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Effect of Blameworthiness and Outcome Severity on Attributions of Responsibility and Damage Awards in Comparative Negligence Cases

Neal Feigenson,1 Jaihyun Park,2 and Peter Salovey2,3

We studied the effects of accident victims' legal blameworthiness and the severity of their injuries on determinations of responsibility and damage awards. In general, participants tended to ascribe more fault to victims than warranted by the facts presented, displaying an antiplaintiff bias. When attributing fault and awarding damages, they were especially sensitive to the blameworthiness of the victim when the consequences of the accident were severe rather than mild. These findings appeared not to be mediated by emotional reactions to the victims. Participants tended to conflate issues of liability with what ought to have been the legally distinct question of damages. They appeared to decide comparative negligence awards not by determining percentage fault and gross damages as discrete items and then computing their product, as the law prescribes, but rather by using more holistic judgmental processes.

INTRODUCTION

In many accident cases, both the victim and injurer are arguably at fault for the resulting injuries.4 Consider, for instance, the case of the exploding house. A valve regulating the intake of propane gas to the kitchen was over 30 years old; the gas company was in the process of replacing its customers’ older valves, but had not yet replaced this one. Relaxing at home one Sunday, the homeowner smelled gas and heard a hissing noise from the kitchen. He and his wife hurried outside to the front yard. For some unknown reason, the homeowner walked back toward the house, and as he crossed the threshold, the house blew up, killing him. The gas company could plausibly be found to have contributed to the accident through its

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4In this statement and in our experiments, we simplify by assuming that only one party to the accident has been injured. We identify this party interchangeably as “the victim” or “the plaintiff”; the other party is “the injurer” or “the defendant.”
careless failure to replace the old valve more promptly. The homeowner could also plausibly be found to have contributed to his own fatal injuries by negligently choosing to walk back toward the house in the face of a risk he should have appreciated.

In a lawsuit by the homeowner's estate against the gas company, most states would apply a comparative negligence rule, which allows jurors to apportion blame between the parties and to reduce the plaintiff's compensatory damages accordingly. Three questions must be answered. First, jurors are to determine the percentage that each party's fault contributed to the accident, e.g., homeowner 30%, gas company 70%. Next, they are to decide an initial or gross damage award representing the plaintiff's compensable damages, e.g., $1,000,000. Finally, the court calculates the plaintiff's ultimate damage award by deducting from the gross figure an amount corresponding to the plaintiff's percentage of fault, e.g., $1,000,000 minus (1,000,000 × .30 = 300,000) = $700,000.

These comparative fault rules provide jurors only the most general guidelines, and little is known about how jurors actually go about apportioning responsibility and calculating damages in these cases. Leading lawyers claim to find no pattern to the percentages of fault jurors assign (American Board of Trial Advocates, 1994). And while some research on damage awards and on attribution theory generally bears on comparative fault, the apportionment of fault and allocation of damages in comparative negligence cases has not been widely examined.

We begin to address these questions in the present research. We have chosen to study the effects of the accident victim's legal blameworthiness and the severity of the victim's injuries on determinations of responsibility and damages. Legal blameworthiness and accident severity are, after all, the factors that should, according to the law, determine outcomes in comparative negligence cases: the percentage of fault allocated to the plaintiff (holding constant the defendant's conduct) should correspond to the plaintiff's degree of legal blameworthiness for the accident; gross damages should vary directly with outcome severity; and the ultimate damage award should simply equal gross damages discounted by the plaintiff's percentage of fault. By manipulating blameworthiness and severity, we should be able to learn something about the extent to which jurors' judgments in comparative fault cases track these legally relevant inputs and the direction of any divergences. We may also learn whether jurors keep separate the formally distinct elements of fault and damages or whether they conflate them into a single compensation judgment (e.g., Greene, 1989; Kalven, 1958; Vidmar, 1995). Finally, we may ascertain whether jurors, contrary to legal instructions, determine fault and damages by using emotions such as sympathy for or anger toward the parties, as is widely suspected (e.g., Hans & Vidmar, 1986). In each of these inquiries, we pay particular attention to the possibility of an antiplaintiff bias in juror judgments (e.g., Hans, 1996; Hans &

5Our stimulus materials generally conform to Connecticut law, which is consistent with the general law of comparative fault in all relevant respects (Schwartz, 1986). The exceptions are that our instructions provide for pure comparative negligence and we ask participants to calculate final (discounted) as well as gross damages.

6We also included extralegal sympathy for the accident victim as an independent variable. This manipulation proved ineffective, and we therefore do not discuss it further.

7Under Connecticut law, for instance, jurors are told: "You should not be swayed or influenced by any sympathy or prejudice for or against any of the parties" (Wright & Ankerman, 1993).
Lofquist, 1992). To study these matters, we examined the effect of the plaintiff's legal blameworthiness and outcome severity on four types of dependent variables: attributions of fault, gross damage awards, discounted damage awards, and emotional responses to the parties.

Attributions of Fault

As noted above, the percentage of fault attributed to the plaintiff should correspond only to the plaintiff's degree of legal blameworthiness, not to the severity of the plaintiff's injuries. Yet there is considerable evidence that outcome severity affects attributions of responsibility. The severity effect holds that the greater the harm, the more responsible the person who caused it (Walster, 1966). On the other hand, some mock jury research testing attributions of responsibility to injurers (as opposed to victims) has failed to replicate the severity effect (Green, 1968; Shaver, 1970; Thomas & Parpal, 1987).

