome Severity.....	53
Effect of Monetary Anchor.....	53
Role of Counterfactual Thinking.....	56
Summary.....	57
Limitations.....	60
Conclusions.....	61

REFERENCES.....	62
-----------------	----

APPENDICES

Appendix A: Medical Malpractice Scale.....	70
Appendix B: Legal Case Summary	72
Appendix C: Judge's Instructions.....	74
Appendix D: Verdict Form.....	75

LIST OF TABLES

Table 1. Descriptive Statistics Regarding Demographics of Sample.....	37
Table 2. Distribution of Damage Awards (Transformed Data and Raw Dollar Amounts) Across Levels of Outcome Severity and Monetary Anchor.....	42
Table 3. Frequencies of Counterfactual Thought Referents/ Key Factors Cited as a function of Outcome Severity and Monetary Anchor.....	47

CHAPTER 1

INTRODUCTION

There is currently a great deal of interest in, as well as controversy surrounding, the manner in which juries determine damage awards in negligence cases, especially regarding punitive damages (Hastie, Schkade, & Payne, 1999). Punitive damages are designed to punish the defendant for reckless conduct and to deter others from engaging in similar conduct in the future. Jurors are instructed to award these damages if they believe that the defendant has acted in a negligent manner (Owen, 1994). Jurors often report difficulty in determining the amount of damages to be awarded in civil trials. One of the reasons cited for this difficulty is the complexity of placing a dollar amount on plaintiffs' intangible injuries such as pain and suffering (Zickafoose & Bornstein, 1999).

Four major criticisms have been addressed in the literature regarding punitive damage awards (Hastie et al., 1999). Critics assert that awards are highly unpredictable and that similar cases can result in vastly different awards (Sunstein, Kahneman, & Schkade, 1998). Secondly, critics argue that the damages awarded are often excessive. These awards often dramatically exceed plaintiff litigation costs and create windfalls for them. Thus, they do not meet the goals of retributive justice, as the windfall serves no social purpose (Hastie et al., 1999). Retributive justice refers to giving people what is perceived to be deserved. It requires that the punishment fit the crime and that similar cases be treated alike. According to this concept, defendants deserve blame and punishment in direct proportion to the nature of the crime.

A third criticism is that extralegal factors, such as defendant characteristics and outcome severity have also been shown to greatly influence damage awards (Saks, 1992). Finally, critics claim that jurors do not follow instructions completely, that they neglect the goals of deterrence, and that they often confuse compensatory and punitive awards (Anderson & MacCoun, 1999; Hastie et al., 1999).

In a typical negligence trial jurors must determine whether the defendant's conduct conformed to the standard required by law and whether the conduct caused harm to the plaintiff (according to legal criteria). Judgments of liability should be based solely on the actions that led to the incident and not on the outcome. However, jurors often judge a person's level of responsibility based on the consequences of his or her actions, rather than just the person's actions *per se*. There is a tendency to assign more responsibility for an accident as the severity of the outcome increases (Greene, Johns, & Bowman, 1999). In addition to influencing mere assignment of responsibility, outcome information also seems to have an effect on legal judgments, especially those regarding punitive damage awards. According to the law of negligence, liability decisions should be solely influenced by evidence relating to the defendant's conduct and not by evidence relating to the outcome of the incident. However, numerous studies have found that outcomes do in fact influence decision making in this context (Bornstein, 1998; Robbennolt, 2000).

Although negligence law is quite explicit, there is very little consistency in decisions made by juries in negligence cases. The cognitive processes employed by people in evaluating negligence claims are not completely understood (Wiener et al., 1994). One kind of cognitive process that may play a role in determining how negligence

judgments are made is heuristic thinking (Kahneman & Tversky, 1974). Kahneman and Tversky argue that in complex situations people use simple heuristics to solve many problems. According to Wiener et al. (1994), "Heuristics make use of psychologically meaningful attributes of information and exclude less salient, but at times equally diagnostic data" (p. 91). This allows people to make efficient social judgments under conditions of social uncertainty.

Additionally, the effect of outcome information on decision making has been attributed to a number of cognitive biases. Kahneman and Tversky (1974) outlined three major heuristics (cognitive shortcuts) that people use in judging probabilities and making decisions under uncertain circumstances. These include the representativeness heuristic, the availability heuristic, and the anchoring and adjustment bias. This list has since been expanded to include other heuristics such as the hindsight bias and counterfactual thinking (Heath et al., 1994). The effects of several of these heuristics on decision making are discussed in the following paragraphs.

The hindsight bias has been studied extensively regarding its role in decision making. Fischhoff (1975) found that when people were given information about an event and its subsequent outcome, their estimates of the probability of that particular outcome occurring changed on the basis of knowledge of the outcome. Thus, people may find it difficult to disregard information that they already possess, and to make judgments on the premise that the particular information was not known at the time of the action in question. In a civil jury context this means that jurors' notions of how foreseeable and negligent a defendant's actions were will likely be influenced by the outcome of those

actions. This may affect decision-making when outcome severity is known, as jurors may find it difficult to separate the incident from the outcome (Greene et al., 1999).

In addition to outcome severity, the anchoring bias (Kahneman & Tversky, 1974) has also been shown to affect juror decision-making (Chapman & Bornstein, 1996). Monetary anchors have been shown to affect judgments, such that participants' judgments tend to be influenced by suggested starting points. This anchoring bias has been examined in the context of civil liability cases when the plaintiff requests a specific amount of compensation. There is a tendency for civil case jurors to gravitate toward an anchor provided by the plaintiffs' legal counsel, and damage awards are often systematically affected by damage requests (Greene & Bornstein, 2003). One explanation for this is that jurors develop a cognitive bias by focusing on the initial value (i.e., the anchor) and then adjusting from that value to some final judgment as they process subsequent incoming information provided by the defense and the prosecution.

Recent work on counterfactual thinking (one type of cognitive heuristic) directly addresses how people evaluate events that have already taken place. An event is judged to be normal if it matches expectations and other alternatives are not readily available. However, if the given event is easily mentally mutable (i.e., it is easy to imagine alternatives to the event), it is judged as abnormal. Research has shown that events that are more easily mutable are seen as more negligent by mock jurors (Johnson & Dronby, 1985). This ease of mutability of events has implications for judgments of responsibility for outcomes, such that easily undoing a particular person's behavior mentally tends to result in greater responsibility being placed on that person (Heath et al., 1994). Wiener and Pritchard (1994) found that the ease with which participants could mentally undo a

defendant's behavior in a negligence case was associated with increased likelihood that they would vote in favor of the plaintiff. According to Wiener and Pritchard, this effect is mediated to some degree by judgments of normality; as the defendant's behavior is seen as less normal the easier it becomes to undo his or her behavior. An abnormal event is typically perceived to be more mentally mutable than an event that is considered to be normal or routine. Evidence exists that these more mutable events are more likely to be perceived as the direct cause of the outcome of a sequence of events. This has implications for the legal system, as judgments of normality should not affect judgments of negligence. Research has revealed that counterfactual thinking may influence negligence judgments in ways that are counter to the law as it is written. According to the law, liability should be determined by comparing the defendant's actions to that of a careful and prudent person, not necessarily to the actions of a "normal" person or a person acting out of custom. Thus, an action should be judged negligent if it is imprudent, not abnormal. Although this is clearly delineated, people often make decisions based on normality, which is affected by the ease of mutations (Feigenson, 2002).

Additionally, investigations of the "deep pockets" effect, which is the tendency for jurors to be biased against wealthy defendants, have produced mixed results in the research literature. For instance, the deep pockets effect has been suggested to account for the findings that jurors tend to award more for equivalent injuries in medical malpractice than in automobile collision cases (Bovbjerg, Sloan, Dor, & Hsieh, 1991). However, Vidmar (1995) conducted a series of studies to explore this issue and found no such effect. Additionally, studies to test this effect often confound defendant status (corporate vs. individual) and wealth. When the two variables are distinguished, greater

evidence exists for the fact that status accounts more for the bias, as opposed to wealth (MacCoun, 1996).

The focus of this study was on the juror judgment process. More specifically, the present study was an investigation of the psychological processes involved in jurors' attempts to assess punitive damage awards in a medical negligence case. The effects of outcome information and provision of a monetary anchor on damage awards were examined. Additionally, the effects of counterfactual thinking on mock jurors' judgments of responsibility were investigated. That is, the question of whether the generation of specific types of counterfactual thoughts would correspond to the assignment of responsibility and awarding of monetary damages was also examined.

One question in forensic psychology is whether jurors can ignore a known outcome when judging the amount of punitive damages that should be awarded. The use of a medical negligence case is timely and relevant given the ongoing tort reform debate focusing on medical malpractice cases (Vidmar, 1995), as well as recent changes in the physician-patient relationship that encourage increasing patient involvement and responsibility for patients' own treatment and healthcare needs (Murphy, 1991). These changes have led to patients' increased control over decision making, paving the way for comparative negligence to be used as a defense, in which each party's degree of negligence is considered as evidence.

In 2002 the American Medical Association identified 12 states (including Ohio) as being in a medical liability crisis in which physicians cannot afford insurance or find companies to insure them. Some have advocated the position that passing tort reforms to

cap noneconomic damages would effectively control medical liability premiums (Leong, 2004).

Tort reform has been a controversial issue, especially with regard to capping damage awards, the use of bifurcated trials (separate trials to determine (1) liability and compensatory damages, and (2) punitive damages) and replacing juries with professional boards. Another criticism has been that juries tend to be overly generous and easily affected by extralegal factors (Vidmar, 1995). This study investigated, in an experimental manner, some of the variables influencing the issue of damage awards. Specifically, the current study involved examining the effects of outcome severity information, provision of monetary anchors, and generation of counterfactual thoughts on juror decision making with regard to punitive damage award amounts.

Outcome Severity and Attribution of Responsibility

Before addressing attributions of responsibility, it is necessary to make distinctions among various concepts that are often perceived as being quite similar. Although they differ in meaning, appropriate distinctions regarding the definitions of blame and responsibility have not been maintained in the literature (Robbennolt, 2000). According to Krulewitz and Nash (1979), "terms used by different investigators to assess causal attributions appear not to be equivalent in meaning...responsibility, blame and fault carry important, although subtly different shades of meaning" (p. 568).

For instance, responsibility implies a causal relationship between a person's actions and the outcome, whereas blame or fault is more likely to imply moral wrongdoing (Robbennolt, 2000). Researchers often use these terms interchangeably, despite the fact that it has been shown that people often perceive these concepts as

distinct (Fiske & Taylor, 1991). Harvey and Rule (1978) asked participants to rate an actor who caused harm on a number of different dimensions. They found that participants' responses revealed distinct clusters; one set associated with responsibility and the other with blame or moral evaluation.

Attribution of responsibility has been a subject of research activity that started to gain momentum in the 1960s. A seminal study by Walster (1966) triggered much research in this area. She posited that as the consequences of an action become more severe, the tendency to assign responsibility for the accident to someone who may be responsible increases. To investigate this, Walster presented participants with a scenario of an accident with different outcomes ranging in severity and asked them to determine the responsibility of the actor in the accident. She found that participants assigned more responsibility to the actor when the outcome presented was more severe as compared to when it was less severe.

Much literature has focused on how the severity of outcomes affects individuals' attributions. According to Burger (1981), a severe outcome generates in the observer a need to believe that it could have been averted. This is a result of self-protective motives. The observer needs to feel that measures could have been taken by the victim to prevent the event. This helps to reduce the observer's perceived vulnerability as he or she may feel that the event could have been avoided had the victim taken certain precautions. Thus, the severity of the outcome becomes an important determinant in the assignment of responsibility for the event. Studies have shown that an increase in the severity of the outcome causes observers to adopt defensive attributions (Burger, 1981; Medway & Lowe, 1975; Zuckerman & Evans, 1984). Variations in personal and situational similarity

between the perceiver and the actor often lead to differential levels of responsibility being assigned to the person involved. *Situational similarity* refers to the perceived similarities between the circumstances of the perceiver and the actor in the incident. *Personal similarity* refers to the perceived correspondence of beliefs, values and personal characteristics between the two individuals (Shaver, 1970). If personal similarity is low, responsibility on the part of the actor may be seen as high by the perceiver. This will thus minimize the perceived possibility that a similar incident could happen to the perceiver. However, if personal similarity is high, it is difficult for the perceiver to believe that the incident could be successfully avoided and thus may deny responsibility of the actor to avoid the possibility of being blamed in the same circumstances.

Medway and Lowe (1975) hypothesized that changes in the severity of a situation affect attributions of responsibility. Participants were asked to read a vignette about a student who was given eight questions to use in preparation for a midterm, four of which would appear on the exam. Due to time constraints the student studied only four of the eight questions. Outcome was manipulated wherein either the exam contained all the questions the student studied and he received a high grade, or the exam contained none of the questions he studied, resulting in a low grade. Severity of the consequences was manipulated by either requiring or not requiring the student to participate in research, based on the grade received. Participants then responded to a questionnaire measuring their perceptions of assignment of responsibility for the consequences. Greater personal responsibility was assigned to the student in the severe, as opposed to mild, consequence situation.

