

Reducing the Hindsight Bias in Mock-Juror Decision Making: Assessing the Effectiveness of a Court-Appointed Witness

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Abstract

Because the legal system asks jurors to render a verdict with knowledge of the original outcome of events, jurors become susceptible to the human judgment phenomenon known as hindsight bias. This exploratory study extends previous research into hindsight debiasing in the courtroom context by utilizing a court-appointed expert witness to: 1) explain the bias to jurors, and 2) suggest strategies to avoid engaging in it when rendering a verdict. Results of this exploratory study suggest that an integrative trial strategy approach may be needed to effectively reduce juror tendency to engage in hindsight bias.

Key Words: Hindsight; Hindsight Bias; Juror Decision Making; Expert Witness Testimony; Verdict Formation

As factfinders, jurors are expected to set aside biases, basing their verdicts only on the evidence presented (Menon, 1995; Sand, Siffert, Loughlin, Reiss, & Batterman, 1997). However, in most cases jurors are asked to render a verdict after events have occurred and the outcome (usually negative) is known. Previous research by social scientists suggests that outcome knowledge makes jurors particularly susceptible to a human judgment phenomenon called hindsight bias (for a review see Hawkins & Hastie, 1990). In Wexler and Schopp's (1989) study of the effects of hindsight bias in psychiatric malpractice cases, they suggest using expert witness testimony to reduce the hindsight bias among jurors — a suggestion that has yet to be tested empirically. Therefore, the goal of this study is to evaluate the effect of expert witness testimony on reducing the hindsight bias in juror decision-making.

Review of Literature

Hindsight

Hindsight bias is the tendency for people to use outcome knowledge to “judge *a priori* decisions or actions in light of their *post hoc* knowledge” (Stallard, Price, & Dane, 2001). Fischhoff (1975), who conducted much of the early research investigating hindsight bias, concluded that most people are unaware that they engage in hindsight and that few individuals realize that they use outcome knowledge (hindsight) when asked to predict the “inevitability” of an event's

outcome. From his research, Fischhoff (1975) found that people exhibit several judgment heuristics such as 1) exaggerating their ability to predict the inevitability of an event's outcome, 2) overestimating their ability to predict the outcome, and 3) overestimating the probability of the known outcome. Utilizing a variety of experimental settings and populations (Hawkins & Hastie, 1990), researchers have validated Fischhoff's original findings.

Drawing on the cognitive strategy of creeping determinism, Fischhoff (1975) suggests that judges will integrate incoming information into what they already know about the outcome of an event. He writes:

Upon receipt of outcome knowledge, judges immediately assimilate it with what they already know about the event in question. In other words, the retrospective judge attempts to make sense, or a coherent whole, out of all that he or she knows about the event (p. 297).

Wasserman, Lempert & Hastie (1991) also address the effect the bias may have on individual cognitive processing, noting that when individuals focus on the "causal links" associated with the given outcome, they tend to rewrite the story "so its beginning and middle are causally connected to its end" (p. 31). The importance of this type of causal reasoning to story development is well established in both the discourse processing (Graesser, 1981; Bower, Black, & Turner, 1979; Mandler, 1984) and the juror decision making literature (Beach, 1985; Bennett & Feldman, 1981; Feigenson, 1995; Hastie, 1993; Hastie, Penrod & Pennington, 1983; Pennington & Hastie, 1981; 1988; 1992).