Perhaps most importantly for our purposes, the effect of outcome severity on responsibility attributions has not been studied in the context of comparative fault. At least two alternative hypotheses for any such effect are plausible. The first, which we may call straight severity, is that the defendant or injurer would be found more at fault, the more serious the consequences. The second is the blame-the-victim hypothesis: when the victim is more seriously injured, participants would attribute more fault to the victim. This blame-the-victim effect has often been interpreted as an instance of defensive attribution (Shaver, 1970): the more seriously injured the accident victim, the more readily subjects blame him or her for the accident, in order to preserve their belief that they can avoid similar misfortune (e.g., Fiske & Taylor, 1991; Lerner, 1980). Thus, defensive attribution may lead to an antiplaintiff bias.

Defensive attribution may also be indicated by an interaction of blameworthiness by severity on attributions of fault. According to the legal norm, the effect of the plaintiff's legal blameworthiness on apportionment of fault should be constant regardless of the seriousness of the accident. But if blame affects perceived fault more when the consequences are more severe, defensive attribution may be at work: the more serious the accident, the greater individuals' need to blame the victim to maintain their belief that they can avoid a similar fate themselves.

Apart from any straight severity or blame-the-victim effect, there is reason to expect perceived fault to diverge somewhat from legal fault. Some research (addressing negligence cases generally, not comparative negligence) suggests that attributions of fault correspond to the actors' legal blameworthiness (Green, 1968; Karlovac & Darley, 1988). But other experiments, by manipulating factors other than the actors' legal blameworthiness—e.g., the moral culpability of the actors' behavior (Alicke, 1992)—have shown that such factors (which are, by definition, extralegal) significantly affect judgments of fault.\(^8\)

\(^8\)Other examples of relevant attributional biases include causal primacy (Johnson, Ogawa, Delforge, & James, 1989), the fundamental attribution error (Nisbett & Ross, 1980), and the simulation heuristic (Kahneman & Tversky, 1982). Some research also suggests that jurors' judgments are biased by demographic characteristics of the parties or jurors' own stable attitudes or traits, although others have questioned the impact of such extralegal influences (e.g., Ellsworth, 1993; MacCoun, 1987).
These extralegal factors might bias attributions of fault either for or against the accident victim. There is, however, evidence of a specifically antiplaintiff bias in responsibility judgments. Interviews with actual jurors (Hans & Lofquist, 1992) and experimental research (Lupfer, Cohen, Bernard, Smalley, & Schippmann, 1985) indicate that jurors tend to be biased against plaintiffs, attributing their behavior to suspect motives (e.g., greed) rather than to role demands (i.e., suing is how one obtains compensation for injuries). Other evidence (Vidmar, Lee, Cohen, & Stewart, 1994; Vidmar, 1995) shows that jurors may attribute more fault to accident victims than the victims' legal blameworthiness warrants; defendants are not found completely responsible even where the facts strongly indicate that the plaintiffs could not in any way be at fault for their plight. Similarly, we can test whether participants reveal an antiplaintiff bias by holding the plaintiff responsible for a nonnegligible percentage of fault when the facts are designed so that the plaintiff is more or less free of legal responsibility.

Gross Damage Awards

Actual damage awards roughly correlate, as they should, with the severity of the victim's injury (Rodriguez & Boggett, 1989; Vidmar, 1995), although studies have shown that jurors tend to overcompensate relatively minor injuries and undercompensate the most severe ones (e.g., Dewees, Duff, & Trebilcock, 1996). Research also indicates that in addition to outcome severity, which is the only legally relevant factor, mock jurors rely on various extralegal sources and employ a variety of computational methods to arrive at their damage awards (Goodman, Greene, & Loftus, 1989; Greene, Goodman, & Loftus, 1991).

Prior research also suggests that gross damage awards may be affected by the degree to which individuals believe the plaintiff is at fault for the accident. Some evidence, both experimental (Vidmar, 1995) and anecdotal (e.g., Kalven, 1958), suggests generally that jurors, contrary to the law's instructions, conflate judgments of damages with those of responsibility. More specifically, Hammitt, Carroll, and Relles (1985), in a study of jury verdicts in automobile accident cases tried under comparative negligence, found that juries take perceived fault into account in determining the plaintiff's gross damages. The plaintiff's recovery is thus double-discounted: first inappropriately and then according to law.

Studying the effect of the plaintiff's legal blameworthiness on damages allows us to test whether jurors indeed merge judgments of fault and damages, leading to a double discounting of the plaintiff's recovery. Moreover, if blameworthiness and severity interact on gross damages such that participants inappropriately discount at an even greater rate when the outcome is severe, there is a stronger case for defensive attribution (and thus antiplaintiff bias), rather than computational error or failure to understand instructions, as the source of double discounting.
Discounted Damages

There is also some reason to believe that, were jurors allowed to discount gross damages to arrive at the plaintiff’s final award, they would do so inappropriately—i.e., not in strict proportion to the percentage of fault they attribute to the plaintiff. Evidence for an antiplaintiff bias in legally prescribed discounting comes from one of the few experimental studies specifically addressing comparative fault. Thomas and Parpal (1987) found that mock jurors tended to hold the defendant liable for a smaller amount of damages than indicated by the ratio of the defendant’s perceived fault for the harm to the sum of the plaintiff’s and the defendant’s perceived fault. That is, participants divided the losses from wrongdoing less generously to the plaintiff than their own apportionments of fault would indicate.9

By asking participants to calculate the final as well as the gross damage award and comparing the rates at which they discount gross damages to the percentages of fault they attribute to the plaintiff, we can test whether participants discount less favorably to the plaintiff than the attributed fault would warrant. We can also, as above, determine whether the rate of discounting (and thus the degree of error relative to the legal norm) is greater when the accident is more severe; again, this sort of interaction may very well reflect defensive attribution.

