

THE EFFECTS OF CONTEXTUAL INFORMATION ON ALLOCATION OF RESPONSIBILITY: A SOCIAL COGNITIVE FRAMEWORK

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We summarize the findings of five experiments that tested the effects of contextual information on allocation of blame. Each study used a single-scenario methodology in which participants read about a consumer that was injured during the use of or exposure to a consumer product. Information about the manufacturer's knowledge of hazards and its safety practices and policies was manipulated. The main dependent variable was the amount of blame assigned to different parties (e.g., manufacturer, distributor, employer, injured person). Across all studies, the principles of foreseeability and precautionary action appeared to guide participants' blame allocations. Consistent with a social cognitive view of negligence, greater blame was assigned to the manufacturer when foreseeable harm existed and no precautionary steps were taken. Overall, this line of research suggests that safety pays, particularly when the product manufacturer develops high quality warnings and other safety materials and takes the necessary steps to ensure that they, and other links in the information distribution *chain*, get these materials to the people that need them most—the end user.

INTRODUCTION

Evidence from the social cognition literature indicates that negligence perceptions are highly sensitive to contextual information, and therefore, relatively unstable across people and settings (e.g., Karlovac & Darley, 1988; Wilson & Jonah, 1988). Because contextual information shapes perceptions and attributions, decision makers (e.g., jurors, judges) may attribute responsibility for accidents on the basis of the amount and type of information accessible to them. Therefore, research is needed to determine how people weigh information about the victim, manufacturers and other entities involved in the production or distribution of consumer products, and situational variables when assigning blame for injuries.

Research suggests that two principles in particular guide the decisions that observers make about negligence. First, they attempt to reconstruct the foreseeability of harm as it appeared to the injured person prior to the accident. If the foreseeability of the risk is judged to be high, then the (injured) person is likely to be seen as negligent. Second, they assess the degree of care taken to prevent foreseeable risks and harms. People should be held less accountable for accidents to the extent that they took reasonable and prudent steps to minimize the likelihood of their occurrence.

One goal of the present research was to examine the respective roles of foreseeability and personal responsibility on allocations of blame. When risk of harm to consumers is not obvious to observers, as with "hidden" hazards, they should not hold the manufacturer responsible for failing to anticipate the injury. Instead, they should assign more of the blame to the injured person, which in turn, should be tempered by their success in taking appropriate precautionary actions. Contextual information that changes the foreseeability of harm

and the level of precaution taken by the manufacturer, however, should change observers' attributions. Specifically, greater blame should be shifted toward the manufacturer when contextual information suggests that it did not take adequate precautionary action than when information suggests that it acted with foresight and took reasonable precautions to warn consumers of potential dangers (e.g., developed high quality warnings and took steps to ensure this information actually reaches end users).

Another goal of this research is to examine how blame is allocated or spread among different parties. Many of the studies in this area have examined the processes underlying attributions of blame to a single individual or target. However, in actual product liability cases, multiple parties are typically involved and each entity may be seen as negligent, or contributing, to the injury in some manner. We predict that allocation of blame will depend to a large extent on the context in which an accident occurs and the observers' interpretation of actions taken by the different parties involved. The principles of foreseeability and precautionary action should be applied to the actions of all parties involved, and allocation of blame will depend on who is seen as most negligent in their actions leading up the injury.

In this report, we summarize the results of five experimental studies that tested the effects of contextual information on patterns of blame estimates for injuries sustained during the use of or exposure to consumer products. In each study, manipulated information about a manufacturer's safety policies and practices can be seen as altering perceptions of foreseeability and precautionary action. Each study used a single-scenario methodology in which participants read about a consumer that was injured after using or being exposed to a product. Contextual information about

the manufacturer's knowledge of hazards and its safety practices and policies was manipulated in the scenario and/or in a separate section termed *Relevant Facts*. The injuries were depicted as severe enough to warrant legal action and the participants were asked to allocate blame for the injury to different parties mentioned in the scenario. The main dependent variable in each case was the blame assigned to different parties (e.g., manufacturer, distributor, employer, injured person). A chart summarizing the experimental conditions and major findings of each study is presented as Table 1.

SUMMARY OF STUDIES

In the first study (Kalsher et al., 1998), we examined how participants allocated blame in fictitious scenarios loosely based on the infamous McDonalds hot coffee case. Contextual information intended to be either positive or detrimental to the company and its safety practices was either present or absent from the scenario. The negative information indicated that the company regularly serves its coffee about 40 degrees higher than home-brewed coffee and that it had not changed its safety or warning procedures despite numerous complaints and prior injuries. The positive information indicated that the company had responded to complaints by designing more effective warnings for its cups. Participants attributed significantly less blame to the consumer when the scenario was accompanied by contextual information that placed McDonalds' policies and practices in an unfavorable light, compared to when the same information was framed positively or when no supplementary information was provided. The supplemental information can be interpreted as manipulating observers' perceptions of foreseeability and precaution: the company knew about the risks of its product and either did or did not take action to minimize the risk of injury. Interestingly, the victim always received more blame than McDonalds; in the studies that follow this will not always be the case.