Hindsight in the Legal Arena

As previously noted, hindsight affects decision making by affecting individual's causal reasoning. Causal reasoning is central to story development. It is widely accepted in both legal and social scientific realms predeliberation juror judgment is affected by the stories jurors develop to explain case events (MacCoun, 1989; Rieke & Stutman, 1990). In fact, research in this area led to the formation of the three-stage Story Model of juror decision-making (Pennington & Hastie, 1981; 1988; 1992). In the first stage, jurors evaluate the evidence through narrative representation or schema, constructing an explanation which accounts for the events in the dispute. This schema is based on several things: trial information, a juror's relevant knowledge, and a juror's perception of what constitutes a coherent story. The constructed narrative is also believed to consist of temporal, causal and intentional relations between events and pieces of trial information. This schema, not the actual "raw" evidence, is stored in memory. Importantly, evidence perceived to be the most important will be the most readily available for recall. In the second stage, jurors learn about the verdict categories, while in the third stage, jurors

compare the story they have developed with the verdict categories provided by the Court. The process of matching a juror's story schema to the verdict criteria results in the juror's decision. Essentially, the best matching category “wins.”

Because hindsight bias can affect the facts jurors ultimately choose to focus upon, the bias has important implications for the explanatory narratives jurors may develop for case events. The bias makes it more difficult for jurors to imagine, and subsequently develop, narratives of how differing outcomes could occur (Fischhoff, 1975; Schkade & Kilbourne, 1991). Consequently, facts that are consistent with an event's outcome are rated as more important and more pertinent (Baron & Hershey, 1988; Fischhoff, 1975).

Empirical research conducted to study the effect of hindsight bias on jury decision making has found that the bias is quite prevalent (Casper, Benedict, & Kelly, 1988; Casper, Benedict, & Perry, 1989). Recent attempts to reduce jurors' tendency to engage in the hindsight bias in the courtroom have met with mixed results (Kamin & Rachlinski, 1995; Smith & Greene, 2005; Stallard & Worthington, 1998). For example, Kamin and Rachlinski (1995) used specialized jury instructions as a debiasing strategy. Their study utilized three conditions – foresight, hindsight, and hindsight debiasing. The case presented in each condition involved a negligence case regarding whether a city “should take, or have taken, precautions to protect a riparian property owner from flood damage” (p. 89). In the foresight condition, participants received information set in an administrative hearing where one of the decisions was to determine if a flood might be possible in the future. The hindsight and hindsight debiasing conditions were set in a courtroom context in which participants of both conditions were given outcome knowledge (i.e., the town had flooded). However, the hindsight condition differed in that the judge instructed participants “to recognize the influential effects of hindsight and to consider alternative outcomes as had the city in foresight” (p. 93). One of the dependent measures in the Hindsight condition of their study focused on jurors' assessments of the city's negligence. The other dependent measure tested participants' ability to set aside outcome knowledge of the resulting flood when providing estimates of the probable success of the city's flood program. These estimates were then compared to those made by participants in the foresight condition, who did not have outcome knowledge regarding the flood. Results indicated that subjects exposed to the hindsight condition provided higher probabilities that the flood would occur than subjects who participated in the foresight condition. However, the findings also indicated that this debiasing technique failed to reduce jurors' tendency to engage in hindsight. These findings were confirmed by Smith and Greene (2005) who found

that not even multiple admonishments by a judge over the course of a trial were effective in reducing juror hindsight bias.

Kamin and Rachlinski (1995) concluded their original hindsight study with a call for developing suitable and effective debiasing techniques for the courtroom, suggesting “more intrusive procedures might be necessary to counteract the bias’s influence” (p. 100). Later, Rachlinski (1998) noted “the bias is primarily a product of cognitive processes, and only procedures that alter the mental strategies used to make judgments in hindsight have any chance of producing unbiased evaluations” (p. 584).

More recently, Smith and Greene (2005) tested the effectiveness of bifurcation. Their study had separate juries independently address liability and compensation decisions. Using an automobile negligence case, jurors in the control condition both determined negligence and awarded damages (i.e., a traditional unitary trial). These results were then compared to decisions made by the bifurcated juries. Results indicated that both the level of negligence assigned to the defendant and the monetary amount awarded to the plaintiff were lower when a bifurcated trial format was utilized than when jurors were part of a unitary trial.