Emotional Responses to the Parties

Cognitive theories of the emotions are popular (e.g., Lazarus, 1991; Ortony, Clore, & Collins, 1988), and there have been numerous studies of the attributional underpinnings of emotions, such as sympathy and anger, that might be expected to figure in jurors’ determinations of comparative fault and compensation. For instance, Weiner and others (Graham, Weiner, Giuliano, & Williams, 1993; Schmidt & Weiner, 1988; Weiner, Graham, & Chandler, 1982) have shown that people react with sympathy to a victim whom they perceive not to be responsible for his or her own suffering, but with anger to a blameworthy victim.

Weiner and his colleagues did not, however, study the effects of sympathy or anger on judgments of legal fault and damages. Indeed, research on the effects of specific emotions on social judgments is quite limited (Gallagher & Clore, 1985; Keltner, Ellsworth, & Edwards, 1993). Bornstein (1991, 1994) has shown that sympathy affects attributions of causal responsibility in product liability scenarios. Greater sympathy for the plaintiff (manipulated by increasing accident severity) or lesser sympathy for the defendant (manipulated by making the defendant “high-status,” i.e., a large corporation, as opposed to “low-status,” i.e., an individual/small company) leads individuals to find the defendant more responsible for causing the

9Thomas and Parpal (1987) also found what could be considered further evidence of an antiplaintiff bias. They showed that while evidence of the plaintiff’s fault had an inverse effect on perceptions of the defendant’s fault, the converse was not true. This suggests that defendants benefit (in the assessment of proportionate blame and responsibility for damages) from the attachment of blame to plaintiffs, but not vice versa: plaintiffs’ blameworthiness is somehow “sturdier,” less likely to be modulated by others’ fault.
harm. Experiments on the simulation heuristic (Kahneman & Tversky, 1982) confirm correlations among sympathy for the plaintiff, compensation, and the defendant’s perceived fault: observers tend to feel greater sympathy for the victim of an accident that occurs under exceptional rather than normal circumstances, to hold the defendant more responsible for that accident, and to award the victim greater compensation (Macrae, 1992; Macrae & Milne, 1992; Ritov & Baron, 1994).

On the basis of Weiner’s work on the attributional content of emotional appraisals, it might be predicted that the degree of the plaintiff’s blameworthiness would affect sympathy for or anger toward the plaintiff. Also, varying outcome severity should significantly affect sympathy for the plaintiff. We can then ascertain whether participants’ emotional reactions to the parties mediate their judgments of fault and compensation. If participants’ judgments turn out to be biased against the plaintiff, emotional reactions may help to explain that bias.

THE PRESENT EXPERIMENT

In the present experiment, we examined the effects of victim blameworthiness and accident severity on attributions of responsibility and damages by presenting participants with summaries of four accident cases. Each summary was constructed in a 2 (victim blameworthiness: high, low) × 2 (outcome severity: severe, mild) × 2 (“extralegal” victim sympathy: high, low) design. Each subject read summaries of the same condition of all four cases. Because the “extralegal” sympathy manipulation was ineffective, we collapsed over this variable in all analyses. Thus, the functional design of the experiment was 4 (case) × 2 (blameworthiness) × 2 (severity), with case manipulated within subjects, and blameworthiness and severity manipulated between subjects. After reading each summary, participants responded to manipulation checks and questions addressing their emotional responses to the case and the parties. They then read a one-paragraph set of legal instructions concerning apportionment of fault and then apportioned fault between the parties. They also explained their apportionments discursively. They subsequently read two sentences of instructions regarding gross and discounted damages, respectively, and assessed each.

METHOD

Participants

A total of 133 students (62 first-year law school students and 71 undergraduates) participated in this study. The undergraduates received credit toward an Introductory Psychology subject participation requirement. The law students completed the tasks in class and were not compensated.
Materials

A booklet was constructed that contained summaries of four accident cases (e.g., home accident, workplace accident, automobile accident, and medical malpractice) and measures following each of them. The home and workplace accident scenarios were selected from actual legal cases; the automobile accident and medical malpractice scenarios were adapted from Vidmar et al. (1994). The independent variables (e.g., outcome severity and victim blameworthiness) were manipulated by varying key sentences in the scenarios. For example, sentences concerning high- or low-severity conditions were “[Mr. R] dies a week later from the explosion” and “[Mr. R] is bruised in the explosion,” respectively, whereas those concerning high- or low-blameworthiness conditions were “Mr. P is attempting to cross the street, although the traffic light is red for pedestrians” and “Mr. P is standing at the corner waiting for the light to change.” All other details were kept consistent across conditions. Examples of the different versions of these scenarios are provided in Appendix A. The order of the four scenarios was counterbalanced.

