

PAIN AND SUFFERING AWARDS FOR CONSUMER PRODUCT ACCIDENTS: EFFECTS OF PLAINTIFF-DEFENDANT LIABILITY AND INJURY SEVERITY

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A study was carried out to explore the effects of two variables on the amount of pain and suffering awards in a product liability litigation context. The first variable was the level of liability/responsibility allocated to the plaintiff and defendant for the accident and injury. The two levels were 100% and 60% assigned to the defendant, with the corresponding levels for the plaintiff at 0% and 40%. The second variable was the severity of the injury which was characterized as high or low. The two variables were manipulated between participants, resulting in a 2 x 2 design. Four separate accident/injury scenarios were employed, and each participant was presented with all four scenarios in one of the conditions. The scenarios described an automobile accident resulting in paralysis, a workplace accident resulting in chemical burns, a workplace accident resulting in brain damage, and an automobile accident resulting in the death of a small child. Following the presentation of each scenario, participants were asked to make a pain and suffering award. There were no constraints, small or large, on the size of the awards. Results indicated significant differences in pain and suffering allocations for the two levels of liability/responsibility (means in dollars were: defendant 100% = 4.0 million, defendant 60% = 1.2 million). While the means were in the expected direction for the high and low injury severity manipulation (high = 3.2 million, low = 2.0 million) the difference in pain and suffering allocations was not significant. The results suggest that liability or fault may play an important role in pain and suffering awards, a finding of significance in understanding jury decisions.

INTRODUCTION

In the context of personal injury litigation, it is common for the jury to be given information in the form of expert testimony by economists about the value of economic damages such as medical expenses and lost wages. Such information is intended to help the jury in assessing such damages and making awards. However, juries are often called upon to make award decisions regarding non-economic damages and awards, usually referred to as "pain and suffering." Pain and suffering includes damages such as bodily harm (pain, disfigurement and disability), emotional distress (fear, anxiety, depression and embarrassment), and loss of enjoyment of life (limitations on lifestyle). Economists generally do not have a basis for assessing and assigning values to such damages, and juries are "on their own" to make such assessments and award decisions.

Very little research has been reported on the topic of jury decisions regarding non-economic damages; that is, pain and suffering awards. A recent review of work on this topic was reported by Wissler, Evans, Hart, Morry and Saks (1997). It seems highly likely that decisions

regarding such losses involve a variety of considerations and factors, many of which are psychological and social in nature. One such factor is the extent of the plaintiff's injury. Wissler et al. (1997) reported that injury severity had a strong effect on perceptions of harm suffered and on award amounts. Another factor that some of our own preliminary research suggests may be important is the liability or degree of fault of the plaintiff (see Laughery, Laughery, Meingast, Bean and Wogalter, 2000, this volume). However, Wissler et al. (1997) reported that degree of fault had little influence on pain and suffering awards.

This article presents the results of a study that explored the effects of injury severity and the previously assigned percent liability between the plaintiff and defendant on pain and suffering awards. Based in part on the work of Wissler et al. (1997), one hypothesis is that with greater injury severity, pain and suffering will be perceived as greater and awards will be higher. A second hypothesis is that with higher levels of defendant's liability, pain and suffering awards will be higher.

METHOD

The methodology consisted of presenting four accident-injury scenarios to participants. Each scenario was described as representing a product liability civil litigation case in which the participant was to consider him/herself a member of the jury. The scenarios described the accident, the injuries, other relevant information, the results of the liability decision, and the amount of economic damages awarded. After reviewing each scenario, the participant decided on an award for pain and suffering. No constraints, small or large, were placed on the amount of the awards. Two between-participant variables were manipulated. The liability or fault assigned to the defendant was either 100% or 60%. Injury severity was introduced at two levels, high and low. The study was carried out in two locations. One location involved participants from the University of Houston (UH) and the other involved participants from North Carolina State University (NCSU).

Participants

Participants were obtained from two universities. The first group consisted of 54 undergraduate students enrolled in an introductory economics course at UH. There were 29 males and 25 females, and they ranged in age from 18 to 26. Participants in the second group were 22 undergraduate students enrolled in an introductory psychology course at NCSU. There were 7 males and 15 females, and they ranged in age from 18 to 21.

Design

The study was a two-factor experiment where the variables manipulated were the defendant/plaintiff liability and the injury severity. There were two levels of each variable: 100% and 60% defendant liability and high and low injury severity. Both variables were manipulated between participants, resulting in four experimental conditions. Four separate scenarios were presented to each participant, each scenario calling for a pain and suffering allocation decision. The participants were run in groups.