Other research (Agans & Shaffer, 1994; Arkes, 1989; Tversky & Kahneman, 1982) supports the importance of individuals being able to imagine *alternative* outcomes in order to reduce the influence of the hindsight bias. Based on this research, Stallard and Worthington (1998), in a study on juror decision making, introduced a debiasing strategy (i.e., a specific alternative outcome) into the defense attorney's argument. They found that when the attorney provided mock jurors with an alternative outcome, it became easier for them to imagine an alternative ending to case events. Earlier, Arkes (1989) observed that criminal defense attorneys use essentially the same type of debiasing strategy when they provide jurors with scenarios that do not implicate the accused.

Expert Witness Testimony

Wexler and Schopp (1989) also suggested another “intrusive” technique – expert witness testimony – as a means of reducing hindsight bias in the courtroom context. In both commentaries and study conclusions, researchers have suggested that juror and jury decision making might be improved through “coaching” from the judge, experts, or the jury instructions (Strawn & Munsterman, 1982; Wells, Lindsay, & Tousignant, 1980; Wexler & Schopp, 1989). However, the adversarial nature of most expert testimony may lead jurors to view the testimony as biased, a factor which could negatively affect the expert's credibility, or lead jurors to use other cognitive shortcuts to assess expert credibility (Cooper & Neuhaus, 2000). One suggested method of dealing with the potential biases associated with dueling experts is to

present jurors with an “impartial” presentation on the issue in question from an expert witness (Developments in the Law, 1995).

Brekke, Enko, Clavet, & Seelau (1991) examined the impact of nonadversarial (court-appointed) versus adversarial expert testimony on jury decision making. They found that a court-appointed expert and the associated “non-biased” status did not lead jurors to evaluate the testimony more favorably than adversarial expert testimony. In fact, they found that deliberating jurors were actually less responsive to the content of nonadversarial expert testimony than to that of their adversarial counterpart. However, this study, like much of the other research into the effect of expert witness testimony on jury decision making, used a criminal case. Moreover, the study was not designed to evaluate the effect of expert testimony on reducing hindsight bias. A review of the literature did not identify any previous study attempting to use expert witness testimony as a hindsight debiasing strategy (i.e., explaining what and how the bias works). Research into judicial instructions, however, indicates that pre-instructed jurors are better able to reject nonevidentiary materials than post-instructed jurors (ForsterLee, Horowitz, & Bourgeois, 1993). Pre-instructed jurors are also more likely to defer their final decision until trial’s end (Smith, 1991). Therefore, having a “neutral” expert witness to discuss the hindsight bias prior to mock jurors’ exposure to each attorney’s arguments may reduce the effects of the bias.

Research into source characteristics and credibility also suggests that neutral testimony may be more influential with jurors. For example, previous research into credibility stresses the importance of a communicator eliciting perceptions of both expertise and trustworthiness from receivers (for a review, see Stiff & Mongeau, 2003). In addition, research by Cooper and Neuhaus (2000) found that juror views of expert testimony may be affected by source cues (i.e., credentials and compensation). Results of their study indicate that jurors tended to view highly-paid, highly credentialed experts as hired guns. The experts were less believed, less liked, and generally viewed as less effective than experts who were paid less or who had more modest credentials.

The use of court-appointed expert witnesses may also reduce juror tendency to question the validity of the presented testimony. Jurors may develop pre-message expectations based on which side the expert is testifying for. These perceptions can lead jurors to form knowledge and/or reporting biases of the offered testimony. In turn, these expectations may affect the perceived trustworthiness of the witness (Eagly, Chaiken, & Wood, 1981). Because they are court-appointed (i.e., a friend of the court), expert witnesses and their testimony may carry a greater weight with jurors, hopefully reducing their tendency to engage in hindsight.