After reading each scenario, participants responded on a 7-point scale to 10 items asking about their emotional reactions (e.g., anxious, fearful, anger at each party, sympathy for each, sadness for each, and disgust with each) and 6 items checking on the effectiveness of the severity and blameworthiness manipulations (e.g., “the victim is responsible for the outcome”). Then they read the judge’s instructions contained in Appendix B and completed measures of the major dependent variables. These included (a) estimating the amount of fault in percentage terms for both the defendant and the plaintiff, (b) assigning a damage award in dollars, with information about the amount requested by the plaintiff provided, and (c) assigning a damage award in dollars discounted by the percentage that participants thought the plaintiff contributed to the outcome. For example, if the participant considered the plaintiff 30% responsible for the outcome and felt that damages came to $100,000, the adjusted damage award should be $70,000: $100,000 − ($100,000 × .3).

Procedure

Participants were told that this study was designed to investigate the way in which jurors make judgments in legal situations and were asked to serve as potential jurors in this study. After consenting to participate in the study, participants were provided with the booklet. At the end of the session, they were debriefed and thanked.

Results

Preliminary Analyses

Affiliation. A preliminary analysis was conducted to test whether college affiliation (e.g., first-year law school or undergraduate) influenced any dependent vari-
Fig. 1. (continued to next page)

ables. There were no main effects of affiliation or interactions involving affiliation on any of the measures. Thus, the data were collapsed over affiliation in all the subsequent analyses.

Cases. Summaries of four cases were used in the present study. Analyses of variance that included case as an independent variable revealed that the four cases were not generally different from each other. Occasionally, the medical malpractice scenario was exceptional on an individual measure, but a 3-way MANOVA including case, severity, and blameworthiness indicated that there were no significant main effects or interactions involving case overall. Therefore, all subsequent analyses are presented collapsed over the four cases.

Manipulation Check. A 2 (outcome severity: severe vs. mild) by 2 (victim blameworthiness: high vs. low) ANOVA was conducted on the manipulation check items. The high- and low-severity cases indeed differed on the two relevant items: for
The adjusted damage award

![Graph showing damage award comparison between high and low blameworthiness conditions.]

Fig. 1. Effects of severity and blameworthiness on primary outcome variables.

“The consequences for the victim were serious,” $F(1, 125) = 137.05, p < .0001$ ($M = 6.48$ and $4.61$ for the severe and mild conditions, respectively), and for “I don’t think the outcome of this accident was severe for the victim,” $F(1, 125) = 77.80, p < .0001$ ($M = 1.48$ and $2.95$ for the severe and mild conditions, respectively). Clearly, severity was manipulated appropriately in this experiment.

The main effect of victim blameworthiness was significant for the two manipulation-check items relevant to it. For “The victim must have done something wrong himself/herself,” $F(1, 125) = 156.98, p < .0001$ ($M = 3.17$ and $0.48$ for the high and low conditions, respectively) and for “The victim is responsible for what happened to him/her,” $F(1, 125) = 105.01, p < .0001$ ($M = 2.90$ and $1.76$ for the high and low conditions, respectively). Victim blameworthiness also appears to have been manipulated appropriately.

Primary Analyses

Blame and Apportionment of Fault. Participants were asked to estimate the amount of fault in percentage terms attributed to both the plaintiff and the defendant. A 2 (outcome severity: severe vs. mild) by 2 (victim blameworthiness: high vs. low) analysis of variance was conducted on fault apportionment for the plaintiff and the defendant. The means are presented in Fig. 1. Means for plaintiff and defendant are, of course, interdependent because they were designed to sum to 100. On the apportionment of fault for the plaintiff, participants considered the plaintiff more at fault when the plaintiff was highly blameworthy, $F(1, 125) = 113.33, p < .0001$. In addition, plaintiff fault ratings were higher when the outcome was severe, $F(1, 125) = 5.65, p < .05$. These results were qualified by a severity by blameworthiness interaction, $F(1, 125) = 5.84, p < .05$. This interaction was driven by the higher degree of fault attributed to plaintiffs in the “high-blamewor-
thiness” and “severe-outcome” condition. People were especially sensitive to the blameworthiness manipulation in making fault judgments when the consequences were severe as opposed to mild. Because participants were instructed to make their percentages of fault attributed to the plaintiff and the defendant sum to 100%, the same main effects and interactions were significant for fault judgments about the defendants.

**Gross Damage Award.** Participants were also asked to decide on the amount of an initial or gross damage award to compensate the plaintiff. Because anchors were provided to participants in the form of the ad damnum (the plaintiff’s attorney’s damage request), the distribution of dollar values was not as positively skewed as is sometimes the case, and they were therefore analyzed in their raw form. (In fact, when a log transformation was applied to these data, the results were essentially the same.) A 2 (outcome severity: severe vs. mild) by 2 (victim blameworthiness: high vs. low) analysis of variance was conducted for this variable, the means for which are also presented in Figure 1. As expected, the amount of damages awarded was considerably higher when the outcome was severe—not surprisingly, since subjects were provided with a higher “anchor” request by the plaintiff. More importantly, initial monetary awards were higher when the plaintiff was less blameworthy. The results showed that the main effects of outcome severity and victim blameworthiness were significant: \( F(1, 125) = 75.06, p < .0001 \) and \( F(1, 125) = 4.69, p < .05 \), respectively. However, a severity-by-blameworthiness interaction was also significant, \( F(1, 125) = 6.44, p < .01 \), reflecting the especially large damage awards given to severely injured plaintiffs who were not seen as blameworthy, as depicted in Figure 1.