The second study (Kalsher, Wogalter & Williams, 1999) expanded on these preliminary findings in two ways. First, we looked at allocation of blame for a product with a hidden hazard. To do this, we created scenarios in which a young girl is permanently injured as a result of choking on marshmallows. The hazards of marshmallows are largely "hidden" and most people do not consider them dangerous. Second, we looked at blame allocated across multiple parties related to the injury. Participants were given product-use scenarios that described a girl whose age was manipulated to be from 18 months to 16 years and who suffered serious brain damage after choking on a marshmallow made available to her by her mother. Contextual information intended to be either positive or detrimental to the manufacturer and its safety practices was either present or absent from the scenario. The manipulated variables in this study were age of victim and the amount and type of contextual information provided. Participants either received no contextual information—and hence the product

hazard was presumed to be non-obvious—or they received contextual information that indicated that the manufacturer had prior knowledge of the hazards associated with its product (foreseeability of risk) and that it either took precautionary action to minimize risk of injury or did not take such action. After reading the scenario, participants allocated blame to five different parties: the victim, the victim's mother, the store that sold the product, the manufacturer, and the paramedics that arrived to treat her.

Results revealed that when the potential hazard was not obvious and the product was generally believed to be harmless, people tended to assign manufacturers relatively little blame, and instead assigned the majority of the blame elsewhere. The girl's parents received the most blame, while the blame allocated to the child increased with her age. However, contextual information affected the allocation of blame to the different sources. When participants were given information that the manufacturer did not act on knowledge that the product is potentially harmful, they assigned significantly greater blame to the manufacturer. Providing participants with information that the manufacturer took precautionary action to warn consumers of possible risks shifted the blame away from the manufacturer and toward the parents. Again, these findings are consistent with the argument that negligence ratings are high when harm is foreseeable and people do not take adequate or reasonable action to reduce its chances of occurring (Karlovac & Darley, 1988).

Our third study (Williams et al., 2000) was designed to replicate the Kalsher et al. (1999) findings and to examine the effectiveness of a manufacturer's product warning in terms of its ability to alert consumers to hidden hazards. The same product-use scenario was used in which a young girl suffers permanent brain damage after choking on marshmallows given to her by her mother. Age of the victim and contextual information were manipulated in the same manner as in study 2. A variant (one of four) of a warning was provided, but only in the positive contextual information conditions. Specifically, we crossed two features of the warning—color of the pictorials (black-and-white vs. color) and number of panels (single vs. multiple-panels) designs) in a factorial design. Once again, we found that contextual information about the manufacturer's safety policies and actions significantly influenced the pattern of blame allocated to each of the different parties. Providing participants with information that the manufacturer did not act on knowledge that the product is potentially harmful significantly increased the amount of blame assigned to it, suggesting that people perceived the manufacturer as reckless or irresponsible in its practices. However, information that the manufacturer acted on this knowledge by taking steps to warn consumers about the hazards of its product shifted blame away from the manufacturer and toward the parents. The results also showed that within the positive context condition, simple (black-and-white, single-frame) warning labels were not as noticeable and

were rated less effective than multi-frame labels and labels presented in color.

In our fourth study (Kalsher et al., 2001), we examined personal responsibility of the victim as well as safety practices of the manufacturer. Participants read variants of a fictitious scenario in which the driver of an automobile is injured by a deploying airbag after being struck by another vehicle whose driver has swerved into incoming traffic to avoid striking a child who had run into the road. The manipulated variables were the "safety-worthiness" of the vehicle (manufacturer had vs. had not included many safety features in its design), the speed at which the victim was driving at time of accident (at speed limit vs. over the speed limit), and the victim's stature and behavior (sitting in or out of the air bag's deployment zone out of necessity or for reasons of personal comfort). The behavioral variables—speed and sitting in the deployment zone—were included to see if participants took into account the victim's own responsibility for the injuries she received. Results showed that participants were indeed sensitive to both the safety practices of the manufacturer and the behavior of the injured driver. Consistent with the results of the first three studies, the manufacturer of the "safe" car was allocated less blame than the manufacturer of the "unsafe car." The driver received greater blame when driving the safe car and when driving over the speed limit.