Research has provided mixed support for the hypothesis that as the severity of the outcome increases, the degree of responsibility attributed to the actor increases. Walster (1967) was not able to replicate her earlier findings (Walster, 1966). Similarly, Shaver (1970) reported two studies, neither of which provided support for the original findings of Walster (1966). Phares and Wilson (1972) hypothesized that the relationship between the attribution of responsibility and severity of outcome may be mediated by "situational ambiguity structure" (p. 394). That is, severe outcomes lead to attributions of greater responsibility when situations are highly structured (where the causal connection between the person and the outcome is very direct) more so than when they are ambiguous (the causal connection between the person and the outcome is not very clear).

Shaver (1970) also recognized that observers tend to assign levels of responsibility on the basis of personal and situational similarity. He suggested that situationally similar perceivers will be motivated to deny personal similarities to the actor, and hold him or her more responsible. Perceivers will thus consider it unlikely that the event would happen to them, partially as a result of lack of personal similarity; this is known as *harm-avoidance*. However, if observers do identify with the victim (high personal similarity), they will attribute more responsibility for the incident to chance, termed *blame-avoidance* (Fulero & DaLara, 1976 & Shaver, 1970). Thus, defensive attributional processes involve the effects of perceivers' identification with the victims and outcome severity on the assignment of responsibility to the victim.

Chaikin and Darley (1973) assigned participants to the role of either a worker or a supervisor. Half the participants (in the mild condition) were told that the worker pay would be determined by the supervisor, who could take extenuating circumstances into

consideration; the second half (in the severe condition) were told that the worker's pay would be determined solely by his output. Participants were then shown a video clip in which a worker completed the task of building a tower of blocks, but as he stood at the end of the task, the tower fell. In the mild condition the participants believed that the supervisor could take the extenuating circumstances into consideration while paying the worker, whereas the participants in the severe condition did not believe this to be possible. The situation was also made situationally relevant by having the participants believe that they would soon be placed in the role of either the worker or the supervisor. Defensive attribution theory predicts that the worker should not be blamed because observers may easily envision themselves in a similar situation and devaluing the worker would be a threat to themselves. Chaikin and Darley found support for the defensive attribution theory – future supervisors attributed more responsibility to the worker and were less likely to blame the supervisor in the scenario for the severe outcome. In addition, participants who were expected to later take the role of the supervisor attributed less responsibility to the supervisor than did participants who expected to be workers.

The outcome severity/responsibility relationship has also been examined in the context of comparative medical negligence cases (Feigenson, Park, & Salovey, 1997; Greene, Johns, & Bowman, 1999). Comparative negligence refers to the rule of law applied in accident cases to determine responsibility and damages based on the negligence of every party directly involved in the accident. Studies conducted in this area have produced mixed results. Greene et al. (1999) found no relationship between the severity of the injury and liability judgments, whereas Bornstein (1998) found that participants were more likely to rule in favor of the plaintiff when the injuries sustained

were more severe. (Other factors, such as the degree of negligence on the part of the defendant and evidence about the injury's cause were held constant across the Greene and Bornstein studies.) Specifically, Bornstein presented participants with a trial scenario in which a woman with ovarian cancer sued a drug company, alleging that her disease was caused by the birth control pills manufactured by the company. Bornstein manipulated the severity of the outcome and found that jurors in the high severity outcome condition were almost twice as likely to find the company negligent as compared to participants in the low severity outcome condition.

Feigenson et al., (1997) had participants estimate both the fault of the defendant and the plaintiff and then determine an adjusted damage award that was discounted by the percentage of the fault assigned to the plaintiff. They found that when attributing fault and awarding damages, participants were especially sensitive to the blameworthiness of the victim when the consequences of the accident were severe rather than mild. Robbennolt's (2000) meta-analysis of studies that examined the relationship between outcome severity and responsibility revealed a small but positive relationship. She found a significant relationship between outcome severity and amount of damages to be awarded, as well as a significant relationship between outcome severity and punishment. The smallest significant relationship was found for liability (in this case, determination of *negligence*) judgments and outcome severity. The mere existence of such a relationship is counter to legal criteria, as severity of the injury is not supposed to influence liability judgments. That is, determination of liability is to be based exclusively on the defendant's actions leading to the outcome, and not the outcome itself.

Although much research supports the existence of such a relationship, some research suggests that the severity of outcomes does not have an effect on liability judgment. For instance, Greene (1967) varied the degree of injury severity in a negligence case and found that the seriousness of the injury did not affect mock jurors' liability judgments. Thomas and Parpal (1987) measured the impact of severity of harm on ratings of responsibility of both the plaintiff and defendant. They found that severity of harm was not correlated with the perception of defendant fault. Thus there is a need to further research this area; one method of accomplishing this is through jury simulation studies.

Damage Awards

In addition to exploring the factors that influence the judgments of defendant liability with respect to verdict (guilt or innocence), the relationship between injury severity and monetary damage awards has also been studied (Bornstein, 1998; Chapman & Bornstein, 1996; Zickafoose & Bornstein, 1999). According to the written law (*American Law Institute, 1979, 901*), injury severity is relevant in determining the amount of *compensatory damages* to be awarded (i.e., damages recovered in payment for actual injury or economic loss) but should not be involved in determining the amount of *punitive damages* (i.e., damages awarded in a lawsuit as a punishment and example to others for malicious, evil or particularly fraudulent acts) to be awarded (see Robbennolt, 2000). The goal of tort law is to compensate for the injury, thus jurors who award greater compensatory damages for more severe injuries are functioning in accordance with the law. Archival studies provide support for the idea that more severely injured plaintiffs receive greater compensation than less severely injured plaintiffs (Bovbjerg et al., 1991;

Chin & Peterson, 1985). Additionally, simulation studies have revealed a correlation between injury severity and the amount of total damages (i.e., compensatory and punitive damages combined) awarded (Feigenson et al., 1997; Greene, Johns, & Smith, 2001).

In particular types of cases, both compensatory damages and punitive damages are assessed. These punitive damage awards are given for pain and suffering sustained by the plaintiff (Greene & Bornstein, 2003). Jurors often receive minimal guidance in determining the exact amount of punitive damages that should be awarded and the criteria for making these decisions are poorly specified (Greene & Bornstein, 2000). Some jury instructions acknowledge this ambiguity by stating “there are no objective guidelines by which you can measure the money equivalent of pain and suffering; the only real measuring stick, if it can be so described, is your collective enlightened conscience” (Douthwaite, 1988, pp. 6-7).

Pain and suffering are defined differently in different contexts such as jury instructions, case law, and statutory law. For example, the Civil Rights Act of 1991 allows for recovery in employment discrimination cases for “emotional pain, suffering, inconvenience, mental anguish, loss of enjoyment of life and other nonpecuniary (i.e., noneconomic) losses” (Greene & Bornstein, 2003, p. 11). This issue of defining pain and suffering is crucial, as it can play a major role in jurors’ decisions regarding damage awards.

Punitive damages are designed essentially to punish and deter the defendant rather than to compensate the plaintiff. Thus, the effect of the severity of the injury should not be taken into consideration while determining punitive damages; only the act itself that led to the outcome should be considered. Rustad (1998) examined 260 product liability

cases involving punitive damage awards. He found that in the majority of the cases where punitive damages were awarded, serious injuries to the plaintiffs were involved.

Although this can be interpreted as evidence for the relationship between injury severity and punitive damages, it is difficult to draw strong conclusions from archival studies because of the possibility that various confounding factors contributed to the findings.

According to Greene and Bornstein (2003), very few simulation studies have examined the effect of variations in injury severity on jurors' punitive damage awards, and those that do exist have found mixed results. Robbennolt and Studebaker (1999) presented participants with a simulated trial in which the plaintiff was described as having contracted either Hepatitis B (low severity) or AIDS (high severity) from a blood transfusion. More severely injured plaintiffs were awarded more in punitive damages as compared to less severely injured plaintiffs. Thus, injury severity was shown to have an effect on punitive damages even though these damage awards are intended to punish the defendant rather than compensate the victim.

Medical malpractice refers to "a physician's deviation from the applicable standard of care that a similar physician would exercise under the same circumstances" and "may be through negligence, ignorance, or intentional wrongdoing" ("The Project On," 2006). That is, medical malpractice is the larger category of professional wrongdoing, and negligence is one specific example of such malpractice.

With respect to medical negligence, jurors in these cases are presumed to be vulnerable to judgmental biases, such as deep-pocket and sympathy effects (Wiener et al., 1994). The deep pocket effect refers to the tendency of jurors to award greater damage awards to plaintiffs when the defendants are extremely wealthy or represent large

corporations, regardless of the circumstances of the case. Sympathy effects occur when jurors identify with the plaintiff and award greater damages as a result. One reason for these differences in damage award amounts could be that pain and suffering play a considerable role in medical negligence cases, and since jurors receive vague guidance in determining this component of compensation, awards for similar injuries may vary greatly (Greene & Bornstein, 2000). For instance, Bovbjerg et al. (1991) found that malpractice plaintiffs tend to receive greater compensation than automobile injury plaintiffs even when similar injuries were sustained. However, Vidmar (1995) asked mock jurors to award damages to a woman who had broken her leg and had resulting complications. She was described as sustaining her injuries either in an automobile negligence situation or a medical negligence situation. In this study jurors did not award significantly different damage awards as a function of type of case. Thus, there are mixed results in the literature concerning whether there is a difference in damage awards across different types of negligence cases. One explanation that has been suggested by researchers for this lack of consistency is that malpractice cases can be distinguished from automobile negligence cases on a number of dimensions; there is a professional relationship between the plaintiff and the physician, fact patterns leading to the injury are different, and malpractice cases usually involve multiple defendants. All these factors provide plausible explanations for larger awards in malpractice cases (Vidmar, Lee, Cohen, & Stewart, 1994).

As addressed previously, punitive damage award judgments are quite subjective in nature, largely as a result of highly ambiguous and unclear instructions given to jurors. Studies suggest that anchors provide a basis for simplifying judgments that involve

uncertainty and that people often rely on a salient numerical reference point when making quantitative judgments (Kahneman & Tversky, 1974). This effect has been termed the anchoring and adjustment bias, in which a person's judgments are unduly influenced by an arbitrary number that is suggested.

This anchoring bias has been demonstrated in a number of judgment tasks, both in the laboratory and naturalistic settings (Caverni & Peris, 1990). Anchoring is highly relevant to juror decision making, as this is a real-world domain where anchors may influence judgments regarding damage awards. According to Kahneman and Tversky (1974), people who must consider a great deal of information in making their decisions, such as jurors, are likely to rely on cognitive heuristics. These heuristics, such as anchoring effects, can then result in systematic biases.

In civil litigation cases, legal counsel for the plaintiff will usually suggest an initial amount, which is used in determining damage awards. This is known as the *ad damnum*. This requested compensation amount might act as an anchor and be quite influential in jurors' judgments. Raitz, Greene, Goodman, and Loftus (1990) found that nearly half their participants selected a damage award that exactly matched the award that had been suggested. Broeder (1959) examined the influence of the *ad damnum* on jurors' awards. He interviewed jurors in 11 actual legal cases and found that in six of the seven cases in which the jurors had ruled in favor of the plaintiff, the amount awarded was determined with reference to the amount requested by the plaintiffs' attorneys.

Zuehl (1982) investigated whether the *ad damnum* would function as an anchor for mock jurors. Different groups of jurors were given different suggested amounts of compensation after reading about a personal injury case. The different anchor figures

were \$10,000, \$75,000, \$150,000 or “substantial compensation” (p. 342). The results showed that half the damage awards matched the specific amounts requested, but the degree of acceptance of the anchor decreased as the dollar amount of the anchor increased. This decrease in acceptance occurred at the higher anchor levels. Specifically, the average awards of jurors with explicit monetary requests were \$18,000, \$62,800, and \$101,400, respectively.

Chapman and Bornstein (1996) included an extremely high anchor in a personal injury case in which the plaintiff claimed that her birth control pills had led to her ovarian cancer. Mock jurors awarded significantly more to the plaintiff in the high anchor condition than in the low anchor condition. Thus, there is clear evidence that the anchor-adjustment heuristic does play a role in juror damage award determination. However, studies have also shown that as the requested amount increases there is a tendency for the level of acceptance of the anchor amount to decrease after a certain point (Greene & Bornstein, 2003; Zuehl, 1982). In some cases, extraordinarily high requests can backfire. Marti and Wissler (2000) demonstrated this boomerang effect in a personal injury case in which the amount requested by the plaintiff, as well as counter anchor amounts suggested by the defendant, were varied. The \$25 million request by the plaintiff resulted in significantly lower award amounts than the \$15 million request, and the \$0 defense rebuttal produced awards that were significantly higher than when the \$100,000 rebuttal was offered.

Saks, Hollinger, Wissler, Evans, and Hart (1997) examined the effects of providing information about damage awards for pain and suffering in similar cases on mock jurors' decisions in a personal injury case. Research has shown that there is a high

level of variability in awards for similar injuries. They found that when jurors were provided with information about punitive damage awards in similar cases, the variability in the awards (i.e., different amounts awarded for similar injuries) was reduced. At the same time, the size (the actual monetary amount awarded in a particular case under different anchor conditions) of the mean awards was not affected in the cases of medium and high severity injuries. That is, by providing anchors, the awards for less severe injuries were inflated and those for more severe injuries were depressed. Studies have provided support for the anchoring effect, showing that jurors make decisions by relying on both information that is meant for their use (specifically, evidence regarding actions of the defendant at the time of the event), as well as extralegal information (such as outcome severity, defendant and victim characteristics, etc.) when making decisions regarding damage awards. The *ad damnum* seems to act as a starting point for discussions about appropriate compensation (Robbennolt & Studebaker, 1999).