As none of the published research to date has examined the potential effect of expert witness testimony – particularly a court-appointed expert – to reduce hindsight bias on juror decision making, the goal of this study is to test empirically the effectiveness of testimony from a court-appointed expert in reducing jurors' reliance on the hindsight bias. Thus, this study tests the effectiveness of court appointed expert testimony on reducing mock juror tendency to engage in hindsight bias.

Experimental Methods and Procedures

Subjects

Volunteers were drawn from introductory communication courses at a large southern university and awarded course credit for their participation. Of the 174 participants, 111 were women and 63 were men. Subjects ranged in age from 18 to 49 years ($M = 22$; $SD = 4.36$), with 80% identifying themselves as Caucasian, 14% as African-American, and 6% as Asian, Hispanic, or "other" origin.

Stimulus Materials

Attorney Presentations.

The stimulus materials consisted of written scripts developed from an actual commercial litigation case in which the Resolution Trust Corporation (the RTC) sued a Savings and Loan Board of Directors for the failure of their Savings and Loan (see Pitera-Stallard, 1996, for full transcripts). The facts and issues within the case were held constant across all conditions, with claims of negligence being made against both parties. Plaintiff and defense attorney closing arguments presented the facts of the case from each party's respective viewpoint. A synopsis of attorney arguments presented by each party, regardless of condition, is presented in Table 1.

Expert Witness Testimony.

The expert witness testimony did not attempt to support either side of the dispute but simply described the hindsight bias and how it can affect people's decision making. At the beginning of the expert witness presentation and in keeping with traditional introduction of expert witness testimony in court, the expert's credentials were presented (e.g., years in practice; educational background; extensive publications and presentations; previous expert testimony). Next, the court-appointed expert psychologist attempted to decrease the hindsight bias by first explaining how the "after-the-fact" structure of the legal system makes jurors susceptible to the human judgment phenomenon known as the hindsight bias. Finally, he described the bias using sporting and medical analogies to illustrate the effect of the hindsight bias on an individual's decision making (i.e., probability estimates with outcome knowledge v. estimates without outcome knowledge).

Manipulations and Procedures

Via the format of a simulated trial, one group was exposed to the Hindsight condition, while the second group was exposed to the Hindsight Debiasing condition. Also known as mock juries, this technique provides a method for systematically analyzing “juror” decision making and behavior (MacCoun, 1993).

In the Hindsight condition, the attorneys presented the case from their respective positions and the mock jurors were provided with outcome information (i.e., the S & L failed). The Hindsight Debiasing condition was the same as the Hindsight condition, except, prior to the attorney presentations, the court-appointed psychologist presented his expert testimony. Because these arguments had been previously tested to ensure that participants exposed to the arguments would engage in hindsight, a foresight condition was judged unnecessary (see Pitera-Stallard, 1996, for the full text and statistical findings related to the original testing of these arguments).

Participants were randomly assigned to one of the two 60-minute experimental sessions – hindsight or hindsight debiasing. At the session, they received a packet of materials containing, in order of appearance: 1) an informed consent, 2) the expert testimony (provided only to participants randomly assigned to the Hindsight Debiasing condition), 3) the attorney’s arguments, 4) judge’s instructions, 5) the verdict form, and 6) the questionnaire. After reading the materials from their packet, mock jurors completed the dependent measure questionnaire. Participants could not reference the scripts while completing the questionnaire.

Finally, based on Cohen’s power estimates, a minimum sample size of 87 participants per group was employed in order to detect a medium to large-sized effect at $\alpha = .05$, power = 80% (Cohen, 1992).

Dependent Measures

Using procedures in keeping with the previously described research (Fischhoff, 1975; Kamin & Rachlinski, 1995; Stallard & Worthington, 1998), three dependent measures were used to test the research question. First, to test the effect of hindsight on verdict formation, participants in each condition were asked to assess whether the Board of Directors should have instituted their business plan. Individuals were next asked to judge whether the Board of Directors acted negligently. These first two measures utilized a dichotomous “Yes/No” decision. The third dependent variable tested a participant’s ability to avoid engaging in hindsight (i.e., set aside outcome knowledge). Mock jurors were instructed to set aside the outcome information (i.e., to imagine they did not know the S & L’s failed)

and asked to predict the probability (from 0% to 100%) of whether the savings and loan would succeed or fail.