**Adjusted Damage Award.** Finally, participants were asked to calculate the adjusted or ultimate damage award by deducting from the gross damage award an amount corresponding to the plaintiff’s judged percentage of fault. Another 2 (outcome severity: severe vs. mild) by 2 (victim blameworthiness: high vs. low) analysis of variance was conducted on this variable. Because the discounting procedure to compute the adjusted damages substantially reduced the award only when the victim was highly blameworthy, it increased the magnitude of the main effect of blameworthiness, \( F(1, 125) = 7.71, p < .001 \), and brought out the interaction in greater relief, \( F(1, 125) = 10.09, p < .001 \), as illustrated in Figure 1. Again, the damage awards in the “mild” outcome condition were not significantly different from each other, but blameworthiness mattered much more when the outcome was severe, as with the gross damage award.

**Mediation Analyses**

**Emotional Reactions.** In order to test the possibility that participants’ decisions about damage awards were mediated by their emotional reactions, we asked them to rate how they felt after reading the scenarios. Table 1 provides the mean ratings of participants’ emotional reactions after reading the scenarios. A 2 (outcome severity: severe vs. mild) by 2 (victim blameworthiness: high vs. low) multivariate analysis of variance (MANOVA) was performed across all of the emotion items,
which revealed significant main effects of severity, $F(10, 120) = 4.00, p < .0001$, and blameworthiness, $F(10, 120) = 10.77, p < .0001$. On univariate tests of each of the 10 items, significant effects were found on 4 of them: “angry,” “sympathy,” “sad,” and “disgust,” all directed toward the plaintiff. Participants were likely to get angry at the victim when the victim was more to blame, $F(1, 125) = 66.14, p < .0001$; feel sympathy for the victim when the damage was severe, $F(1, 125) = 5.16, p < .05$, and the victim was not to blame, $F(1, 125) = 9.04, p < .01$; feel sad when the damage was severe, $F(1, 125) = 17.32, p < .0001$, and the blameworthiness of the victim was relatively low, $F(1, 125) = 8.02, p < .005$; and feel disgusted with the plaintiff when the plaintiff was more blameworthy, $F(1, 125) = 41.34, p < .0001$.

Because these four emotions were influenced by the manipulation of outcome severity and victim blameworthiness, it seems plausible that they might mediate the effect of severity and blameworthiness on the apportionment of fault and damage awards. In order to test this possibility, a series of multiple regression analyses was conducted in which these dependent variables were regressed on first the emotional reactions and then on severity condition and blameworthiness condition together.

First, a multiple regression analysis was conducted in which apportionment of fault was the outcome variable. When emotional reactions were put in a separate model from the independent variables (severity and blameworthiness), their regression coefficients were at least marginally significant (for anger, $b = .53, p < .0001$; for sadness, $b = -.24, p < .001$; for disgust, $b = .13, p < .06$). However, when emotional reactions and the independent variables (severity and blameworthiness)
were included in the same regression model, coefficients for all independent variables and emotional reactions except anger were significant regressors. If emotional reactions completely mediated the effects of the independent variables, severity and blame, on apportionment of fault, the regression coefficients for severity and blame should be substantially reduced when emotions are included in the analysis. Because such was not the case, the effects of severity and blameworthiness on fault apportionment do not appear to be mediated by emotional reactions.

Next, a similar multiple regression analysis was conducted in which the damage awards were the dependent variables. When the damage awards were regressed on the emotional reactions alone, only the regression coefficient for sadness for the plaintiff was significant. However, when the awards were regressed on the emotions along with the independent variables severity and blameworthiness, no emotional reactions were associated with damage awards. These findings suggest that emotional reactions are not likely to mediate the effect of severity and blameworthiness on damage awards, although some emotions (e.g., sadness) may be correlated with the amount awarded.

DISCUSSION

Our study is among the first to examine how mock jurors apportion fault in comparative negligence cases. The results show that attributions of fault and damage awards can be explained, at least in part, by the blameworthiness of the victim and the severity of the accident. This much is unsurprising. The ways in which severity and blameworthiness matter, though, are interesting. First, mock jurors reach decisions on fault and damages by using outcome severity and blameworthiness when they are not legally relevant, and sometimes by ignoring them when they are relevant. Second, their judgments on fault and damages show a fairly consistent antiplaintiff effect. We discuss the implications of each finding below.

Noncombinatorial Decision-Making

In deciding comparative negligence cases, individuals do not behave as the law commands, neatly compartmentalizing the distinct questions of fault, gross damages, and discounting, and considering blameworthiness and outcome severity only when relevant to each question. Instead, they base their determinations of responsibility and damages on legally irrelevant variables. The percentage of fault attributed to the victim, which ought to be affected only by legal blameworthiness, is significantly greater when the victim's injuries are more severe (people thus blame the victim, as we discuss further below). Gross damages, which ought to be affected only by outcome severity, are significantly lower when the victim is more legally blameworthy (individuals thus double discount the plaintiff's award). And the ratio of discounted to gross damages, which ought to be the simple inverse of the percentage fault attributed to the plaintiff and constant regardless of outcome severity, is higher than that inverse for less severe outcomes. Interactive effects of severity by blame
underscore the point: for both gross and discounted damages, blame matters more when the consequences are more severe.