Comparative Negligence

Jurors often report experiencing difficulties in determining the appropriate amount of punitive damage awards in civil trials. As addressed earlier, there are multiple reasons for this, such as the lack of guidance given in how to determine the appropriate amount of damage awards (Goodman, Loftus, & Greene, 1990). Under comparative negligence laws, plaintiffs may be found partly responsible for their own injuries. Thus the jury must determine not only liability, but also decide how responsible each party is (Zickafoose & Bornstein, 1999).

The jury is then responsible for determining the damage award, which is supposed to be independent of the liability issue, knowing that the award will be reduced by the

court in accordance with the degree of negligence attributed to the plaintiff (Greene & Bornstein, 2003). According to Zickafoose and Bornstein (1999) there are two types of comparative negligence: pure comparative negligence and modified comparative negligence. Under pure comparative negligence (currently used in 13 states), the plaintiff may seek damages even if his or her negligence is greater than the defendant's. Under the modified form of comparative negligence (used in 33 states), a plaintiff may recover damages if and only if his or her negligence is less than that of the defendant's (49% or 50%, depending on state law). The damage award is then reduced by the amount of responsibility attributed to the plaintiff by the jury.

The change to comparative negligence from contributory negligence was made in 1975 by most states (the change has not been made in four states). Under contributory negligence any negligence on the part of the plaintiff precludes recovery of any punitive damages. Shanley (1985) found that in cases of comparative negligence, double discounting in damage awards often occurs. He examined auto accident cases in San Francisco immediately after the transition to comparative negligence, and found that the gross damage awards for the partially negligent plaintiffs were lower than that for the plaintiffs not found negligent at all. These gross awards are then reduced by the court on the basis of the level of negligence attributed to the plaintiff. Thus the final award is reduced twice, or double discounted.

Little jury simulation work has been done that involves manipulating plaintiffs' conduct. Thomas and Parpal (1987) found that plaintiffs who were regarded as being more blameworthy received less compensation, but this reduction in amount was not directly proportional to the level of negligence actually assigned by participants to the

plaintiff. There was, however, an inverse relationship between the amount of damage awards and plaintiffs' perceived fault.

Feigenson et al., (1997) manipulated victim blameworthiness and accident severity to explore their effects on attributions of responsibility and damages by presenting participants with summaries of four accidents. Participants apportioned fault between the plaintiff and the defendant, then assessed both gross and discounted damages. The results showed that participants attributed a greater percentage of fault to a victim when the victim's injuries were more severe (even though such judgments should only be affected by legal blameworthiness). Additionally, they awarded lower gross damages when the victim was considered more legally blameworthy (even though such judgments should only be affected by outcome severity). The results also indicated that perceptions of blameworthiness exert more influence when consequences are severe, rather than mild. Thus, participants sometimes use legally irrelevant information when reaching decisions regarding fault and damages.

A criticism to Thomas and Parpal's (1987) and Feigenson et al.'s (1997) research was that they had jurors determine liability prior to awarding damages and manipulated the level of plaintiff negligence indirectly (i.e., through descriptions of plaintiff behavior). The argument was that having mock jurors determine both liability and damages would make the plaintiff's level of negligence more salient, thus resulting in greater discounting of the awards than when jurors award damages only.

Zickafoose and Bornstein (1999) explicitly manipulated level of plaintiff negligence (0% negligent, 20% negligent, or 40% negligent) and asked jurors to determine the gross compensatory damages to be awarded to the plaintiff. They were

instructed to take into account the level of injury severity and disregard the degree of the plaintiff's negligence, as the court would reduce the gross damages awarded on the basis of the amount of negligence. The results showed that significantly higher damages were awarded when the plaintiff was not at fault than in the other two conditions combined. Awards in the 20% and 40% negligent conditions did not differ from one another. Thus, the results show that jurors may simply be unable to disregard the existence of plaintiff negligence information when determining damages once they have been exposed to it.

The present study was an examination of the amount of damages awarded to the plaintiff as a function of manipulated outcome severity. Previous studies have not yielded clear answers regarding determining factors in mock jurors' decision making. In the present study the plaintiff's level of responsibility was not manipulated; rather, participants were asked to assign percentages of responsibility to the defendant and the plaintiff. Additionally, participants were asked to respond in an open-ended format to the question "What was/were the key factor(s) in the case presented that influenced your decision regarding damage awards?" This allowed mock jurors to indicate the key elements that guided their decision making process.

Counterfactual Thinking and Causality

Counterfactual thinking refers to "the propensity of individuals to imagine alternative scenarios that undo negative events" (Roese, 1997, p. 133). Counterfactuals may posit alternative scenarios that are evaluatively better than actuality or worse than actuality. The counterfactual content is often an attempt to recapture normality by altering antecedents that are unusual back to what the person considers "normal" (Kahneman & Miller, 1986). This cognitive heuristic is especially likely to be employed

when circumstances surrounding negative events are exceptional rather than routine. It is easier to imagine an alternative scenario when the cause of an event is atypical rather than when it is typical. Macrae (1992) demonstrated this effect in a study where a diner who had gone to a different restaurant than usual became ill, versus one who went to her usual restaurant and became ill. It was easier for participants to imagine an alternate scenario when she was described as having gone to a different restaurant than usual. Additionally, the relative ease of "undoing" the negative event led participants to have greater sympathy for the victim. That is, it was easier for them to generate counterfactual thoughts when the actor behaved in a manner atypical of her normal routine. For instance, there is a tendency to think that "if only she had gone to her usual restaurant she would not have become sick;" whereas, if she was described as having gone to her usual restaurant, an alternate scenario is harder to imagine.

According to Kahneman and Miller (1986), one of the chief determinants of counterfactual content is extant norms. According to norm theory, the more strongly outcomes evoke alternatives, the stronger any emotional reaction elicited by them will likely be. Additionally, normality of an event defines the ease with which an alternative event can be imagined (Miller & McFarland, 1986). Kahneman and Miller asked participants about the degree of regret various types of victims may be expected to experience. They found that, consistent with norm theory, the more easily an event was undone, or the easier it was to imagine alternative explanations, the more regret participants expected it to generate for the victims.

Researchers have demonstrated a connection between counterfactual thinking and causal attributions (Spellman & Mandel, 1999; Williams, Less-Haley, & Price, 1996).

According to Wells and Gavanski (1989), outcomes that are mentally easily undone may increase perceptions of the causal role of antecedent events. This is, when alternatives are easily imagined, antecedent events are blamed more for causing negative outcomes. These causal attributions in turn often influence emotional reactions and resulting monetary recommendations. This causal reasoning can be influenced by the mutability of events. Mutability refers to the ease with which an event can be mentally altered. That is, more mutable events are easier to imagine as being otherwise than are less mutable events (Williams et al., 1996). According to Wells and Gavanski, a default event is a highly available counterfactual mutation to a factual event. It is the event that easily comes to mind as an alternative to the factual event that led to a particular outcome.

Wells and Gavanski (1989) studied the influence of mutability on causal evaluation in a study where participants read about a paraplegic couple who drowned after their car fell off a collapsed bridge. In two versions of a scenario a taxi driver refused to drive the couple, leaving them to drive themselves in their modified car to their destination. In one version the taxi driver made it across the bridge minutes before it collapsed. In the other version the taxi driver plunged off the collapsed bridge, barely swimming to safety. Participants attributed greater causality to the taxi driver's decision and attributed more responsibility to him for the couple's death in the first version (in which the taxi driver makes it safely across the bridge). The counterfactual default event (driver agrees to take the couple) successfully undoes the event in one version but not in the other. Thus, participants attribute greater causal significance to an event if the counterfactual default event would have yielded a different outcome than if the alternative yielded the same outcome.

According to Roese (1997), people tend to produce relatively minor mutations. People commonly mutate abnormal events, restoring them to their normal default. This role of counterfactual mutations can affect liability judgments in legal settings.

Branscombe, Owen, Garstka, and Coleman (1996) had participants read a story about a date rape and then listen to lawyers' closing arguments suggesting possible mutations to the story. They found that the rapist was assigned more blame in the situation where the argument mutated the defendant's actions so that the rape would be undone, as opposed to a situation where although his actions were mutated, the rape still occurred. Similarly, when the victim's actions were mutated, she was assigned more blame if the mutation would undo the rape than if the rape would have still occurred.

Thus, research supports the connection between mutability and causality (Spellman & Mandel, 1999). Wells and Gavanski (1989) were the first to demonstrate the idea that mutability was important in perceptions of causality. Participants read a scenario where a woman was taken to dinner by her boss. He ordered for both of them a dish containing wine, but the woman, who was allergic to wine, ate the meal and died. The boss had considered ordering something else – in one condition the alternate dish contained wine as well, whereas in the other condition the dish did not contain any wine. Participants were asked to list four things that could have been different to prevent the woman's death and to rate how much of a causal role the boss had played in her death. Participants in the condition in which the alternate dish did not contain wine were more likely to mutate the boss's decision and rate him as being more causal in the woman's death, as compared to those in the condition where the alternate dish contained wine as well. These results provide evidence for the idea that mutability is an important factor

when determining perceptions of causality. That is, for causality to be assigned to an event, the event will likely have a counterfactual that would have undone the outcome. In addition, the ease of mutability affects the perceived causal impact (Spellman & Mandel, 1999).

Other studies have found different patterns of the interaction between causality and mutability (Mandel & Lehman, 1996). One scenario administered to participants describes a fictitious Mr. Jones, who took an unusual route home and was hit by a drunk teenage driver who ran through a red light. One group of participants was asked how Jones would finish the thought "If only..." and the other was asked what Jones would think caused the accident. Participants tended to mutate Jones' decision to take an unusual route but tended to assign causality to the drunk driver. Thus, it is not inevitable that the most commonly mutated event will also be designated as the primary causal event. Nevertheless, participants did mutate the drunk driver's actions as well, thus confirming that there is a connection between mutability and perceptions of causality.

The idea of counterfactual thinking (specifically the concept of mental mutations) has been applied to negligence law, suggesting that one manner in which people make decisions regarding responsibility is to mentally undo events that led to a particular outcome (Wiener & Pritchard, 1994). In the case of ordinary negligence the key decision to be made is whether or not the defendant acted in a way that harmed the plaintiff. Wiener and Pritchard have argued that cognitive heuristics play a prominent role in helping people make these decisions regarding negligence. Mental mutations are cognitive undoings of an event that has already taken place. Events that are more easily mutated are associated with increased perceptions of abnormality, which affect

judgments of victim compensation (Macrae, 1992). Additionally, events that are viewed as routine are less likely to result in counterfactual thinking, whereas atypical events are more likely to result in counterfactual thinking.

Research has revealed that an event is judged as more causal if alternatives that undo the outcome are easily generated. As addressed previously, Wells and Gavanski (1989) demonstrated this in their study describing a woman who died of an allergic reaction to wine following a meal that her boss had ordered for her. Participants saw the boss's actions as more causal when he had considered ordering an alternate meal with no wine in it as opposed to when the alternate meal that was considered but not chosen was made with wine as well. This can be applied directly to negligence law in that a defendant's actions may be judged more causally related to the plaintiff's injuries if the perceiver is easily able to mentally mutate the defendant's action to undo the harm caused (Wiener & Pritchard, 1994).

Studies of counterfactual thinking have been used to evaluate participants' judgments about compensation and financial penalties. The results of these studies demonstrate that victims of atypical events are awarded more compensation than those with injuries resulting from typical events. Additionally, defendants who caused more atypical injuries tend to be deemed more negligent (Hart, Evans, Wissler, Feehan, & Saks, 1997; Macrae, 1992).

The effect of typicality on the amount of compensatory damages, once liability has been established, has no legal basis. Rather, there is the possibility that mock jurors' perceptions are affected by counterfactual thoughts, particularly with respect to the severity of plaintiffs' injuries (Greene & Bornstein, 2003; Hart et al., 1997). For

example, Ritov and Baron (1994) found that plaintiffs injured by atypical events were perceived as suffering more than those injured in a more typical manner. These findings that plaintiffs with atypical injuries receive greater compensation than those with typical injuries from the same causal event can be explained in terms of the ease with which mock jurors imagine how the event's outcome might have been otherwise. This is consistent with the general finding that counterfactual thinking tends to have affective consequences (Roese, 1997). According to Roese, affect may also be a chief determinant of the activation of counterfactual processing. This activation of counterfactual thoughts may influence jurors' compensation decisions. That is, as jurors generate counterfactuals, their emotional reactions may be intensified, leading them to experience greater sympathy for the victim, thus assigning greater compensation.

Counterfactual thoughts are especially likely to influence affective experiences if the imagined alternative is better or worse than reality. That is, the *direction* of counterfactuals has been shown to influence both affect and intentions regarding future behavior. Specifically, Roese (1994) demonstrated that *downward* counterfactuals, those that lead people to imagine outcomes worse than reality, result in more positive affect. *Upward* counterfactuals, those that lead people to imagine outcomes better than reality, influence intentions to perform behaviors that lead to greater success. Thus, people can strategically use downward counterfactuals to make themselves feel better and upward counterfactuals to improve their performance.