Manipulation Check Questions

To determine if study participants exposed to the expert witness testimony understood what the hindsight bias was and whether they remembered specifics of the expert's testimony, the survey included a series of five true/false questions. Responses were satisfactory (see Table 2).

Results

The research question asked whether subjects in the Hindsight condition would exhibit greater hindsight bias than subjects exposed to the Hindsight Debiasing condition. As noted above, previous research established that exposure to these arguments does lead mock jurors to engage in hindsight (Pitera-Stallard, 1996). Thus, differences in test results should be attributable to the debiasing strategy. According to the test design, a "yes" response to the first dependent measure ("Should the Board of Directors have instituted their plan") and a "no" response to the second dependent measure ("Were the Board of Directors negligent") would indicate that the tendency to engage in hindsight had been reduced. As seen in Table 3, there was some movement in subject responses toward "reduced hindsight." However, the difference was not significantly different for either of the first two dependent measures [i.e., should the Board of Directors have instituted their plan, $\chi^2(1) = 2.02$; $p > .05$, and were the directors negligent, $\chi^2(1) = 1.89$; $p > .05$].

The third dependent variable asked participants to estimate the probability of the S&L's success "as if they had not known the outcome" (i.e., its failure). For this variable, a reduced hindsight effect would have Hindsight Debiasing participants rating the probability estimate of the S&L's success higher than those in the Hindsight condition. An independent t-test indicated that participants exposed to the expert witness testimony in the Hindsight Debiasing condition ($M = 55.8\%$) were slightly more likely than participants in the Hindsight condition ($M = 51.6\%$) to believe the S&L would succeed. However, as with the first two dependent variables, this difference was not statistically significant, $F(1,172) = -1.51$; $p > .05$).

Discussion

Hindsight is only one of many factors that may influence juror decision making (e.g., evidence, testimony, witness demeanor, judge's instructions, etc.). However, previous research indicates that psychological biases can and do influence juror interpretation of evidence and testimony (e.g., counterfactuals, availability heuristic, hindsight, etc). Wexler & Schopp (1989) originally suggested the use of expert testimony as a method for reducing juror tendency to engage in hindsight.

This study tested one method of utilizing an expert witness to reduce the bias – a court-appointed expert informing the mock jurors of the cognitive heuristic. Unfortunately, the results of this exploratory study do not support previous suggestions that testimony from an expert witness on the hindsight bias may reduce juror tendency to engage in the phenomenon. The majority of participants exposed to the debiasing condition indicated that they understood the hindsight concept outlined by the expert and that they remembered the expert's testimony. However, while some movement in participant responses occurred, results of the analyses showed no significant difference in the means for participants exposed to the expert's testimony and those who were not (see Table 3).

It should be noted, however, that while correct responses to the majority of closed-ended questions were quite high (see Table 2), correct responses to one crucial manipulation question was somewhat low. Only 67% of participants correctly answered the manipulation check question, "The expert witness suggested that you think of possible alternative outcomes when judging past events," with a "true" response. The expert did suggest that participants imagine or "keep in mind" other alternatives; however, he did not explicitly discuss or outline possible alternatives (i.e., the S&L succeeded, the S&L failed, but with less of a monetary loss, etc.) to the events in question.

These findings indirectly support previous research suggesting that the introduction of alternative outcomes helps individuals to avoid engaging in hindsight (Agans & Shaffer, 1994; Arkes, 1989; Tversky & Kahneman, 1982). Stallard and Worthington (1998) found mock jurors to be less influenced by hindsight when debiasing arguments (an alternative outcome) were incorporated into the defense attorney presentation. They suggested that the attorney arguments made this alternative outcome more plausible and thus more "available" to jurors during their decision making. As noted earlier, alternative scenarios likely make it easier for jurors to construct stories with differing (likely more positive) outcomes.