The finding that blameworthiness affects damage awards seems to confirm several scholars’ observations (Greene, 1989; Kalven, 1958; Vidmar, 1995) that jurors take liability issues into account when determining what ought to be the legally distinct question of damages. The finding that outcome severity affects attributions of fault shows that the conflation of legal categories works in both directions. And the interactive effects of blame and severity—that blame matters more when the consequences are more serious—reinforce the conclusion that people do not decide comparative negligence awards by determining percentage fault and gross damages as discrete items and then computing their product, as the law prescribes.

Instead, people seem to convert the law’s combinatorial, rule-element test into something resembling a factor or balancing test, in which the test’s components are specified but their relative weight is not. They employ a more holistic judgmental strategy in which they combine blameworthiness and outcome severity to reach the decision that they feel is correct. The victim’s blameworthiness permeates the decision, but how far it does so depends on the seriousness of the accident. This is suggested not only by the influence of legally irrelevant factors (e.g., that outcome severity affects attributions of fault), but also by the neglect of, or at least the failure to give due weight to, factors that should be relevant. According to the law, damages should be discounted in proportion to the plaintiff’s percentage fault. Yet participants hardly discount at all for the plaintiff’s blameworthiness when the consequences of the accident are minor. (When the outcome is severe, blame does matter; this is one of the severity-by-blame interactions noted above.) It is as if they make a de minimis exception from the prescribed discounting. Perhaps they implicitly believe that it is less important to blame or to trace the implications of blameworthiness when the accident is not serious. This sort of decisional strategy would be appropriate were the applicable legal rule in the form of a factor test, but not when it is in the form of a rule-element test.

These speculations are consistent with other evidence that jurors use holistic judgmental strategies. In one experiment (Kerr & Sawyers, 1979), mock jurors were asked to reach multiple verdicts on two factually independent charges against a single defendant. The stronger the evidence on one charge, the smaller the probability of conviction on the other, factually unrelated charge. The researchers surmised that jurors, instead of deciding the distinct charges independently, sought to produce a sum of verdicts that would be fair to the defendant. Other research has shown that jurors do not decide cases by determining whether the evidence is sufficient to prove each element of the relevant crime or tort and then computing the verdict by combining those separate decisions, as the relevant rule prescribes. Instead, jurors use the “story model,” in which they choose the overall account of events offered at trial that best fits both the evidence and their sense of how such events usually go (as defined by their general knowledge about the world and about story structure), and then try to match that account to the verdict categories (Pennington & Hastie, 1993).
Our research also suggests that when jurors diverge from the legally prescribed decision-making process, they do so because they actively use an alternative decision-making strategy and not solely because they do not understand the legal instructions (although this, too, may play a part). First, active resistance seems to be a more plausible explanation of why our participants, all college or law students, would tend not to comply with what strikes us as a very straightforward experimental instruction on how to calculate the final (discounted) damage award: simply "reduce [your gross damage figure] by the percentage to which you think the plaintiff contributed to the accident (refer to your answer to [the percentage fault question])." The explanation of active resistance does more credit to jurors than do attributions of mere ignorance or inattentiveness. Second, it is consistent with other research showing that jurors use their own extralegal prototypes of events (specifically, crimes) when they apply the legal definitions of those events (Smith, 1992). If valid, this explanation also suggests that there may be limits to how much jury decision-making may be improved simply by enhancing the comprehensibility of instructions. If jurors’ failure to follow the law is the result of their use of alternative decision-making processes, then efforts to improve compliance with the law must explicitly address those other processes (Diamond & Casper, 1992; Smith, 1993).

Our finding that blameworthiness affects compensatory damage awards appears to be contrary to other recent research (Cather, Greene, & Durham, 1996). Cather et al. manipulated outcome severity and what they called the reprehensibility of the defendant’s conduct (a blameworthiness measure) in three sorts of tort cases and asked participants to award compensatory and punitive damages. They found that outcome severity did not affect punitive awards, which thus properly reflected only perceptions of the defendants’ reprehensibility. Conversely, the defendants’ reprehensibility did not affect compensatory damages. They concluded that, with one exception not germane here, damage awards were influenced only by legally relevant considerations.

A possible explanation for the differences between our findings and those of Cather et al. is that they manipulated the defendant’s blameworthiness, while we manipulated the plaintiff’s. It could be that the plaintiff’s blameworthiness is somehow more important to jurors than the defendant’s and therefore more likely to “spill” into a decision regarding a legally distinct category [cf. Thomas and Parpal’s (1987) observation that plaintiff’s blameworthiness is “sturdier” than defendant’s]. Also, manipulating the blameworthiness of the victim allowed us but not Cather et al. to observe an effect of victim blameworthiness on gross damages (namely, antiplaintiff double discounting).

**Blaming the Victim**

Almost across the board, participants’ use of legally irrelevant considerations to determine fault or damages is detrimental to the plaintiff. A greater percentage of the fault is attributed to the plaintiff when the consequences of the accident are more serious. Moreover, blameworthiness affects attributions of fault more when the outcome is more severe. Participants also “double discount” damages by im-
properly taking the victim's blameworthiness into account in reducing gross damages. Finally, interactions of severity by blame significantly affect both gross and discounted damages. Blameworthiness leads to inappropriately reduced gross damages when the outcome is severe; and when instructed to discount for it, blameworthiness leads participants to discount at a greater rate when the outcome is severe (discounting should be only in proportion to the plaintiff's percentage fault and constant across outcome severity).