Miller and McFarland (1986) had participants read one of three descriptions of a scenario in which the only difference was the normality level of the victim's actions. In all three conditions the victim lost the use of his right arm as a result of a gunshot wound

in a store robbery. The manipulation dealt with whether he went to the convenience store he normally visited, it was a store he went to for a "change of pace," or it was a different store he went to because his regular store was closed. The results showed that participants awarded a greater amount of compensation to an individual whose victimization was preceded by abnormal actions than to one whose actions were preceded by normal actions. Participants assigned the victim less responsibility when he was shot at a store he rarely visited as compared to when he was shot at the store he visited on a regular basis.

This can be extended to negligence cases as well. Using tort-like scenarios, Johnson and Drobny (1985) demonstrated that participants viewed acts as more mutable and therefore more negligent when the precipitating events occurred closer in time to the actual harm and with fewer intervening factors. Macrae (1992) suggested that people who are victims of harmful behavior as a result of atypical actions are seen as more deserving of compensation because it is easier to undo the fate of those victims by altering the "exceptional" conduct of the defendant.

Thus, it can be reasoned that individuals view alleged acts of negligence as abnormal and possibly more deviant from the standard of care to the extent that it is easy to mentally undo the resulting harm (Wiener et al., 1994). Wiener and colleagues found that participants who mentally mutated a negligent act (i.e., generated a greater number of counterfactual mutations), found the defendant's behavior to be abnormal and short of satisfying ordinary care. In addition, plaintiffs in this condition were awarded greater damages than were plaintiffs in the condition where the defendant's behavior was not seen as abnormal.

One limitation to Wiener et al.'s study was that participants were directly led to generate counterfactuals. They were asked specifically to mentally mutate events so that the outcome would have been different. The present study was designed so as to allow participants the option to engage or not to engage in counterfactual thinking. Additionally, Wiener et al.'s study focused on having participants compare the defendant's behavior to ordinary care (with the focus on the defendant's actions). Thus, a bias was created in which it was easier for participants to formulate mutations regarding defendant liability as compared to plaintiff liability. This can be explained by the availability heuristic; that is, when people estimate the frequency or predict the likelihood of certain events, they tend to be influenced by the ease with which instances of that class of events can be brought to mind (Kahneman & Tversky, 1982). Focusing attention on certain information can bias people's information processing in that less mental effort is required to generate explanations based on the more accessible information. The present study was an investigation of a comparative negligence case in which participants were asked to apportion responsibility for the incident. One of the goals of the current study was to examine the number of counterfactual mutations generated by the participants as a function of how they apportioned responsibility between the defendant and the plaintiff. Specifically, one research question was whether participants would generate more counterfactuals that referenced the specific party (the defendant or the plaintiff) who was assigned a greater amount of responsibility.

Jury Simulation Studies

The present study was a jury simulation study in which participants were asked to simulate the role of a juror and make a decision regarding punitive damages in a civil

litigation case, specifically a medical negligence case. Jury simulations studies in general have been criticized with regard to their ecological validity. According to Vidmar (1999), much jury simulation research lacks legal sophistication, researchers make overgeneralizations from their results, researchers overvalue extralegal influences, and most jury simulation studies use college students as their participants. Another issue that has been raised questioning the validity of jury simulation studies is that they make use of written materials, which is unrealistic, as jurors rarely read any case material during a trial. Additionally, simulation research focuses on individual juror decision making rather than on collective jury decisions that result from deliberation and discussion.

Despite these criticisms, jury simulation studies do have some degree of ecological validity. For instance, although the use of college students as mock jurors has been criticized, numerous studies have shown that the differences between decisions made by college students and law students, as well as the differences between decisions by college students and lay persons eligible for jury duty, are not statistically significant. Additionally, some researchers believe that studying individual juror decisions is a valid approach. Weiten and Diamond (1979) have argued that the first ballot in the deliberation process is a strong predictor of the final outcome, even in the absence of group discussion. Although there is still much debate regarding the validity of jury simulation studies, this approach may offer the best alternative to investigating juries that would otherwise not be permissible by law. Additionally, these simulation studies can be used to complement findings from archival studies, which is a methodology often used by jury researchers.

The Present Study

The present study was designed primarily to examine the effect of monetary anchor and outcome severity on damage awards in a medical negligence case. Previous studies have shown that providing an anchor has a dramatic effect on punitive damage awards; typically the higher the request, the higher the awards (Hastie et al., 1999). Additionally, evidence suggests that damage amounts are affected by the severity of the outcome. That is, as severity increases, award amounts for punitive damages tend to increase (Greene & Bornstein, 2003). There is a gap in the research examining individual and joint effects of anchor and outcome severity in the amount of punitive damages awarded. This study permitted the examination of these relationships. Specifically, the levels of outcome severity and anchor were manipulated to examine their effects on the amount awarded in punitive damages by mock jurors.

In the current study, levels of outcome severity were manipulated as high, medium, or low severity, and the anchor level was manipulated as high, medium, or no anchor. It was hypothesized that the specific conditions that would result in the highest damage awards were (1) high outcome severity and (2) high monetary anchor. The individual and joint effects of these factors were investigated in a series of analyses.

Additionally, the study was designed to determine what specific information in the case would be utilized by mock jurors in their decision making process. Participants were asked to apportion liability for the incident to both the plaintiff and the defendant summing to 100%. Analyses were conducted to investigate predictions regarding the association between specific key factors listed and ratings of both responsibility and negligence.

Patterns of counterfactual thought were also examined to better understand the relationship between counterfactual thinking and attributions of responsibility. Following determination of punitive damage award amount, an open-ended question addressing how the participants determined the amount to be awarded was asked. Specifically, they were asked "What was/were the key factor(s) in the case presented that influenced your decision regarding damage awards?" To examine the ease with which participants mentally mutated plaintiff or defendant actions, participants were asked a series of questions. The specific questions asked were: "What were some of the things that the plaintiff could have done differently so as to avoid the outcome?" and "What were some of the things that the defendant could have done differently so as to avoid the outcome?" It was hypothesized that when apportioning fault, participants would assign more fault to the defendant or plaintiff if they could mutate his or her actions with greater ease, which was inferred to be reflected in a greater number of counterfactuals. Thus, it was expected that participants' attributions of responsibility and negligence, as well as the amount of damages awarded, would be a function of the number and type (i.e., specific referent) of counterfactuals generated. Specifically, participants who generated a higher number of counterfactuals altering the *defendant's* behavior (as opposed to the plaintiff's behavior) were also expected to render judgments in favor of the *plaintiff* (with regard to awarding damages and attributing responsibility and negligence) and vice versa.

Hypotheses

(1) Punitive damage award amounts were expected to vary as a function of severity and anchor level. More specifically, higher damage awards were expected to be recommended in the high (vs. medium or low) severity condition (consistent with

Bornstein, 1998), and in the high (vs. medium) anchor condition (consistent with Greene & Bornstein, 2003). No specific prediction was made with respect to the amount of punitive damages expected in the no anchor condition.

(2) Greater responsibility and negligence were expected to be assigned to the referent (i.e., the target) of the participants' counterfactual thoughts. This prediction was based on research indicating that one of the ways people often determine responsibility is by mentally undoing events that led up to the outcome in question (Wiener & Pritchard, 1994), as well as the literature documenting the relationship between mutability and causal attributions (Wells & Gavanski, 1989).

(3) Similarly, key factors cited in decision making were expected to influence damage award amounts such that participants who referenced the defendant's actions as being of key importance were expected to award more in punitive damages as compared to those who referenced the plaintiff's actions. Again, this prediction was based on the evidence suggesting a relationship between the mental undoing of events and the assignment of responsibility (Wiener & Pritchard, 1994).

(4) Participants' apportionment of liability was expected to vary as a function of outcome severity.¹ That is, more liability was expected to be assigned to the defendant in the high (vs. medium or low) outcome severity condition (consistent with Bornstein, 1998).

(5) Similarly, participants' attributions of responsibility and negligence were expected to vary as a function of outcome severity. More specifically, higher ratings of responsibility and negligence were expected to be assigned to the defendant in the high (vs. medium or low) outcome severity condition (e.g., Feigenson et al., 1997).

¹ The concepts of responsibility, negligence, and liability, although conceptually similar, were analyzed separately as data pertaining to these concepts were assessed using different metrics.

CHAPTER 2

METHOD

Participants

Participants included 190 undergraduates enrolled in Introductory Psychology classes at the University of Dayton, a medium-sized, private, Midwestern university. All participation was voluntary in exchange for experimental credit. Participants ranged in age from 17-42 ($M = 20.2$) and were predominately male ($N = 125$). Additionally, a majority of participants were Caucasian (93.04%), and the remainder self-identified as Black/African American (5.3%), and “other” with respect to ethnicity (1.66%). Table 1 provides descriptive statistics regarding the demographic characteristics of the sample.

Design and Procedure

A 3 (outcome severity: High, Medium, Low) X 3 (monetary anchor: High, Medium, None) between-subjects factorial design was employed in which participants were randomly assigned to one of nine conditions: low severity-medium anchor, low severity-high anchor, low severity-no anchor, medium severity-medium anchor, medium severity-high anchor, medium severity-no anchor, high severity-medium anchor, high severity-high anchor, or high severity-no anchor.

Participants were administered the Medical Malpractice Scale (Barbe & Wrightsman, 1998) in group testing approximately one month prior to the study (see Appendix A). The Medical Malpractice Scale is designed to assess attitudes toward doctors, juries, and patients who sue. Participants who completed the scale at the time of

group testing were subsequently administered the remaining measures in groups of 15. In these small-group experimental sessions, the experimenter informed participants that they would be asked to make a decision in a civil litigation case regarding damage awards.

Participants completed the Informed Consent forms and read the legal case summaries. Immediately after reading the legal summary case, participants were told that the doctor was found liable and compensatory damages had been awarded. They were then told that their task as mock jurors was to determine the amount of punitive damages to be awarded to the plaintiff.

Participants then watched a videotape of a mock judge delivering typical judge's instructions for punitive damages in comparative medical negligence cases. The person featured in the video was a local community member who agreed to serve as an actor and play the role of a judge. In the video, the actor (a male Caucasian, approximately 55-60 years of age) was dressed in typical attire for a judge, including authentic judicial robes, and he was seated in the judge's chair in an actual courtroom. (For a complete transcript of the judge's instructions see Appendix C). He was not known to any of the participants. Following these judge's instructions delivered via video, participants determined the amount of punitive damages to be awarded and responded to questions regarding plaintiff and defendant responsibility, negligence, and liability. They were permitted to refer back to the written case summaries while answering the questions and deciding the amount of damages to be recommended.

Table 1

Descriptive Statistics Regarding Demographics of Sample

Age	$M = 20.2$ $SD = 2.69$
-----	---------------------------

Year in School

1 st year	66.3%
2 nd year	15.9%
3 rd year	6.30%
4 th year	11.5%

Ethnicity

White/Caucasian	93.04%
Black/African	5.30%
Asian	0%
Latino	0%
Other	1.66%
Prefer not to respond	0%

Materials

Juror questionnaire packets contained an Informed Consent form, one of the nine versions of the legal case summary, and a form on which they recorded their recommendations regarding damage awards. The packet also included items regarding the assignment of responsibility, negligence, and liability, as well as open-ended items regarding participants' counterfactual thoughts and the specific key factors from the case that were most influential in their decisions.

Legal Case Summaries

The legal case summaries were approximately 650 words in length and were based on an Ohio Supreme Court medical negligence case: *Bowman et al., Appellees v. Davis, Appellant, et al. # 75-898 Supreme Court of Ohio, Nov. 3, 1976* (see Appendix B). As mentioned above, nine versions of the legal case summary were used. The case summary outlines a medical negligence case in which a woman who had undergone a faulty tubal ligation after the birth of her fourth child got pregnant six months later. She had been warned of possible complications with future pregnancies, which was why she had agreed with the doctor's recommendation that she have the surgery to ensure that she would not be able to conceive again. Conflicting testimony was presented regarding whether she or the doctor failed to take the necessary follow-up steps after the surgery. In the high severity condition she was described as having given birth to one healthy baby and one with birth defects, in the moderate severity condition she was described as having given birth to two healthy babies, and in the low severity condition she was described as having given birth to one healthy baby. The specific amounts of suggested monetary anchors were also manipulated. The case summaries either included a high

anchor (\$500,000), a medium anchor (\$250,000), or no anchor. These anchor amounts were chosen based on recent comprehensive tort reform legislation passed by the Ohio General Assembly in December, 2004 (Senate Bill 80). The Governor signed the Bill on January 6, 2005 and the law became effective on April 7, 2005. This measure has put a \$500,000 cap on noneconomic damages for each victim in catastrophic injury cases, that is, the most reprehensible cases of medical malpractice. There is also an additional \$500,000 limit for claims that a spouse or companion may bring. This law was the basis of choosing the high anchor of \$500,000; \$250,000 was chosen as a medium level anchor as this was viewed as halfway between no anchor and the high anchor. In the third condition no anchor was provided, and was included on an exploratory basis.