When a juror is able to image an alternative outcome, he or she will "work backwards" from the imagined outcome to develop a coherent story in keeping with the alternative ending (Fischhoff, 1975, Wasserman et al., 1991). Not surprisingly, differing interpretations of case events result when case facts and evidence are integrated into the alternative narrative. The differing interpretations of evidence and events reflect how jurors mentally organize and emphasize the material (Pennington & Hastie, 1981, 1988, 1992).

In this study, the expert witness was court-appointed and therefore was supposed to be unbiased. As a result, the expert could not present alternative outcomes without seemingly favoring the defendants (the Board of Directors). In

addition, analogies (e.g., medical, sports) were presented to mock jurors to explain the hindsight bias. While these examples may help the expert appear less prejudiced, they apparently are too indirect and, thus, did not help participants imagine alternative outcomes to the events.

In previous research by Arkes, Faust, Guilmette, and Hart (1988), subjects were essentially asked to “consider the opposite” (i.e., imagine alternative outcomes). This strategy increased the probability estimates provided for the alternative outcomes, indicating a reduction in the bias. Unfortunately, having the expert witness discuss only the cognitive heuristic does not, by itself, appear to be enough to discourage jurors from engaging in hindsight. The salience and relevance of the examples also appear to be important.

The results of this study may help to explain the mixed results of another “intrusive” debiasing technique suggested by Wexler and Schopp (1989) and tested by Kamin and Rachlinski (1995), and Smith and Greene (2005) – the use of judicial instructions. Because judges are restricted in much the same way as a court-appointed witness (i.e., they cannot appear to favor one party over another), they cannot explicitly support or introduce specific alternative outcomes (i.e., the S&L could have survived under different economic conditions) to a jury. As Kamin and Rachlinski (1995) and Smith and Greene (2005) reported, having a judge alone explain the hindsight bias to the jury was ineffective in reducing the bias.

Finally, a meta-analysis of studies examining effects of expert psychological testimony and jury decision making by Nietzel, McCarthy and Kern (1999) supports the claim that specific arguments are more effective. They note that their “results suggest a substantial increase in the impact of expert testimony on juror opinions when that testimony is more specific and/or conclusive about the case at hand” (p. 41). Thus, it can be argued that expert testimony that provides greater support to attorney claims of a potential alternative outcome will be more effective at reducing hindsight.

Taken together, results of this study and other debiasing studies suggest that stand-alone strategies (e.g., jury instructions, an expert witness) are not as effective as an integrated approach. In addition, it seems that the introduction of specific alternatives is needed to reduce the bias. Building from previous research, the combination of a neutral expert witness and the defense attorney’s argument may be more effective than the neutral expert alone. The defense attorney, unlike the neutral witness used in this study, can offer specific alternative outcomes. By stressing plausible alternative outcomes in pleadings, voir dire, opening statements, and closing arguments, attorneys can combat juror (and judge) tendency to engage in hindsight bias. When possible, expert witness testimony should also emphasize

alternative outcomes. By doing so, expert witnesses and attorneys make available to jurors the “material” by which to build and support alternative “stories” of the events that occurred. This type of integrated approach would likely better enable jurors to imagine alternative outcomes – the basic building blocks for reducing the bias.

Limitations

The usual limitations can be placed upon the results of this exploratory study: 1) subjects read the stimulus materials of this study, 2) college students are not demographically representative of the jury pool, and 3) the effect of group dynamics on jury decision-making processes was not assessed. However, these limitations may not affect the generalizability of the study as much as they would first appear. Specifically, Bornstein (1999) and Diamond (1997) argue that “Stage One” research can employ methods such as using students as participants and using written simulations without compromising the study’s validity.

