Considerable research has been directed at examining motivational bias in the attribution of responsibility for accidents. To assess the influence of unsafe actions on the attribution of responsibility for traffic accidents of varying severity, 96 college students read scenarios in which the level of unsafe driving behavior (none, drinking, drinking and speeding) and the severity of accident outcome were experimentally varied. Subjects were asked to evaluate the degree of responsibility of the perpetrator, the importance of chance, and other possible causes. The results indicated that both increasing levels of unsafe act and severity of outcome were associated with increased attribution of responsibility. Severity-dependent attribution of responsibility was apparent even in the absence of obvious unsafe acts by the perpetrator. The commission of unsafe acts produced a tendency in the observers to attribute greater responsibility to the actions and characteristics of the perpetrator rather than to chance or situational factors. A denial of personal similarity with the perpetrator was also found under such circumstances. (Author/JAC)
Attribution of Responsibility for Accidents Involving Blameworthy Acts

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A study was conducted to assess the effects of unsafe actions on the attribution of responsibility for motor vehicle accidents of varying severity. Ninety-six undergraduates read specially prepared scenarios in which the level of unsafe driving behavior (none, drinking, drinking and speeding), and the severity of accident outcome were experimentally varied. The results indicated that both increasing levels of unsafe act and severity of outcome were associated with increased attribution of responsibility. Severity-dependent attribution of responsibility was apparent even in the absence of obvious unsafe acts by the perpetrator. The commission of unsafe acts produced a tendency in the observers to attribute greater responsibility to the actions and characteristics of the perpetrator rather than to chance or situational factors. A denial of personal similarity with the perpetrator was also found under such circumstances.
Considerable research has been directed at examining motivational biases in the attribution of responsibility for accidents (Burger, 1981). Early studies suggested that more responsibility is attributed for severe than for mild outcomes (cf. Walster, 1966). According to Walster, this occurs because, as severity increases, the accident observer needs to believe that the event was controllable and thus, avoidable. This is accomplished by attributing the accident to the perpetrator's actions, as opposed to chance or other uncontrollable factors. Other research (cf. Shaver, 1970a, 1970b) indicates that when the observer is personally and situationally similar to the perpetrator, less responsibility is attributed to the perpetrator, with increasing severity. Personal motives also appear involved here, with the observer seeking to avoid possible future blame by attributing the accident to external or situational factors. When responsibility and blame cannot be diverted from the perpetrator, observers attempt to deny the personal similarity between themselves and the perpetrator (Shaver, 1970b, Exp. 3). Collectively, the findings and interpretations of Walster and Shaver have become known as the defensive-attribution hypothesis.

The present study was designed to extend understanding of the determinants of responsibility attribution. Interest was with assessing the influence of identifiable unsafe actions, committed by the perpetrator, on the attribution of responsibility for accidents of varying severity. Descriptions of a college undergraduate, driving his own car while drinking, or drinking and speeding, were employed to enhance personal and situational similarity with the college
student observers, and to extend the attribution literature involving motor vehicle accidents (Arkkelin, Oakley & Mynott, 1979; Brickman, Ryan & Wortman, 1975; Walster, 1966).

It was hypothesized that under conditions of high personal and situational similarity, the absence of unsafe behavior by the perpetrator would result in less responsibility being attributed to the perpetrator as outcome severity increased. However, the commission of unsafe acts by the perpetrator would result in the denial of personal and situational similarity and in more responsibility being attributed to the perpetrator as outcome severity increased.

Method

Subjects and Design

A total of undergraduate (52 females, 44 males), enrolled in introductory health courses, participated. A 3 x 2 between-subjects factorial design was used, involving three levels of unsafe act (none, drinking, drinking and driving) and two levels of accident outcome severity (mild, severe). Sixteen subjects were randomly assigned to each of the six experimental conditions. Participants each read a single accident scenario and completed a standard set of questions.

Accident Scenarios

Twelve accident scenarios were developed, comprised of six versions of two slightly different accident situations: automobile skidding on wet pavement or auto hitting a rough spot in the road. Thus, there were two scenarios for each combination of unsafe act and outcome severity, and each participant read one of the two. The scenarios described the driver, Tom (perpetrator) as driving within the posted speed limit, as having drank six to seven beers just prior to driving, or as having drank six to seven beers and driving over the
posted speed limit. In both accident situations, Tom's car veer back on-
vehicle off the road. In the mild outcome, the other motor to the road without sustaining damage or injury to the passen-
ged. In the severe outcome, the other vehicle crashed into a ditch, was bad damaged, and three passengers seriously hurt. In all scenarios, only the other vehicle, and its passengers, sustained any damage or injury. Also, the other vehicle and driver did not contribute to the accident occurrence or severity in any direct manner.

Dependent Measures

Participants responded to seven questions about the accident scenario they had just read. Answers were indicated using nine point bi-polar rating scales. Each participant was asked to: 1) assign degree of responsibility to the perpetrator for the accident, 2) rate the importance of fate or chance, 3) judge the importance of the perpetrator's personal characteristics as possible causes, 4) evaluate the likelihood of mechanical failure causing the accident, 5) determine the likelihood of being in the same situation as the perpetrator, 6) rate the importance of situational characteristics as possible causes, and 7) judge the extent to which the perpetrator was able to control the situation.

Procedure

Each participant was given a booklet containing a cover sheet, one of the 12 accident scenarios, and the questions. The cover sheet explained the purpose of the study (development of safety-related case histories for future studies) and contained instructions for reading and responding to the scenario.

Results and Discussion

Preliminary analyses of variance on the responses to each question revealed no differences for sex of subject or for accident type (wet pavement or bumpy
road). Hence, the data were collapsed across these variables, resulting in 3(act) x 2(outcome) analyses.