Verdict Forms

After reading the legal case summaries and watching the video of the judge's instructions, participants were asked to decide the amount of punitive damages (if any) to be awarded to the plaintiff. Participants were given the charge that the defendant was determined to be legally comparatively negligent. They were asked to determine the level of comparative negligence and to restrict their award of damages to "those which are reasonably certain to exist now or in the future as the proximate result of defendant's liability." (Again, a complete transcript of the judge's instructions, delivered via video, is included in Appendix C). Participants were then asked to respond to items assessing defendant and plaintiff responsibility, negligence, and liability. Participants were also asked to rate their perception of the severity of the outcome as a manipulation check (see Appendix D), and to list the specific factors in the case that were most influential in their decisions. At the conclusion of each session, all participants were debriefed and thanked.

CHAPTER 3

RESULTS

Descriptive Statistics

There were 190 participants randomly assigned across the nine conditions² (high severity-high anchor, high severity-medium anchor, high severity-no anchor; medium severity-high anchor, medium severity-medium anchor, medium severity-no anchor, low severity-high anchor, low severity-medium anchor, low severity-no anchor). Participants were asked to apportion liability between the plaintiff and the defendant in percentage terms summing to 100%. A frequency analysis revealed that 71.88% of the participants found the *defendant* primarily liable, 16.22% found the *plaintiff* primarily liable, and 11.90% found the plaintiff and the defendant to be equally liable. Distribution of damage award amounts across cells is displayed in Table 2.

Because the distribution of damage awards was negatively skewed and the homogeneity of variances assumption was violated, the data were normalized using a log-10 transformation (Hastie et al., 1999; Zickafoose & Bornstein, 1999). All analyses were thus conducted, and all results are reported, using the transformed data.

Manipulation Check

As a manipulation check for outcome severity, participants ranked the 3 possible outcomes in order of severity. They gave these rankings after they had completed the verdict form. Descriptive statistics revealed that 175 participants (of N = 190 total)

² There were 22 participants in the high severity - high anchor condition and 21 participants in each of the other conditions.

ranked the scenario in which the defendant had one healthy twin and one with physical deformities as *high* in severity, 159 participants ranked the scenario in which the defendant had healthy twins as *medium* in severity, and 155 participants ranked the scenario in which the defendant had one healthy baby as being *low* in severity. Thus, the manipulation was effective, in that participants perceived the outcomes as was intended.

Medical Malpractice Scale

The Medical Malpractice Scale (MMS: Barbe & Wrightsman, 1998) was administered to 151 of the participants (total $N = 190$) one month prior to the testing session. (To increase power, additional participants were later included. No differences were found between those who did and did not complete the MMS, so all data were collapsed for analyses.) The MMS measures peoples' attitudes toward doctors who are sued, patients who sue, and juries. It consists of three sub-scales: one measures attitudes toward doctors who are sued (higher scores indicate pro-doctor attitudes), one measures attitudes towards patients who sue (higher scores reflect sympathy with patients), and one measures attitudes towards juries (higher scores reflect confidence in juries). A series of one-way ANOVAs was conducted to examine the influence of participants' attitudes on their punitive damage award decisions. There were no significant differences in damage awards given as a function of attitude scores on the doctor subscale, $F(1, 143) = .250, p = .618$, on the patient subscale, $F(1, 143) = .003, p = .959$, or on the jury subscale, $F(1, 143) = .093, p = .760$. Thus, all subsequent analyses were conducted without incorporating scores on the MMS as a covariate.

Table 2

Distribution of damage awards (transformed data and raw dollar amounts) across levels of outcome severity and monetary anchor

		<u>Outcome Severity</u>			
		<u>Low</u>	<u>Medium</u>	<u>High</u>	<u>Mean</u>
<u>Monetary Anchor</u>					
None	Transformed	3.27	3.8	3.6	3.56
	Dollar amount	\$38, 285	\$88,333	\$217, 261	\$114, 626
Medium	Transformed	3.68	4.03	4.02	3.91
	Dollar amount	\$94,261	\$120,952	\$401,388	\$205,534
High	Transformed	4.33	4.4	4.94	4.56
	Dollar amount	\$267,619	\$283,333	\$259,818	\$270,257
Mean	Transformed	3.76	4.08	4.19	
	Dollar amount	\$133,388	\$164,206	\$292,822	

Tests of Hypotheses

Hypothesis One.

It was hypothesized that damage award decisions would vary as a function of outcome severity and monetary anchor. More specifically, higher damage awards were expected to be recommended in the high (vs. medium or low) severity condition, and in the high (vs. medium) anchor condition. No specific prediction was made with respect to the amount of punitive damages expected in the no anchor condition. To test these predictions a 3 (severity: high, medium, low) X 3 (anchor: high, medium, none) ANOVA was conducted on the amount of damages awarded to the plaintiff. Partial support was found for this hypothesis. There was a significant main effect for monetary anchor level, $F(2, 181) = 3.97, p < .05, \eta^2 = .20$. There was no significant effect for severity of the outcome, $F(2, 181) = .768, p = .465, \eta^2 = .008$, nor was there a significant interaction between severity of outcome and anchor level, $F(4, 181) = .193, p = .942, \eta^2 = .004$. Post hoc analyses of the main effect of anchor were conducted using Tukey's HSD test. The mean punitive damage award was significantly higher in the high anchor condition ($M = 4.55, SD = .253$) than in the no anchor condition ($M = 3.55, SD = .255$). There were no significant differences between the other anchor conditions.

Hypothesis Two.

It was hypothesized that greater responsibility and negligence would be assigned to the referent (i.e., target) of the participants' counterfactual thoughts. Previous research has shown that participants who view a person's acts as abnormal or negligent are able to mentally mutate the event with greater ease and perhaps generate a greater number of counterfactuals. Additionally, when a person's actions are seen as negligent, he or she

tends to be held more responsible for the action (Weiner et al., 1994). Thus, it follows that participants would generate a greater number of counterfactuals referencing the party who is held more responsible.

To examine the first part of this hypothesis, a one-way ANOVA was conducted on the number of counterfactuals generated (referencing the plaintiff or defendant) as a function of the party to whom primary responsibility was assigned (either the plaintiff or the defendant) by the participants. A one-way ANOVA on the number of counterfactuals generated regarding the *plaintiff's* actions as a function of primary responsibility was not significant, $F(1, 144) = 1.303, p = .256$, although the results were in the direction hypothesized. That is, when the defendant was found to be primarily responsible, participants generated slightly fewer counterfactual thoughts referencing the plaintiff ($M = 1.09, SD = .46$) than when the plaintiff was found primarily responsible ($M = 1.21, SD = .42$). A second one-way ANOVA on the number of counterfactuals generated regarding the *defendant's* actions as a function of primary responsibility was also not significant, $F(1, 144) = 1.38, p = .242$, although again the results were in the direction hypothesized. That is, when the defendant was found to be primarily responsible participants generated slightly more counterfactual thoughts referencing the defendant ($M = 1.18, SD = .56$) than when the plaintiff was found primarily responsible ($M = 1.04, SD = .36$).

The second part of this hypothesis was that if the participants generated a greater number of counterfactuals altering the defendant's behavior rather than the plaintiff's behavior, their judgment would be in favor of the plaintiff (with regard to assigning negligence) and vice versa. This was not supported. A one-way ANOVA conducted on the total number of counterfactual thoughts generated regarding the plaintiff's actions as

a function of negligence assigned was not significant, $F(1, 165) = .593, p = .442$, although the results were in the direction hypothesized. That is, when participants assigned greater negligence to the plaintiff they generated a slightly higher number of counterfactual thoughts that referenced the plaintiff ($M = 1.21, SD = .49$) as compared to when they assigned primary negligence to the defendant ($M = 1.14, SD = .52$). A second one-way ANOVA was conducted on the total number of counterfactual thoughts generated regarding the defendant's actions as a function of negligence assigned. The ANOVA was not significant, $F(1, 165) = 1.651, p = .201$, although the results were in the hypothesized direction. That is, when participants assigned greater negligence to the defendant, they generated a slightly higher number of counterfactual thoughts that referenced the defendant ($M = 1.17, SD = .55$) as opposed to when they assigned greater negligence to the plaintiff ($M = 1.03, SD = .53$).

For descriptive purposes, Table 3 provides an overview of the frequencies of specific counterfactual referents/ key factors cited (i.e., plaintiff, defendant, both plaintiff and defendant equally, or outcome information) as a function of levels of outcome severity and monetary anchor. These categorizations were made by coding participants' open-ended responses to the item regarding the most influential key factors in their decisions, as well as their responses to the two items asking what the plaintiff and defendant could have done differently to avoid the outcome.

Hypothesis Three.

After determining the amount of monetary damages to be paid to the plaintiff, participants were asked to indicate which specific factors of the case influenced their decisions the most regarding these damage awards. It was hypothesized that punitive

damage awards would vary as a function of the types of key factors cited. More specifically, their responses were coded according to whether they referenced the defendant's actions, the plaintiff's actions, the actions of both the plaintiff and the defendant, or the outcome of the situation (i.e., the severity) as being of key importance. Results revealed that 48.4% of the participants referenced the defendant's actions as the key factors in their decision making process, 21.6% referenced the actions of both the defendant and the plaintiff, 20.5% referenced the actions of the plaintiff only, and 9.5% referenced the outcome. A one-way ANOVA was conducted on mean damage awards as a function of the key factor participants listed as most influential in their decisions. There was a significant effect for key factor, $F(3, 186) = 32.06, p < .001$.

Not surprisingly, participants who referenced the defendant's action as the key factor that led to their decisions awarded significantly greater damages ($M = 5.10, SD = .84$) than did those who referenced the plaintiff's actions as the key factor ($M = 2.29, SD = 2.34$). Those who referenced both the plaintiff and the defendant awarded significantly higher damages ($M = 3.89, SD = 1.93$) than those who referenced the plaintiff only, but significantly lower damages than those who referenced the defendant only. Those who listed the severity of the outcome as being of key importance awarded significantly lower damages ($M = 2.46, SD = 2.35$) than did those who referenced the defendant, but slightly greater damages than did those who referenced the plaintiff only, although this difference was not significant.

Table 3

Frequencies of counterfactual thought referents/ key factors cited (plaintiff, defendant, both plaintiff and defendant, or outcome information) as a function of outcome severity and monetary anchor

<u>Monetary Anchor</u>	<u>Outcome Severity</u>		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
None			
Plaintiff	5	5	4
Defendant	10	12	10
Both	5	3	6
Outcome	1	0	1
Medium			
Plaintiff	6	5	5
Defendant	5	11	13
Both	7	3	3
Outcome	2	2	0
High			
Plaintiff	3	4	3
Defendant	10	8	13
Both	5	6	6
Outcome	2	3	0

Note. These categorizations resulted from coding participants' response to the three pen-ended questions asked on the verdict form. That is, (1) "What was/were the key factor(s) in the case presented that influenced your decision regarding damage awards?", (2) "What were some of the things that the plaintiff could have done differently so as to avoid the outcome?," and (3) "What were some of the things the defendant could have done differently so as to avoid the outcome?"

Participants were also asked to indicate, in an open-ended fashion, what they thought the plaintiff or the defendant could have done differently to avoid the outcome. Three factors emerged for each the plaintiff and the defendant from the coding of these responses. Some participants cited more than one factor as being of key importance in their decision, thus some of the percentages sum to more than 100 percent. With regard to the plaintiff, the most commonly cited counterfactual thought was "The plaintiff should have gone in for/scheduled a follow-up appointment (84.4%)," followed by "The plaintiff should have taken more precautions when resuming sexual relations" (17.2%), and finally, "The plaintiff should have researched the surgery and its after effects more thoroughly" (11.1%). For the defendant the most commonly listed counterfactual thought was "The defendant should have made sure the plaintiff scheduled a follow-up appointment" (49.5%), followed by "The defendant should have performed the surgery correctly" (29.8%), and "The defendant should have informed the plaintiff of the test results" (31.3%).

Hypothesis Four.

It was hypothesized that liability judgments would vary as a function of outcome severity. More specifically, greater liability was expected to be assigned to the defendant in the high (vs. medium or low) outcome severity condition (consistent with Bornstein, 1998). To test this hypothesis a one way ANOVA was conducted on participants' liability judgments assigned to the defendant. Liability judgments were made by having participants assess a percentage of liability to both the plaintiff and defendant, with these percentages summing to 100; therefore, to avoid redundancy only those values assigned to the defendant are analyzed. The ANOVA was not significant, $F(2, 187) = .756, p =$

.312, $\eta^2 = .008$. An exploratory 3 (outcome severity: High, Medium, Low) X 3 (monetary anchor: High, Medium, None) ANOVA was also done to determine if there were any interactive effects on judgments of liability. There were no significant effects of anchor, $F(2, 180) = .435, p = .622, \eta^2 = .007$, or outcome severity, $F(2, 180) = .964, p = .321, \eta^2 = .008$, nor was there a significant interaction between anchor and outcome severity, $F(4, 180) = .468, p = .755, \eta^2 = .009$.

Hypothesis Five.