For example, MacCoun (1993) noted that previous research has not found any “inherent, systematic pattern of bias” in mock jurors’ verdicts. Likewise, research by MacCoun & Kerr (1988) indicates that college students and adults reach similar verdicts in trial simulations. Reviewing the jury simulation research, both Bornstein (1999) and Nietzel et al. (1999) found few differences between student versus non student participants or the method of presentation. For instance, Nietzel et al. (1999) noted that there was little difference in the effect sizes of studies using different simulation formats (e.g., live, written, audio-taped, video-taped, etc.), while Bornstein (1999) argued that his findings support “the feasibility of generalizing from simulation studies to the behavior of real jurors” (p. 88).

Conclusion

Hindsight bias has been repeatedly demonstrated in the legal arena (Casper, et al., 1988; Casper, et al., 1989; Kamin, & Rachlinski, 1995; Smith & Greene, 2005; Stallard & Worthington, 1998). Consequently, it is important for researchers to continue developing and testing other potential debiasing strategies appropriate to the courtroom. While bifurcation appears to be a somewhat successful strategy in reducing juror tendency to engage in the bias, realistically, trial costs and efficiency are unlikely to allow for regular application of this technique.

Future study should attempt to strengthen the expert witness testimony so that subjects can better understand the need to “imagine” other alternative outcomes to the events in question. The question is whether informing jurors of the cognitive heuristic of hindsight, even if topic-specific examples are used, will be enough to debias the jury. Therefore, the effect of adversarial expert testimony should be further tested. As noted earlier, Brekke, et al. (1991) found that deliberating jurors

were more responsive to a partisan expert testimony than to the content of nonadversarial expert testimony. Partisan testimony usually is subjected to cross-examination, which may affect how accepting jurors are of the information being covered. There is one caveat to this suggestion: judicially appointed expert witnesses can be cross-examined — an adversarial process — under specific circumstances. Ultimately, the judge determines the extent to which the expert is involved in the case. Further research into expert testimony may illuminate if, and, or when, such testimony may lead to hindsight debiasing.

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Table 1

Synopsis of Arguments for the Plaintiff and Defense

Plaintiff Case (RTC)	Defense Case (S&L Board of Directors)
1. The directors were inexperienced in underwriting construction loans.	1. The S&L crisis resulted from the deregulation of interest rates by federal agencies.
2. The directors insufficiently supervised the loans.	2. S&L's were encouraged to make construction loans by federal agencies.
3. The directors lacked suitable guidelines for underwriting construction loans.	3. The directors could not foresee the downturn in the U. S. economy.

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Table 2

Subjects Exposed to the Expert Witness Testimony Condition: Percentage of Correct Responses to Manipulation Check Questions.

<i>Question</i>	<i>Correct Response</i>	<i>Percentage</i>
The expert witness told you that people cannot overcome the hindsight bias.	False	73.8%
The expert witness told you that the hindsight bias is a human judgment phenomenon.	True	96.6%
The expert witness suggested that you think of possible alternative outcomes when judging past events.	True	67.0%
The expert witness told you that the S&L did not have to fail.	False	84.7%
The expert witness told you knowing the outcome of an event makes a person susceptible to the hindsight bias.	True	91.8%

Table 3
Subjects' Dichotomous Responses to Dependent Variables One and Two

<i>Dependent Variable</i>	<i>Condition</i>			
	<i>Hindsight</i>		<i>Expert Witness Debiasing</i>	
	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>
Should the board of directors have instituted their plan? ^a	58 (67.7%)	29 (33.3%)	65 (76.5%)	20 (23.5%)
Were the directors negligent? ^b	42 (48.3%)	45 (51.7%)	33 (37.9%)	54 (62.1%)

^a $\chi^2(1) = 2.02; p > .05$

^b $\chi^2(1) = 1.89; p > .05$