Materials

The first scenario described an automobile accident in which the driver's injuries resulted in either permanent paraplegia or quadriplegia. The second scenario described a work place accident in which an employee received severe chemical burns as a result of chemicals erupting from a tank. The high severity was burns over

65% of his body and loss of vision in one eye; the low severity condition was burns over 30% of his body. The third scenario described a work place accident in which an employee suffered brain damage. The high severity was permanent damage resulting in intellectual function at a 7 or 8 year old level; the low severity was brain damage with some but not full expected recovery. The fourth scenario was an automobile accident in which a 13 month old girl was fatally injured by an airbag while seated in a child restraint seat in the right front passenger seat of the vehicle. The pain and suffering in this scenario took the form of the parents' loss of a child. The high severity condition was defined by the fact that this was the couple's only child and the mother was in her early 40s and unable to have another child. The low severity condition defined by the same facts except the parents had another child who was a twin of the deceased child. All aspects of the scenarios were kept constant across conditions except for the liability and severity manipulations. Following is the text of the fourth scenario with the 100% defendant liability and high severity injury conditions:

Scenario #4. Vickie Long, a 42 year-old mother, was driving her 1995 Volkswagen Jetta. Vickie's 13-month old daughter, Shelby, was riding in the right front passenger seat in a forward facing child safety restraint seat. Vickie was driving north on Milton Avenue, a 4-lane street. She had stopped first in line at an intersection for a red light. When the light turned green she started to move forward. A vehicle on the crossing street had continued through the intersection after the opposing light turned red and was in Vicki's path as she started forward. The front of Vicki's Jetta impacted the side of the other vehicle at a low speed. Vickie was not injured. However, the air bag on the passenger side deployed striking Shelby in the head, causing a traumatic head injury. Despite emergency surgery, Shelby died two days later as a result of the injury.

Vickie and her husband, Jim, filed a lawsuit against Volkswagen contending that design and manufacturing defects in the passenger side airbag caused it to deploy at a low speed impact. The lawsuit also claimed that Volkswagen failed to warn consumers not to place children in forward facing child safety seats in the right front seat in front of the airbag. Evidence presented at the trial included the following:

1. Auto manufacturers, including Volkswagen, were aware in the early 1970's that airbags were dangerous and could kill children in child safety seats located in front of an airbag. This known

hazard included forward facing as well as rear facing child seats. A warning on the visor of Vickie's Jetta warned against putting a child in a rear facing child seat in the front of the airbag, but said nothing about forward facing child seats. The same information was in the Jetta Owner's Manual.

2. Vickie testified that she had read the information concerning placement of child safety seats on the visor and in the manual. She said that when Shelby was younger and in a rear facing child seat, she always placed the child seat in the rear seat of the Jetta; however, she assumed the forward facing child seat was safe in the front

3. The defendants testified that a good deal of information had been disseminated to the public about child safety and air bags, and Vicki should have known not to put a child in a forward-facing child seat in front of the air bag, even though the warning label did not mention it. However, the plaintiffs pointed out that at the time of this accident, February 12, 1996, there was little information available to the general public about the hazards of children in forward-facing child seats in front of an air bag.

4. Medical testimony indicated that had Shelby been securely fastened in the rear of the vehicle, she would have survived, probably with little or no injury. Also, if the airbag had not deployed, she would have survived with minimum injuries.

5. An expert engineer who analyzed the accident, testified the Jetta was traveling less than 10 miles per hour at impact. He further testified that the impact force at this speed was less than minimum force at which the airbag was supposed to deploy. He concluded, therefore, that the airbag had malfunctioned because it deployed at a lower speed than it should have.

6. An expert economist evaluated the economic damages in the case and presented (testified to) the following information:

Medical costs	\$42,000
Other expenses	<u>6,000</u>
Total	\$48,000

In determining the liability (fault), the jury decided that Volkswagen was 100% responsible for the injury and death.

The jury awarded Vickie and Jim \$48,000 for economic damages, which (given the liability decision) meant Volkswagen is required to pay the full \$48,000.