It was hypothesized that both responsibility and negligence judgments would vary as a function of outcome severity. More specifically, higher ratings of responsibility and negligence were expected to be assigned to the defendant in the high (vs. medium or low) outcome severity condition. To test the first part of this hypothesis I conducted a one-way ANOVA on participants' responsibility judgments, using their outcome severity condition as the predictor. Responsibility was measured on a bipolar scale ranging from +3 (the defendant was very responsible) to -3 (the plaintiff was very responsible). There was no significant effect of outcome severity, $F(2, 187) = .059, p = .943, \eta^2 = .001$ on attributions of responsibility. Additionally, an exploratory 3 (outcome severity) X 3 (monetary anchor) ANOVA was conducted to determine if there were any interactive effects on attributions of responsibility. There were no significant effects of anchor, $F(2, 180) = .580, p = .561, \eta^2 = .007$, or outcome severity, $F(2, 180) = .904, p = .904, \eta^2 = .001$, nor was there a significant interaction between anchor and outcome severity, $F(4, 180) = 1.078, p = .369, \eta^2 = .024$ on participants' attributions of responsibility.

The second part of this hypothesis was that negligence judgments would also vary as a function of outcome severity, with more negligence being assigned to the defendant

in the high outcome severity condition. To test this, a one-way ANOVA was conducted on participants' negligence judgments, using their outcome severity condition as the predictor. As with responsibility, negligence was measured on a bipolar scale ranging from +3 (the defendant was very negligent) to -3 (the plaintiff was very negligent). The ANOVA was not significant, $F(2, 187) = .059, p = .943, \eta^2 = .001$. Additionally, an exploratory 3 (outcome severity) X 3 (monetary anchor) ANOVA was conducted to determine if there were any interactive effects on participants' attributions of negligence. There were no significant effects of anchor, $F(2, 180) = .270, p = .764, \eta^2 = .003$, or outcome severity, $F(2, 180) = 2.20, p = .114, \eta^2 = .025$, nor was there a significant interaction between anchor and outcome severity, $F(4, 180) = .994, p = .412, \eta^2 = .023$ on participants' negligence ratings.

CHAPTER 4

DISCUSSION

The purpose of this study was to investigate mock juror decision-making regarding punitive damage awards in a medical negligence case. Specifically, this investigation was focused on the effects of outcome severity information and the provision of a monetary anchor on punitive damage awards. Actual jurors often report a great deal of difficulty in determining the appropriate amount of punitive damages to be awarded in civil trials. There are several reasons for this difficulty. Judges' instructions are often unclear with regard to the process of awarding punitive damages. Additionally, placing a dollar amount on intangible injuries (such as pain and suffering, loss of comfort, etc.) is a daunting and confusing process.

Punitive damages are designed to punish the defendant for his or her actions, not to compensate the plaintiff (which is the purpose of *compensatory* damages). Thus, the effect of injury severity should not be taken into consideration when determining punitive damages (which is explicitly stated in the judge's instructions); only the act itself should be considered. However, previous research has shown that there is a link between injury severity and amount of punitive damages awarded (Robbennolt & Studebaker, 1999; Rustad, 1992). This study was an investigation of the effects of outcome severity and the provision of a monetary anchor on punitive damage awards. The current findings suggest that mock jurors did take into consideration the legal guidelines provided, but at the same time they also relied on their intuitive decision-making processes. There seems to be a

complex combination of factors involved in jurors' damage award decisions, including the use of legal guidelines and their own personal beliefs.

In the current study participants were asked to list the key factors of the case that most influenced their decisions regarding the amount of punitive damages to be awarded. This was done to investigate 1) whether mock jurors can ignore a known outcome when judging the amount of punitive damages that should be awarded (as required by law), and 2) which specific factors are most salient for jurors when deciding punitive damage awards.

The results revealed that a majority of the participants referenced the defendant's or the plaintiff's *actions* (which, according to the law, is what should be taken into consideration). Only a relatively small percentage (9.5%) of the participants referenced the outcome information. The current finding of a significant effect for key factor provides support for the view that damage awards are determined at least partly as a function of who/what is thought of as being the most important influence, which is in accordance with legal guidelines. Participants who referenced the actions of the defendant awarded significantly greater damages in all conditions. Information regarding outcome severity was not revealed to be an important factor in damage award decisions. Participants apparently took into consideration the judge's instructions while determining which factors were most influential in their decisions. For instance, one participant wrote "The definition of punitive damages is 'damages awarded for punishment... for malicious, evil or particularly fraudulent acts.' The act that resulted in the damage was a mistake but not malicious or evil or fraudulent in any way. The compensatory damages have covered the mistake as well as money possibly can. No punitive damages are

necessary.” These findings question the notion that jurors do not take into consideration legal requirements when making their decisions. On the contrary, this provides some evidence that jurors follow the instructions given by the judge in making decisions.

Effect of Outcome Severity on Damage Award Decisions

One of the primary goals of the current study was to examine the effect of outcome information (specifically, different levels of severity of the outcome) on the determination of punitive damage awards. Previous research has provided mixed support for the hypothesis that there is a link between severity of an outcome and punitive damage awards. Some researchers have found evidence indicating that as the severity of the outcome increases, the amount of punitive damages awarded also increases (Cather, Greene, & Durham, 1996; Robbennolt, 2000). I found no effect of outcome severity on punitive damage award amounts in the current study. There were no significant differences in the amount of punitive damages awarded regardless of whether the participants were in the high, medium, or low severity condition. This indicates that participants were able to ignore the outcome information while determining the punitive damage award amount (as instructed by the law).

Effect of Monetary Anchor on Damage Award Decisions

The current study also examined the effect of provision of a monetary anchor on participants’ punitive damage award decisions. Research has provided support for the anchoring effect in mock juror decisions related to damage awards. Goodman, Loftus, and Greene (1990) found that nearly half their participants selected a damage award that exactly matched the award that had been suggested. Using archival research, Broeder (1959) found that in six out of seven cases the amounts awarded to the plaintiff were

determined with reference to the amount requested by the plaintiffs' attorneys. This monetary anchor (also known as *ad damnum*) seems to act as a starting point for jurors as they attempt to determine appropriate compensation (Robbennolt & Studebaker, 1999).

In the current study there was a significant main effect of monetary anchor. Participants showed a strong tendency to award damages similar to those suggested in the case summary, providing empirical support for the anchor-adjustment heuristic (Greene & Bronstein, 2003). The anchor acted as a frame of reference and led to assimilation. That is, the mean juror awards were drawn toward the anchor provided. This effect of monetary anchor was also evident in participants' open-ended responses. They were asked to indicate the key factors in the case that most affected their decisions regarding punitive damage awards. Approximately 32% of the participants indicated that the "amount suggested" (i.e., the monetary anchor) was a factor they considered when making their decisions. For example, one participant in the high anchor condition (\$500,000) wrote, "I think the defendant bares (*sic*) most of the responsibility for the birth of the child as the fallopian tube was incorrectly severed. However, the plaintiff was negligent in (not) following up on the test results. Therefore the plaintiff bares (*sic*) responsibility as well. 60% of \$500,000 is \$300,000, which I am awarding.³" Similarly, another participant in the medium anchor condition (\$250,000) wrote, "The case stated that normal punitive damages are \$250,000 in cases like this. I felt that 30% of the liability belonged to the plaintiff so I gave roughly 70% of the usual award."

The results revealed that the highest damage awards were granted in the high anchor condition. Awards in this condition were significantly higher than those in the no

³ Note: This particular participant apportioned 60% of the liability to the defendant and 40% of the liability to the plaintiff.

anchor condition. Research has revealed that as the anchor amount increases, the proportional level of acceptance of this anchor decreases (Zuehl, 1982). This was demonstrated in the current study. The mean damage award in the medium anchor condition was considerably closer to the suggested anchor than was the mean damage award in the high anchor condition.

One interesting finding was that the lowest amount of damage awards was granted in the no anchor condition. No specific hypotheses were formulated regarding the no anchor condition, as this has not been investigated in previous studies. The results of the current study suggest that when participants are not given any sort of guidelines regarding punitive damages they tend to be conservative with regard to the amount awarded. These results contradict existing literature indicating that juries, when given no guidelines, tend to recommend awards that are excessive and do not meet the goals of justice (Quayle, 1994). Participants in the current study did not show a tendency toward awarding damages at a level that might be considered excessive in nature. Additionally, they provided specific reasons as to why they did not award any damages at all, or why they did not award a higher amount of damages. For instance, one participant wrote, "The plaintiff was awarded compensatory damages to pay for the medical needs. I do not think she should be given anything in punitive damages as she was also at fault and has been awarded what she needs to sustain the child in compensatory damage amounts."

Additional analyses conducted on the data revealed some interesting trends. The results of these analyses are reported below according to the specific factors they assessed.

Role of Counterfactual Thinking in Juror Decision Making

Research has demonstrated a connection between counterfactual thinking and causal attributions (Spellman & Mandel, 1999; Wells & Gavanski, 1989). In the domain of negligence law, it has been suggested that one heuristic that people employ while making decisions regarding levels of responsibility is to mentally undo an event that led to a particular outcome (Wiener & Pritchard, 1994). An event is judged as playing a more causal role in the outcome if alternatives to that event that would undo the outcome are easily generated. The easier it is to mentally mutate an event, the easier it is to view an act as potentially negligent. Weiner et al. (1994) found that participants who mentally mutated a negligent act found the defendant's behavior as being more abnormal than those who did not.

In this study I examined the number of counterfactual thoughts generated as a function of the responsibility and negligence assigned to the defendant or the plaintiff. Specifically, I hypothesized that higher ratings of responsibility and negligence would be assigned to the referent, that is, the target of the counterfactual thought. The results of these analyses were not significant but were in the direction hypothesized. That is, when the defendant was found primarily responsible, a greater number of counterfactual thoughts were generated mutating the defendant's actions, and when the plaintiff was found primarily responsible, a greater number of counterfactual thoughts were generated mutating the plaintiff's actions. Similarly, when the defendant was determined to be more negligent than the plaintiff, a greater number of counterfactual thoughts were generated mutating the defendant's actions, and when the plaintiff was determined to be

more negligent than the defendant, a greater number of counterfactual thoughts were generated mutating the plaintiff's actions.

One possible explanation for the lack of significance of these results is the number of counterfactual statements generated overall. On average, participants generated only 1.3 counterfactual statements. This does not allow for a large enough mean difference to obtain significance. Previous studies have directly led participants to generate counterfactuals by specifically asking them to think of how certain events could have been different (Weiner et al., 1994). Although participants were asked to think of what the plaintiff and defendant could have done differently to avoid the outcome in the present study, they were not directed to generate a certain type or direction (i.e., upward or downward) of counterfactual thoughts, nor were they prompted to list a specific number of counterfactual thoughts, as has been done in previous research. Coercing participants into generating counterfactual thoughts can lead to artificial data. That is, participants may not naturally have the tendency to engage in counterfactual thinking, but by specifying guidelines for generating these thoughts, they may be compelled to do so, thus providing inaccurate or invalid information.

Summary

To summarize, the current data provide some evidence that mock jurors do take into consideration judges' instructions when making decisions regarding punitive damages. This is evidenced by the fact that there was no significant effect of outcome severity on punitive damage amounts. Participants did not tend to take into account outcome severity when making their decisions. This is also reflected in their open-ended responses. When asked about the key factors that influenced their decisions regarding

damage awards, very few participants made reference to the outcome. The results provide some indication that mock jurors are neither arbitrary nor excessive in their award amounts, as some researchers have suggested (Greene & Bornstein, 2003). There is evidence that they tend to follow the guidelines of the law. This finding has some major implications for policy making. Introducing monetary caps on punitive damage awards is currently a major issue of debate in tort reform. The rationale provided for the introduction of these caps is that jurors are very random and illogical in the methods and reasoning they employ while awarding damages. The current findings tentatively support the idea that jurors' decision making may not be as illogical as previously thought with regard to the case information utilized. That is, they may be able to separate various pieces of information and base their decisions on that which is prescribed by the law rather than their own emotions and paradigms. At the same time, the argument for capping awards is still a relevant one. For instance, given the strong anchoring effect demonstrated in this study, attorneys could potentially ask for excessive sums in damages, which may lead to high anchor amounts and resulting damage awards that are inflated. Although research has demonstrated that there is less acceptance by jurors as anchor amounts rise, there is still the potential for the granting of excessive damage awards. Further research should more closely address this effect of anchoring with relation to the capping of awards.

Another important finding of this research was the significant effect of the provision of a monetary anchor, which was just addressed in the context of capping awards. Participants in the high and medium anchor condition showed a tendency to award damages similar to the anchor provided and when asked, a considerable number

reported that they used the “amount suggested,” (i.e., the anchor) in reaching their final decision. This is clear evidence for the anchoring bias in a civil liability case. This bias, which has been studied on numerous occasions in behavioral decision making, is extremely relevant to understanding the decision making processes in a courtroom as well. These data provide support for the fact that suggested monetary awards have a substantial effect on mock jurors’ final award decisions. Several important topics for further research in this area emerge from the current results. One issue is whether this phenomenon is observed in real courtroom settings, which could be accomplished using archival research. That is, examination of court transcripts of attorneys’ statements would reveal whether they make use of anchors and whether there are differences in award amounts across similar cases as a function of these monetary anchors. Additionally, future research should address whether there is an effect of providing an anchor after jurors have made a preliminary decision regarding damage amounts.