Although all of these results are disadvantageous to plaintiffs, they do not necessarily reflect an antiplaintiff bias. Consider the effect of outcome severity on attributions of responsibility. One possible explanation, which would not reflect bias toward or against either party, is that participants employ a hindsight bias (Fischhoff, 1975) in (otherwise properly) determining the plaintiff's degree of care (i.e., according to the Learned Hand calculus, by weighing the benefits of the plaintiff's conduct against the foreseeable risks of harm; Karlovac & Darley, 1988). In the high-severity condition, the ex ante possibility of the plaintiff's death is made more salient to participants than in the low-severity condition. High-severity participants, knowing that the plaintiff died, may reason that the plaintiff should have foreseen that he might die. Consequently, these participants judge that plaintiffs in the high-severity condition risked greater misfortune, and thus acted more carelessly, than do participants in the low-severity condition. Similarly, with respect to the severity-by-blame interactions on attributions of fault, gross damages, and discounted damages, participants might simply feel a greater need to assign blame (to someone, not necessarily to the plaintiff) with the knowledge born of hindsight that serious consequences resulted from the parties' behavior.

We prefer, however, to explain the effect of outcome severity on responsibility attributions in terms of an antiplaintiff bias. First, the simple fact that outcome severity increases attributions of responsibility to the plaintiff (blame-the-victim) rather than the defendant (straight severity), when presumably both parties could have foreseen the fatal consequences of their carelessness, reflects an antiplaintiff bias.

Second, antiplaintiff bias seems to account best for the significant effect of the victim's blameworthiness on gross damage assessments. Any reduction at all of gross damages by the victim's responsibility is an antiplaintiff bias, because gross damages ought to represent the amount necessary to compensate plaintiffs fully for their injuries, regardless of fault. In addition, this double discounting effect is traceable almost entirely to the high-severity condition, i.e., jurors inappropriately discount when the outcome is severe. That would seem to rule out as the source of double discounting the party-neutral explanation of failure to understand instructions, because participants in the low-severity condition had the same instructions and presumably were equally competent to understand them.

Third, that participants often allocate nonzero percentages of blame to victims in the low-blameworthiness condition, whose behavior was designed to be more or less blameless in a legal sense, further indicates an antiplaintiff bias \(M = 10.25\%\); in the exploding house case (plaintiff running away from house), \(M = 14.33\%\); in the railroad accident case (plaintiff obeyed all rules), \(M = 21.80\%\). In discursive responses collected from participants after they apportioned fault, some offer plau-
sible justifications for allocating some fault to victims in the low-blameworthiness condition, but others more plainly reflect an antivictim bias. Some participants, for example, speculated that the homeowner may have carelessly caused the leak himself (although there is nothing whatsoever in the facts to suggest this), while others assumed that the homeowner, qua homeowner, must be held partly responsible for the valve (again, the facts do not suggest this, and in fact state that the valve and tank were owned by the defendant).

Fourth, defensive attribution may be at work. Defensive attribution best accounts for our finding that increasing the plaintiffs’ blameworthiness significantly increases anger at and disgust with the plaintiffs, much more so than it reduces their anger at the defendants. That participants react with anger to stories of accidents may be explained in terms of Ortony et al.’s (1988) cognitive emotional theory, in particular their definition of anger as a compound of reproach and distress: anger is the emotional response to holding another person responsible for blameworthy behavior (reproach) and being upset about the outcome (distress). But it is very striking that anger is directed primarily at the accident victim, even though the victims are held responsible for considerably less than half of the total fault in all cases. A clue to the source of this intense reaction against blameworthy victims comes from the significant main effect for victim blameworthiness on the degree to which subjects identify with the victim. The more blameworthy the plaintiff, the less participants were able to imagine themselves in his or her place, $F(1, 125) = 6.58, p < .05$. This is a clear, indeed prototypical, indication of a defensive reaction to suffering. By blaming the victim, observers distance themselves from him or her, preserving their belief that they will not find themselves in the same position (Lazarus, 1991; Wispé, 1991). We acknowledge, however, that it is difficult to measure directly any kind of defensive process, and that studies should be designed to rule out alternative explanations of a strictly cognitive nature (e.g., level of scrutiny of case information).

In general, then, our data seem consistent with field research (Hans, 1996; Hans & Lofquist, 1992) and verdict analyses (Clermont & Eisenberg, 1992) that tend to debunk the popular wisdom that jurors are biased toward plaintiffs. If anything, jurors appear to be biased against the victims of accidents.

Final Comments

It may be appropriate to comment more generally on the external validity of our results. In addition to the stimulus materials’ relative lack of vividness, our brief scenarios (a paragraph each) excluded much information about the accident that would have been introduced at an actual trial. Participants might very well have found such information relevant to their decisions and modified them accordingly. Also, the use of individual (juror) instead of group (jury) responses prevented us from learning whether the processes of deliberation would have altered the decisions, and if so, how. Finally, our sample consisted largely of undergraduate and first-year law students, and the validity of our results may be limited to the extent
that these individuals' responses do not represent those of members of jury pools generally.