The plaintiffs also sued for pain and suffering damages. This category includes the loss of the child that Vickie and Jim suffered. She and Jim had wanted a child and had tried for several years without success. Finally, Vickie became pregnant through a special

medical assistance program. Shelby was described as a healthy, energetic, happy child. They described the loss of the child as devastating. It was noted that Vickie was in her early 40's and due to some medical problems, her ovaries had been surgically removed and she would not be able to have another child. They have been receiving psychological counseling on a regular basis to help with their adjustment to Shelby's death.

The jury must now decide whether to award pain and suffering and, if so, how much.

Write how much money you would award for pain and suffering on the line below.

Procedure

Each participant was provided a packet consisting of a number of sheets. The first sheet contained instructions for the study, and was followed by the four scenario descriptions. The last sheet requested gender and age information.

RESULTS

Tables 1 and 2 show the means of the pain and suffering awards for the four conditions in the UH and NCSU samples.

Table 1. *Pain and Suffering Awards in Millions of Dollars. UH Participants*

Def Liability	100%		60%	
	High	Low	High	Low
Quad	5.9	2.7	1.4	1.3
Burns	4.3	1.8	.97	.58
Brain	6.2	5.1	2.8	2.6
Child	5.3	2.0	1.3	.48

Separate ANOVAs were carried out for the two participant samples. The three variables were scenario, liability and severity. Pain and suffering awards differed significantly for the four scenarios: $F(3,150) = 4.6, p < .01$ in the UH sample, and $F(3,54) = 2.5, p < .05$ in the NCSU sample. In the UH sample the brain damage case resulted in significantly higher awards than the other three cases, while in the NCSU sample the brain damage case awards were

significantly higher than the burns case. The other scenario comparisons did not differ significantly.

Table 2. Pain and Suffering Awards in Millions of Dollars. NCSU Participants

Def Liability	100%		60%	
	High	Low	High	Low
Quad	4.0	2.7	.88	.74
Burns	3.2	1.7	.51	.42
Brain	3.7	5.9	1.9	.75
Child	4.3	3.2	.25	.63

The percent liability variable resulted in significantly different pain and suffering awards in both samples: $F(1,50) = 7.1, p < .01$ in the UH sample, and $F(1,18) = 10.5, p < .01$ in the NCSU sample. Mean awards in millions of dollars for the 100% and 60% liability conditions were 4.1 and 1.4 for the UH participant and 3.6 and .77 for the NCSU participant. The severity of injury variable did not significantly affect the pain and suffering awards in either sample ($p > .05$). Also, no interaction involving severity was significant.

Variability across participants in the amount of pain and suffering awards was substantial. In the UH sample the range was 0 to 25 million dollars, and the standard deviations across the four conditions for the quad, burn, brain and child cases were 4.8, 4.1, 5.8 and 4.9 million respectively. In the NCSU sample the range was 3 thousand to 15 million dollars, and the standard deviations across the four conditions for the quad, burn, brain and child cases were 2.3, 2.1, 3.8 and 3.1 million.

DISCUSSION

To some extent the results of this study appear to conflict with the findings reported by Wissler et al. (1997). They reported little influence of perceived fault on pain and suffering awards, while our results show liability to have a robust effect on such awards. A possible explanation of the different outcomes is that in the Wissler et al. (1997) study participants made attributions of fault, while in the present study the liability was explicitly defined. This difference in the clarity with which the variable was defined for the participant may account for the outcomes. In the Wissler et al. study the severity of injury had a strong effect on awards, while our results did not produce a significant effect of this variable. A likely explanation is that the low severity conditions in this study were still serious injuries with substantial pain and suffering consequences. Differences in the awards for the various

scenarios lend some support for the notion that injury severity is important. The brain damage scenario led to higher pain and suffering awards, and participants frequently commented on the extreme severity of such an injury.

Comments by participants also indicate that fault was an important consideration in their allocation decisions. If the participant perceived that the plaintiff "could have avoided the accident," a lower award was more likely.

It was noted in the introduction that jurors typically do not get recommendations on pain and suffering damages from economists. The research reported in this paper is not intended to contribute to a basis for defining a dollar value for non-economic damages. Rather it represents an effort to understand some of the factors that may influence pain and suffering allocations in juror decisions. The substantial variability in participants' awards suggests that characteristics of the decision maker (the juror) may play an important role in their evaluation of such damages. Certainly such factors pose interesting opportunities for future research.

Finally, it should be noted also that this research focused on individual decisions. Unlike jurors, there was no opportunity for the participants' decisions to be influenced by inputs from others. We recognize, of course, that group processes play an important role in jury decisions.

REFERENCES

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