With regard to the attribution of responsibility for the accident (Table 1), greater responsibility was assigned to the perpetrator as the magnitude of blameworthy behavior increased, F(2,90) = 4.51, p < .01, and as the consequences of the accident became more severe, F(1,90) = 5.84, p < .02. The interaction term did not approach significance (F < 1.0). These results are only partially consistent with the hypothesis, since severity-dependent attribution occurred even in the absence of any obvious unsafe act by the perpetrator. Yet, as predicted, greater responsibility was attributed to the perpetrator when he had committed identifiable unsafe driving acts. Moreover, under such circumstances, observers were more likely to view the personal characteristics of the perpetrator as contributory factors, F(2,90) = 9.71, p < .001, and less able to see themselves in a similar situation, F(2,90) = 19.71, p < .001 (Table 2). The fate or chance question and the controllability question both yielded results which approached significance (Table 2). When unsafe acts had been committed, fate or chance was viewed as being less a factor, F(2,90) = 2.68, p < .07, while the perpetrator was viewed as having more control over the accident, F(2,90) = 2.56, p < .08. Finally, mechanical failure was perceived as a less likely contributing cause when unsafe acts has been committed, F(2,90) = 3.70, p < .03 (Table 2).

These findings indicate that the commission of unsafe acts led the observers to explain the accidents, whether mild or severe in outcome, as being caused by the actions or characteristics of the perpetrator and not by chance or situational factors. By being less able to see themselves in a similar situation, the observers appeared to deny similarity with the perpetrator. Consistent with the defensive-attribution hypothesis, blameworthy behavior appeared to offer a
basis for focusing responsibility on the perpetrator and for viewing the accident as controllable (cf. Wortman, 1976). This was accompanied by a denial of similarity.

Interestingly, post hoc comparison of the means (Duncan's procedure, $p < .05$) for the above questions indicated that, with one exception, the difference between no unsafe act and drinking and driving failed to reach significance, and that only when both drinking and speeding were involved was there significantly more responsibility attributed. The exception was the question which dealt with whether the observers could see themselves in a situation similar to the perpetrator. Here, both unsafe act conditions were significantly different from the no unsafe act condition. Apparently, the commission of either unsafe act was sufficient for them to deny similarity with the perpetrator. For the personal characteristics questions, significant differences were also found between the two unsafe acts, indicating that personal characteristics were most likely contributing factors when the perpetrator had been both drinking and speeding as compared to just drinking. As indicated, no differences were found between drinking and no unsafe act.

It remains to explain why more responsibility was attributed for severe than mild outcomes in the absence of unsafe behavior by the perpetrator. The design of the specific scenarios used in this study might have been such that it was difficult to attribute responsibility to anyone or anything other than the perpetrator. For instance, there was no perpetrator-victim confounding; even in the severe outcomes the perpetrator suffered no injury or damage. Also, there were no unsafe or questionable actions on the part of the victims which might have implicated them in the accident causation. Finally, the nature of the accidents themselves might have contributed--skidding on wet roads or hitting a bump and losing control of the vehicle, even while sober and driving
within the speed limit, might have been viewed by the observer as being due to careless or poor driving on the part of the perpetrator.

Conclusions

Blameworthy behavior on the part of the accident perpetrator appeared to provide a basis for attributing more responsibility to the perpetrator, even in situations of high personal and situational similarity. Accidents involving unsafe acts by the perpetrator but not the victim, and in which only the other party suffers, comprise a situation where it is very difficult not to attribute responsibility to the perpetrator. Observers responded to this situation by focusing responsibility on the actions and characteristics of the perpetrator and by denying any similarity to that person. Although responsibility attributions were most pronounced where both drinking and speeding were simultaneously involved, a strong tendency to deny similarity occurred with the commission of either action.

In terms of outcome severity, more responsibility was attributed to the perpetrator for severe than mild outcomes regardless of whether this individual had committed an unsafe driving act. The persistence of severity-dependent attribution was probably the result of the specific accident situations used.

References


Footnote

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Table 1
Means and Standard Deviations for Attribution of Responsibility (Question One)

<table>
<thead>
<tr>
<th>Act</th>
<th>Mild</th>
<th>Severe</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>No Unsafe Act</td>
<td>5.44</td>
<td>2.06</td>
</tr>
<tr>
<td>Drinking</td>
<td>6.31</td>
<td>2.60</td>
</tr>
<tr>
<td>Drinking and Speeding</td>
<td>6.81</td>
<td>2.37</td>
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</table>

Note. The higher the mean values the greater the attributed responsibility.
Table 2
Means and Standard Deviations for the Three Unsafe Act Conditions for Questions Two to Seven

<table>
<thead>
<tr>
<th>Measure</th>
<th>No Unsafe Act</th>
<th>Drinking</th>
<th>Drinking and Speeding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Fate or Chance</td>
<td>5.69</td>
<td>2.62</td>
<td>5.91</td>
</tr>
<tr>
<td>Personal Characteristics</td>
<td>4.56</td>
<td>2.57</td>
<td>5.63</td>
</tr>
<tr>
<td>Mechanical Failure</td>
<td>4.69</td>
<td>2.29</td>
<td>4.06</td>
</tr>
<tr>
<td>Self in Similar Situation</td>
<td>7.31</td>
<td>1.42</td>
<td>4.41</td>
</tr>
<tr>
<td>Situational Factors</td>
<td>7.28</td>
<td>1.61</td>
<td>6.47</td>
</tr>
<tr>
<td>Controllability</td>
<td>5.72</td>
<td>2.02</td>
<td>6.28</td>
</tr>
</tbody>
</table>

Note. The higher the mean value the greater the importance or likelihood of the specific measure.