We believe, nevertheless, that our findings are a valuable preliminary step in the study of how jurors decide fault and damages under comparative negligence. The fact that even our highly simplified stimulus materials led people to conflate the law's elements and resort to what we have described as holistic decision-making, and to react emotionally and defensively to the plight of the accident victims, suggests that more realistic experiments would produce stronger, not weaker, effects of a similar kind. Alternatively, more realistic stimuli would allow us to examine whether sympathy for victims militates against seemingly pervasive tendencies to blame them. In any event, we hope that our results will inspire further inquiry into these topics.

APPENDIX A. Case Scenarios

Case 1: Exploding House

Mr. and Mrs. Roe are residential customers of the defendant, Hocon Gas, which provides propane fuel. The valve that controls the flow of propane from the tank (owned by Hocon) on the Roes' property to their appliances in the house is at least 30 years old. Hocon, as requested by their insurance company, has recently begun to replace all valves over 15 years old, but has not yet replaced the Roes'. One Sunday afternoon Mr. Roe is resting in his living room when he smells gas and hears a hissing from his kitchen. He goes outside and gets a telephone repairman, who happens to be working on the property, to check out the smell and the noise. They go to the kitchen, where the noise is so loud that the repairman has to shout, "Let's get the hell out of here!" They go out the front door into the yard. [After a moment, Mr. Roe turns and goes back toward the house. As he steps through the front door.] [Mr. Roe runs away from the house, following the repairman, when] the house explodes. [He dies a week later from his injuries.] [He is bruised in the explosion.] The repairman is unhurt. [Although Mr. Roe and his wife had their first baby five months ago.] [Mr. Roe and his wife have no children, and] at the time of the explosion Mr. Roe was the only person at home.

Case 2: Train Accident

Mr. G is a young trainman who works for the defendant, Providence & Worces- ter Railroad. He has been employed for about nine months as a brakeman, [and is engaged to be married.] [and he is single.] The Railroad trained him in the rules for making him a conductor but never actually assigned him to conduct. One evening the defendant orders Mr. G to conduct a three-man crew (conductor, engineer, brakeman) and back a train up in a yard in which the Railroad has never before assigned him to work. For the critical maneuver, Mr. G positions himself on the rear of the train, as it backs up along a side track. The railroad has not
equipped the yard with the flags and reflecting targets used by other railroads to mark switches [and Mr. G has forgotten to bring his lantern, a violation of railroad rules. For these reasons, Mr. G does not] [Even though Mr. G brings his lantern, as required by railroad rules, it is too dark for him to] notice that a cross-over switch has been improperly left in a position that will send his train onto the main track, where other cars are sitting. The train backs up and goes over the switch and collides with the cars on the main track; [Mr. G is crushed to death.] [Mr. G suffers a broken leg.]

Case 3: Pedestrian/Car Accident

Tom, the defendant, is driving home at about 11:30 p.m. on a Friday night. He has spent an enjoyable evening with his close friends in the apartment of one of his friends. They have gotten together one Friday of every month since they graduated from high school. By the time the gathering is breaking up, Tom has finished his seventh beer. The journey home is about 6 miles. It is raining very hard, so Tom switches his windshield wipers to the highest speed. Tom is about two miles from home, driving along a well-traveled suburban street when he suddenly catches sight of a pedestrian directly ahead of his vehicle. [Mr. P is attempting to cross the street, although the traffic light is red for pedestrians.] [Mr. P is standing at the corner waiting for the light to change. Tom’s car bumps the curb and] Tom’s car strikes Mr. P. A neighbor calls the police and an officer arrives on the scene a few minutes later. Mr. P is taken to the hospital [but dies from the accident.] [and he has some bruises and a twisted ankle.] The investigation by the police reveals that [Mr. P is married and the father of three children.] [Mr. P is single and has three brothers.]

Case 4: Medical Malpractice

Mr. N is a thirty-two year old male who has a cyst which has developed behind his ear. [Even though surgery is not required, he elects to have surgery to remove it.] [Surgery is necessary because the cyst could cause permanent hearing loss if it is not removed.] Upon injection of a local anesthetic into the upper portion of Mr. N’s neck and cheek area, Dr. D mistakenly damages Mr. N’s facial nerve by improperly implanting the needle. Although the surgery on the cyst is performed successfully, [Mr. N suffers irreversible nerve damage that results in a permanent facial distortion, which also causes a permanent muscle pain in his face.] [Mr. N suffers some nerve damage that results in a slight facial distortion, which becomes apparent especially when he smiles.] [Because of his facial distortion, he loses many friends; even his fiancée leaves him.] [Since his surgery he has had a lot of social support from his friends and fiancée.]
Independent Variables

Outcome severity: [severe] [mild]
Victim blameworthiness: [high] [low]
Sympathy: [high] [low] (the data were pooled over this manipulation)

APPENDIX B. Judge’s Instructions

The next several questions ask you to allocate blame or responsibility between the plaintiff [relevant name in each case] and the defendant [relevant name in each case]. To find a party blameworthy, you must find both that the party was at fault and that the fault causally contributed to the accident. “Fault” is doing something that a reasonably prudent person would not do under the circumstances, or failing to do something that a reasonably prudent person would do under the circumstances. An act is a cause of the accident when it is a substantial factor in producing it. In making these decisions, you should not be swayed by sympathy for or prejudice against either party.

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