The relationship between engaging in counterfactual thinking and punitive damage award amounts revealed some interesting findings, although none attained statistical significance. However, there were some trends found that indicate a relationship between the referent of counterfactual thoughts and the amount of punitive damages awarded. That is, when participants cited the defendant’s actions, the damages awarded were somewhat greater as opposed to when the plaintiff’s actions were cited. This relationship between counterfactual thinking and amount of punitive damage awards merits further exploration.

Limitations

There are various limitations to this study that should be addressed. First, although the legal case summary was designed to be as realistic as possible (and was based on the actual case summary that was presented in the appellate decision of the Supreme Court *Bowman et al., Appellees v. Davis, Appellant, et al. # 75-898 Supreme Court of Ohio, Nov. 3, 1976*), the material lacked a certain amount of realism. That is, the case summaries consisted of a brief two-page review of the case. This excluded much of the information that would have been presented at the actual trial. Thus, some information that would have been included in an actual trial may well have been excluded that the participants could have found relevant to their decisions.

Another factor that should be acknowledged is the use of undergraduate college students as participants, which may limit the ecological validity of the study. Although all the participants in the study were jury-eligible, they were all of very similar socio-economic backgrounds, in the same age category, and all were currently enrolled in college level courses. Some studies have shown that the responses of community members and college students in mock jury studies are not significantly different, whereas others have shown that they are. For further studies it would be wise to use a mix of both college students and community members.

Additionally, the use of individual juror decisions rather than mock juries (as a group) did not permit the study of group effects or the effects of deliberation on the outcome of the results. In the future, studies should look at both individual juror decision making and group jury decision making to determine whether there are any differences in responses as a function of discussion and deliberation processes.

Conclusions

These findings are a valuable contribution to understanding how jurors decide punitive damages in a comparative negligence case. The results provide some evidence that jurors reason in accordance with the law and make decisions based solely on the actions of the parties involved. There is also strong support for the hypothesis that jurors tend to make use of monetary anchors provided to aid them in their decision making process. A more realistic environment, such as a simulated jury trial, may provide stronger support for these findings. This study investigated the decision making process of mock jurors by asking a number of open-ended questions of the participants. An alternative method would be to have mock jurors deliberate and analyze the deliberation process. These findings have important policy implications relating to the capping of damage awards and bifurcated trials. Thus, this study provides an important starting point in an area where further research is clearly warranted.

References

- Anderson, M. C., & MacCoun, R. J. (1999). Goal conflict in juror assessments of compensatory and punitive damages. *Law and Human Behavior, 23*, 313-330.
- Barbe, M., & Wrightsman, L. S. (1998). Construction and validation of a medical malpractice scale. Unpublished honors thesis, Department of Psychology, University of Kansas, Lawrence, KS.
- Bornstein, B.H. (1998). From compassion to compensation: The effect of injury severity on mock jurors' liability judgments. *Journal of Applied Social Psychology, 28*, 1477-1502.
- Bornstein, B. H. (1998). From compassion to compensation: The effect of injury severity on mock jurors' liability judgments. *Journal of Applied Social Psychology, 28*, 1477-1502.
- Bovbjerg, R., Sloan, F., Dor, A., & Hsieh, C. R. (1991). Juries and justice: Are malpractice and other personal injuries created equal? *Law and Contemporary Problems, 54*, 5-42.
- Branscombe, N. R., Owen, S., Garstka, T. A., & Coleman, J. (1996). Rape and accident counterfactuals: Who might have done otherwise and would it have changed the outcome? *Journal of Applied Social Psychology, 26*, 1042-1067.
- Broeder, D. (1959). The University of Chicago Jury Project. *Nebraska Law Review, 38*, 744-761.

- Burger, J. M. (1981). Motivational biases in the attribution of responsibility for an accident: A meta-analysis of the defensive-attribution hypothesis. *Psychological Bulletin*, 90, 496-512.
- Cather, C., Greene, E., & Durham, R. (1996). Plaintiff injury and defendant reprehensibility: Implications for compensatory and punitive damage awards. *Law and Human behavior*, 20, 189-205.
- Caverni, J., & Peris, J. (1990). The anchoring-adjustment heuristic in an "information rich, real world setting": Knowledge assessment by experts. In Caverni, J. & Fabré, M. G. (Eds.) *Cognitive Biases* (pp. 35-45). North Holland: Oxford.
- Chaikin, A. L., & Darley, J. M. (1973). Victim or perpetrator?: Defensive attribution of responsibility and the need for order and justice. *Journal of Personality and Social Psychology*, 25, 268-275.
- Chapman, G. B., & Bornstein, B. H. (1996). The more you ask for, the more you get: Anchoring in personal injury verdicts. *Applied Cognitive Psychology*, 10, 519-540.
- Chin, A., & Peterson, M. (1985). Deep pockets, empty pockets: Who wins in Cook County jury trials. Santa Monica, CA: RAND Institute for Civil Justice.
- Douthwaite, G. (1988). Jury instructions for personal injury and tort cases. (5th ed.) New York: Bender.
- Feigenson, N. (2002). *Legal Blame*. Washington, D. C.: American Psychological Association.

- Feigenson, N., Park, J., & Salovey, P. (1997). Effect of blameworthiness and outcome severity on attributions of responsibility and damage awards in comparative negligence cases. *Law and Human Behavior, 21*, 597-617.
- Fischhoff, B. (1975). Hindsight is not equal to foresight: The effect of outcome knowledge on judgment under uncertainty. *Journal of Experimental Psychology: Human Perception and Performance, 1*, 288-299.
- Fiske, S. T., & Taylor, S. E. (1991). *Social Cognition* (2nd ed.) New York: McGraw-Hill.
- Fulero, S. M., & DeLara, C. (1976). Rape victims and attributed responsibility: A defensive attribution approach. *Victimology, 1*, 551-563.
- Goodman, J., Loftus, E. F., & Greene, E. (1990). Matters of money: Voir dire in civil cases. *Forensic Reports, 3*, 303-329.
- Greene, E. & Bornstein, B. H. (2000). Precious little guidance: Jury instructions on damage awards. *Psychology, Public Policy, and Law, 6*, 743-768.
- Greene, E. & Bornstein, B. H. (2003). *Determining Damages: The Psychology of Jury Awards*. Washington D.C.: American Psychological Association.
- Greene, E., Johns, M., & Bowman, J. (1999). The effects of injury severity on jury negligence decisions. *Law and Human Behavior, 23*, 675-693.
- Greene, E., Johns, M., & Smith, A. (2001). The effects of defendant conduct on jury damage awards. *Journal of Applied Psychology, 86*, 228-237.
- Hart, A. J., Evans, D. L., Wissler, R. L., Feehan, J. W., & Saks, M. J. (1997). Injuries, prior beliefs, and damage awards. *Behavioral Sciences & the Law, 15*, 63-82.
- Harvey, M. D., Rule, B. G. (1978). Moral evaluations and judgments of responsibility. *Personality and Social Psychology Bulletin, 4*, 583-588.

- Hastie, R., Schkade, D., & Payne, J. (1999). Juror judgments in civil cases: Effects of plaintiff's request and plaintiff's identity on punitive damage awards. *Law and Human Behavior, 23*, 445-470.
- Heath, L., Tindale, R. S., Edwards, J., Posavac, E. J., Bryant, F. G., Henderson-King, E., et al. (1994). *Applications of heuristics and biases to social issues*. Plenum Press: New York.
- Johnson, J. T., & Drobny, J. (1985). Proximity biases in the attribution of civil liability. *Journal of Personality and Social Psychology, 48*, 283-296.
- Kahneman, D., & Miller, D. T. (2002). Norm theory: Comparing reality to its alternatives. In *Heuristics and biases: The psychology of intuitive judgment*. Gilovich, T., (Ed); Griffin, D., (Ed). Cambridge University Press: New York, 348-366.
- Kahneman, D. & Miller, D. T. (1986). Norm theory: Comparing reality to its alternatives. *Psychological Review, 93*, 136-153.
- Kahneman, D., & Tversky, A. (1982). The psychology of preferences. *Scientific American, 246*, 160-173.
- Kahneman, D., & Tversky, A. (1974). Judgments under uncertainty: Heuristics and biases. *Science, 185*, 1124-1131.
- Krulowitz, J. E.; Nash, J. E. (1979). Effects of rape victim resistance, assault outcome, and sex of observer on attributions of rape. *Journal of Personality, 47*, 557-574.
- Leong, G. B. (2004). Determining Damages: The psychology of jury awards. *American Journal of Psychiatry, 161*, 1731-1732.

- MacCoun, R. J. (1996). Differential treatment of corporate defendants by juries: An examination of the 'deep pockets' hypothesis. *Law and Society Review*, 30, 121-161.
- Macrae, C. N. (1992). A tale of two curries: Counterfactual Thinking and accident-related judgments. *Personality and Social Psychology Bulletin*, 18, 84-87.
- Mandel, D. R., & Lehman, D. R. (1996). Counterfactual thinking and ascriptions of cause and preventability. *Journal of Personality and Social Psychology*, 71, 450-463.
- Marti, M. W., & Wissler, R. L. (2000). Be careful what you ask for: The effect of anchors on personal-injury damages awards. *Journal of Experimental Psychology: Applied*, 6, 91-103.
- Medway, F. J., & Lowe, C. A. (1975). Effects of outcome valence and severity on attribution of responsibility. *Psychological Reports*, 36, 239-246.
- Miller, D. T., & McFarland, C. (1986). Counterfactual thinking and victim compensation: A test of norm theory. *Personality and Social Psychology Bulletin*, 12, 513-519.
- Murphy, S. W. (1991). Contributory negligence in medical malpractice: Are the standards changing to reflect society's growing healthcare consumerism? *University of Dayton Law Review*, 17, 151-179.
- Owen, D. G. (1994). A punitive damages overview: Functions, problems and reform. *Villanova Law Review*, 39, 353-413.
- Phares, E. J., & Wilson, K. G. (1972). Responsibility attribution: Role of outcome severity, situational ambiguity, and internal-external control, *Journal of Personality*, 40, 392-406.

- Raitz, A., Greene, E., Goodman, J., & Loftus, E. F. (1990). Determining damages: The influence of expert testimony on jurors' decision making. *Law and Human Behavior, 14*, 385-395.
- Ritov, I., & Baron, J. (1994). Judgments of compensation for misfortune: The role of expectation. *European Journal of Social Psychology, 24*, 525-539.
- Robbennolt, J. K. (2000). Punitive damage decision making: The decisions of citizens and trial court judges. *Law and Human Behavior, 26*, 315-342.
- Robbennolt, J. K. (2000). Outcome severity and judgments of "responsibility": A meta-analytic review. *Journal of Applied Social Psychology, 12*, 2575-2609.
- Robbennolt, J. K., & Studebaker, C. A. (1999). Anchoring in the courtroom: The effects of caps on punitive damages. *Law & Human Behavior, 23*, 353-373.
- Roese, N. J. (1997). Counterfactual thinking. *Psychological Bulletin, 121*, 133-148.
- Roese, N. J. (1994). The functional basis of counterfactual thinking. *Journal of Personality and Social Psychology, 66*, 805-818.
- Rustad, M. (1998). Unraveling punitive damages: Current data and further inquiry. *Wisconsin Law Review, 1998*, 15-69.
- Saks, M. J. (1992). Do we really know anything about the behavior of the tort litigation system – And why not? *University of Pennsylvania Law Review, 140*, 1147-1292.
- Saks, M. J., Hollinger, L. A., Wissler, R. L., Evans, D. L., & Hart, A. J. (1997). Reducing variability in civil jury awards. *Law and Human Behavior, 21*, 243-256.
- Shanley, M. G. (1985). Comparative negligence and jury behavior. *The Rand Paper Series*.

- Shaver, K. G. (1970). Defensive attribution: Effects of severity and relevance on the responsibility assigned for an accident. *Journal of Personality and Social Psychology*, 14, 101-113.
- Spellman, B. A., Mandel, D. R. (1999). When possibility informs reality: Counterfactual thinking as a cue to causality. *Current Directions in Psychological Science*, 8, 120-123.
- Sunstein, C., Kahneman, D., & Schkade, D. (1998). Assessing punitive damages. *Yale Law Journal*, 107, 2017-2153.
- The project on Medical Liability in Pennsylvania (2004). *Judicial News on Medical Malpractice*. Retrieved February 22, 2006, from <http://medliabilitypa.org>
- Thomas, E. A., & Parpal, M. (1987). Liability as a function of plaintiff and defendant fault. *Journal of Personality and Social Psychology*, 53, 843-857.
- Vidmar, N. (1993). Damage awards and jurors' responsibility ascriptions in medical versus automobile negligence cases. *Behavioral Sciences and the Law*, 12, 149-160.
- Vidmar, N. (1995). *Medical Malpractice and the American Jury: Confronting the myths about jury incompetence, deep pockets and outrageous damage awards*. Ann Arbor: University of Michigan Press.
- Vidmar, N. (1999). Juries don't make legal decisions! And other problems: A critique of Hastie et al. on punitive damages. *Law and Human Behavior*, 23, 705-714.
- Vidmar, N., Lee, J., Cohen, E., & Stewart, A. (1994). Damage awards and jurors' responsibility ascriptions in medical versus automobile negligence cases. *Behavioral Sciences and the Law*, 12, 149-160.
- Walster, E. (1967). 'Second Guessing' important events. *Human Relations*, 20, 239-249.