The last study reports the results of a new experiment (Kalsher, Williams, Viale & Yockey, 2003) that examined how participants allocated blame in situations in which several parties (manufacturer, distributor, company owner, injured person) either did or did not take precautionary actions to warn a worker about workplace hazards. This experiment also followed up on the suggestion from the Williams et al. (2000) study that the type of warning used by a manufacturer may influence allocation of blame. For this study, participants read one of two product-use scenarios. One of the scenarios described a construction worker who was injured after falling through an acrylic panel used in the construction of greenhouses; the other scenario described a machinist who died after breathing contaminated metalworking fluid mist generated during the machining process. The safety practices and policies exhibited by the manufacturer, distributor, employer and worker (injured person) in both instances either reflected or did not reflect precautionary actions to warn the worker of the risk of injury. In addition, we manipulated the quality of the warnings placed on the products by their respective manufacturers. For both scenarios, the warnings were either constructed to resemble warnings actually used on similar products in the respective industries (*existing*) or they were *enhanced* to reflect the recommendations of ANSI Z-535 and included a multi-panel format and color pictorials. For both scenarios, the results were nearly identical and showed that blame allocation fell "downstream", with the greatest blame falling on the party that failed to distribute safety information to the next step of the chain. The effects of distribution breakdown on blame was moderated by the type

of warning provided by the manufacturer in that greater blame was placed on the negligent party when a good warning was used. Part of the blame for the accident always shifted to the manufacturer when it provided a poor warning, regardless of where the breakdown occurred.

DISCUSSION

These results show that when allocating blame, people are sensitive to the amount and type of information made available to them—in this instance the information made available to them via fictitious scenarios. They also show that the principles of foreseeability and precautionary action appear to guide negligence ratings. Consistent with Karlovac and Darley's social cognitive view of negligence, observers increased blame on the manufacturer when foreseeable harm existed and no precautionary steps were taken.

This research also shows that injuries sustained during the use of or exposure to consumer products are complex events and that there are frequently more actors deserving of blame than just the product manufacturer and the injured person.

The results of the final experiment highlight the fact that manufacturers cannot avoid blame simply by developing effective warnings and other instructional materials. Indeed, these findings emphasize that the efforts of the manufacturer and other relevant entities to ensure that these materials reach the end users are equally important. Specifically, when a particular "link" in the information chain was depicted as having failed in its duty, it was blamed accordingly.

Overall, this line of research seems to suggest that safety pays, particularly when product manufacturers develop high quality warnings and other safety materials and then take the necessary steps to ensure that they, and other links in the distribution chain, get these materials to the people that need them most—the end user.

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Study	Product-Use Scenario	Possible Sources of Blame	Safety Context Manipulation	Additional Manipulations	Main Findings
Kalsher, Phoenix, Wogalter, & Braun (1998)	McDonalds hot coffee case	Victim Company	<i>No information</i> about company's safety practices <i>vs.</i> <i>Positive information vs. Negative information</i>		Some blame shifted from victim to company when negative safety information was provided. Victim received highest blame in all conditions.
Kalsher, Wogalter, & Williams (1999)	Hidden hazard: girl suffers brain damage after choking on marsh-mallow given to her by her mother	Victim (Child) Parent Manufacturer Store Paramedics	<i>No facts vs. Positive facts</i> (warning and responsible marketing) <i>vs.</i> <i>Negative facts</i> (no warning and aggressive marketing)	<i>Age of Victim</i>	Manufacturer received higher negligence ratings when harm was foreseeable and it failed to warn consumer. When hazard remained hidden, victim and parent were blamed.
Williams, Kalsher, Maru, & Wogalter (2000)	Same as above	Same as above	Same as above	<i>Age of Victim</i> <i>Type of Warning</i>	Replicated main findings of Kalsher et al (1999). Multi-frame color warning more noticeable than single, black and white frame.
Kalsher, Williams, & Murphy (2001)	Driver is injured by a deployed airbag after she swerves to avoid child who has run into the road	Victim (Driver) Other Driver Child Parent of Child Auto Manufacturer	Manufacturer <i>known for safety practices</i> and precautionary action <i>vs.</i> Manufacturer <i>not known for safety practices</i> and precautionary action	<i>Speed at Impact</i> <i>Stature of Driver</i> <i>Severity of Injury</i>	Manufacturer of safe car received less blame than manufacturer of unsafe car. Personal responsibility matters; victim receives more blame when driving unsafely.
Kalsher, Williams, Viale & Yockey (2003)	Construction worker injured after falling through an acrylic panel; Machinist injured after breathing contaminated metalworking fluid mist	Manufacturer Distributor Owner Victim (Worker)	<i>Safety Materials Distributed vs. Safety Materials Not Distributed</i>	<i>Type of Warning</i> used by the manufacturer (existing warning <i>vs.</i> enhanced warning)	Highest blame allocated to party that failed to take to precautionary action by distributing safety information. Type of warning used by the manufacturer moderated the safety distribution effect.

Table 1. Summary of product-use scenarios, the experimental conditions and major findings of each study.