- Walster, E. (1966). Assignment of responsibility for an accident. *Journal of Personality and Social Psychology*, 3, 73-79.
- Weiten, W., & Diamond, S. S. (1979). A critical review of jury simulation paradigm: The case of defendant characteristics. *Law and Human Behavior*, 3, 71-93.
- Wells, G. L., & Gavanski, I. (1989). Mental simulation of causality. *Journal of Personality and Social Psychology*, 56, 161-169.
- Wiener, R. L., Gaborit, M., Pritchard, C. C., McDonough, E. M. (1994). Counterfactual thinking in mock juror assessments of negligence: A preliminary investigation. *Behavioral Sciences and the Law*, 12, 89-102.
- Wiener, R. L., & Pritchard, C. C. (1994). Negligence law and mental mutation: A social inference model of apportioning fault. In *Applications of heuristics and biases to social issues*. Heath, L., (Ed); Tindale, R. S., (Ed), Plenum Press: New York, 117-136.
- Williams, C. W., Lees-Haley, P. R., & Price, J. R. (1996). The role of counterfactual thinking and causal attribution in accident-related judgments. *Journal of Applied Social Psychology*, 26, 2076-2099.
- Zickafoose, D. J., & Bornstein, B. H. (1999). Double discounting: The effects of comparative negligence on mock juror decision making. *Law and Human Behavior*, 23, 577-596.
- Zuckerman, M., Evans, S. (1984). Schematic approach to the attributional processing of actions and occurrences. *Journal of Personality and Social Psychology*, 47, 469-478.
- Zuehl, J. J. (1982). *The ad damnum, jury instructions and personal injury damage awards*. Unpublished manuscript, University of Chicago.

Appendix A

When a patient files a claim against a doctor or hospital, claiming negligent treatment, the type of case is called a *medical malpractice suit*. In such cases, the person filing the claim is the **plaintiff** and the doctor or hospital is the **defendant**.

We are interested in your attitudes toward medical malpractice lawsuits. There are no correct or incorrect responses to these attitude statements. Please respond to each statement by choosing one of the choices below.

- 1 = Strongly Agree
- 2 = Agree
- 3 = Undecided
- 4 = Disagree
- 5 = Strongly Disagree

- ☐ 1. Juries have increasingly favored plaintiffs over physicians and hospitals even when the evidence doesn't support such a verdict.
- ☐ 2. Damage awards are often excessive and cannot be justified.
- ☐ 3. Juries are usually biased against doctors and hospitals.
- ☐ 4. Juries often give awards out of sympathy for the patient rather than basing their decisions on evidence.
- ☐ 5. Doctors can afford to pay large damage awards because they make a lot of money or are well insured.
- ☐ 6. Juries are more focused on the "pain and suffering" of patients rather than on any evidence of negligence.
- ☐ 7. Punitive damages are often awarded by juries without just cause.
- ☐ 8. Juries are not competent to determine negligence in complex medical cases.
- ☐ 9. Juries are not competent in assessing the testimony of medical experts.
- ☐ 10. Juries are inconsistent in their civil court decisions.
- ☐ 11. A jury composed only of medical doctors would be more capable than the typical juries in making decisions about negligence.
- ☐ 12. Judges would be more capable than juries in making decisions about damages.
- ☐ 13. Doctors are more interested in making money than helping people.
- ☐ 14. The high costs of medicine are directly attributable to the larger number of unwarranted lawsuits against hospitals.
- ☐ 15. Doctors use too many risky procedures without warning patients of the consequences.
- ☐ 16. Many people assume that hospitals have "deep pockets" and therefore use lawsuits as a way to get rich quickly.
- ☐ 17. Most lawsuits involve exaggerated damages to help inflate awards.
- ☐ 18. Most patients know the risks of medical procedures beforehand but still want hospitals to pay if anything goes wrong.
- ☐ 19. Too many doctors don't adequately explain to their patients the nature of the illness and the medical procedures employed.
- ☐ 20. People take too many risks with their health and then expect doctors to rescue them.

Please continue responding by using the scale below:

- 1 = Strongly Agree
- 2 = Agree
- 3 = Undecided
- 4 = Disagree
- 5 = Strongly Disagree

- ___ 21. There are too many frivolous lawsuits.
- ___ 22. It would be too expensive to ensure that all medical procedures are completely safe before using them on patients.
- ___ 23. Hospitals and doctors have to charge very high fees to cover the high cost of large and unjustified awards in civil lawsuits.
- ___ 24. Often it is the patients who take unreasonable risks in their lives and then try to blame others in court.
- ___ 25. Most patients who sue doctors in court have legitimate grievances.
- ___ 26. By making it easier to sue, we have created a safer medical environment.
- ___ 27. The legal system does an excellent job of protecting us against dangerous and careless doctors.
- ___ 28. If a patient undergoes a risky procedure, he/she shouldn't be surprised if it turns out bad.
- ___ 29. If patients do not take the time to learn about all the possible consequences for a medical procedure then they should not sue when something goes wrong.
- ___ 30. A doctor should be legally bound to inform patients of every possible way in which a medical procedure might be harmful to the patient.
- ___ 31. Juries do a good job of determining the outcomes of lawsuits and assessing damages in medical malpractice trials.
- ___ 32. Most doctors get away with too many "errors" in judgment and the only way to keep them in line is to sue them.
- ___ 33. Most patients sue too quickly without looking for other ways to resolve their grievances.
- ___ 34. No monetary award, however large, can ever be a fair compensation for damage to one's health as a result of a doctor's negligence.
- ___ 35. Most patients do not have a fair chance for adequate compensation against hospitals and doctors who can hire "hotshot" lawyers.
- ___ 36. Unless hospitals and doctors are protected from opportunistic "ambulance chasers," affordable medical care will never be possible.
- ___ 37. Doctors are more concerned with protecting their own reputations rather than helping their patients.
- ___ 38. Doctors often "bully" their patients into agreeing to undergo risky, but expensive, medical procedures.
- ___ 39. Doctors get all the money, but patients take all the risks.
- ___ 40. Too many doctors protect each other and are unwilling to "blow the whistle" on colleagues who are incompetent.
- ___ 41. The entire medical field is corrupt.
- ___ 42. Nine out of ten lawsuits by patients against hospitals and doctors are completely justified.

Appendix B

[Based on the case of *Bowman et al., Appellees v. Davis, Appellant, et al.* # 75-898 *Supreme Court of Ohio, Nov. 3, 1976*. The names of the actual plaintiff and defendant have been changed to protect identities.]

Summary of legal case under consideration:

Karen Smith, who underwent unsuccessful tubal ligation, brought malpractice action, together with her husband, against a physician (Dr. John Wells). She was referred to this physician by her family physician during her pregnancy with her fourth child. This specialist in obstetrics and gynecology was recommended to her because of her history of diabetes, difficult pregnancy, and miscarriage.

During her prenatal care, Mrs. Smith was advised by her doctor to undergo a bilateral partial salpingectomy, or tubal ligation, immediately after childbirth in order to avoid the hazards of a future pregnancy. Mrs. Smith and her husband (the other plaintiff in the case) consented to the operation.

On September 24, 2001, Mrs. Smith gave birth to a daughter. At that time the defendant purportedly removed portions of Mrs. Smith's left and right fallopian tubes.

Before she left the hospital, Mrs. Smith was either instructed specifically to return to the defendant for follow-up care or told she "probably should call and make an appointment." (The testimony on this point is conflicting.) Mrs. Smith did not return for postnatal care.

After Mrs. Smith was discharged from the hospital, Dr. Wells received a laboratory analysis of portions of the removed tissue. It stated that the tubal lumen, the distinctively lined channel in the fallopian tube through which the egg passes, had not been "seen" in either sample.

Mrs. Smith meanwhile resumed sexual relations with her husband and conceived about 95 days after the September operation. Her pregnancy was not confirmed until May 2002.

On July 30, 2002, Mrs. Smith [gave premature birth to twins, one of whom suffers from such congenital abnormalities as kidney and hip malformation, as well as mental retardation. The other twin does not appear to have these conditions.]

Note: The portion in brackets was manipulated in different scenario versions and read either (1) as it appears above, or (2) "gave premature birth to twins, both of whom are reasonably healthy," or (3) "gave premature birth to a healthy baby."

Mrs. Smith and her husband instituted a legal action seeking reimbursement for two basic types of damages:

- (1) expenses of or stemming from "the foreseeable consequences of this operation" (these include such "physical discomfort" and "pain and suffering" as the operation "was designed to prevent");
- (2) the value of Mrs. Smith's "society, comfort, care and protection" (including the ability to engage in sexual relations with her husband) lost to "other members of the family" during and after her "confinement for the birth";

At the trial, the plaintiffs (Mrs. Smith and her husband) introduced expert testimony stating that (1) that tubal lumens are the major identifying characteristic of the fallopian tube; (2) that "it was unlikely," given Mrs. Smith's early conception afterward, that the operation "was done in an acceptable" manner; (3) that it was "medically probably" that the defendant (the doctor) had not cut Mrs. Smith's fallopian tubes but had instead severed a neighboring "round ligament." The defendant's partner testified that proper follow-up procedure would have been to consult with the laboratory pathologist and, if necessary, to contact Mrs. Smith about the need to practice birth control and to have additional tests done.

The jury in the case found the defendant **guilty** and determined **compensatory damages** to be awarded to Mrs. Smith and her husband. **Compensatory damages** are intended to be monetary amounts recovered in payment for actual injury or loss. The plaintiffs requested and received financial compensation for expenses due to "the change in the family status," including extra money to compensate for the fact that Mrs. Smith "must spread her society, comfort, care, protection and support over a large group." They were also awarded extra money to "replenish the family funds so that the new arrival[s] will not deprive other members of the family," as well as compensation for the economic costs of "rearing" the [twins/baby (including, in the case of the abnormal twin, the costs of "institutionalization, care, nursing," and "special attention")]] as part of their **compensatory damage** awards.

You, as a jury member, are asked to determine the amount of **punitive damages** that should be awarded to the plaintiffs, if any. **Punitive damages** are damages awarded in a lawsuit as a punishment and example to others for malicious, evil or particularly fraudulent acts. Jurors in these types of negligence cases [award varying amounts] in punitive damages.

Note: The portion in brackets was manipulated in different scenario versions and read either (1) as it appears above, or (2) "typically award plaintiffs \$250,000," or (3) "typically award plaintiffs \$500,000."

Appendix C

Judges' Instructions to Jurors

[delivered via a brief video of an actor wearing judge's robes, seated in the judge's chair in an actual courtroom]

If you should find that the defendant's conduct constituted aggravated conduct which was contrary to the patient's interests and which involved bad motive, or reckless indifference to patient's rights, and the patient sustained some damage, no matter how trivial, you may consider awarding punitive damages. This would serve a dual function of penalizing such conduct, and of deterring such behavior in the future.

Additionally, if you find from the evidence that the injury to the patient which is the subject of this action was a result of the conduct of the plaintiff, conduct which was not that of a reasonably prudent person in the circumstances you should take this into consideration while determining the damages.

If, therefore, you should find from the evidence that the plaintiff bore a share in the causation of any damage you may find to have resulted from the defendant's act, it is your duty to determine what proportion of the total damage is attributable to the plaintiff and, in your verdict, to show that proportion.

If you find, in accordance with the instructions above, that the injuries which are the subject of this action were the result of the combined negligence of the plaintiff and of the defendant, you should first determine the total amount of damages.

Having so determined, you should make your decision as to what proportion of such damages is attributable to the plaintiff and what proportion is attributable to the defendant.

Appendix D

Verdict form

After carefully considering the case presented and the judge's instructions, please answer the following questions to the best of your ability.

1. As a juror you are being asked to assign **liability** for the incident to either the plaintiff or the defendant or to both. In the space below please indicate the percentage of liability assigned to the defendant (if any) and the percentage of liability assigned to the plaintiff (if any). Please make sure that the total sums to 100%.

Plaintiff _____

Defendant _____

Total 100%

2. Please indicate the amount of **punitive damages** (in dollars) to be awarded to the plaintiff (if any): \$_____

3. What was/were the **key factor(s)** in the case presented that influenced your decision regarding damage awards?

4. What were some of the things that the **plaintiff** could have done differently so as to avoid the outcome?

5. What were some of the things that the **defendant** could have done differently so as to avoid the outcome?

6. Please rate the extent to which you feel the **defendant** (the doctor)/**plaintiff** (Mrs. Smith) was negligent?

3	2	1	0	1	2	3
The defendant				The plaintiff		
was very negligent				was very negligent		

7. How responsible do you feel the **defendant** (the doctor)/**plaintiff** (Mrs. Smith) was for the outcome?

3	2	1	0	1	2	3
The defendant				The plaintiff		
was very responsible				was very responsible		

Please rank order the following outcomes in order of seriousness/severity with "1" being the most severe and "3" being the least severe.

_____ Mrs. Smith had healthy twins

_____ Mrs. Smith had one healthy baby

_____ Mrs. Smith had twins, one healthy and one with physical deformities.

R002592632

The HF Group

Indiana Plant

T 047082 M 33 00



5/11/2006