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Effects of the Inclusion and Refutation of Peripheral Details on Eyewitness Credibility

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The present study examines the effects of including trivial details in eyewitness testimony on witness credibility, as well as the effects of discrediting presented details. Participants (N = 155) read 2 brief, contradictory depositions from fictional witnesses about a fictional car accident. One of the depositions included a short set of details unrelated to the accident itself. After participants rated the credibility of the witnesses, the trivial details were refuted and the participants rated the credibility of the witnesses again. Contrary to previous research (Bell & Loftus, 1989), the inclusion of trivial details had no effect on witness credibility. However, significant effects on witness credibility were obtained when the details were refuted. As expected, the credibility of the witness presenting the trivial details significantly decreased after detail refutation. More interestingly, refutation appeared to increase the credibility of the other witness.

Eyewitness testimony has fueled the interest of both social and forensic psychologists as a social process affecting the outcome of jury trials. A major aim of using eyewitness testimony in jury trials is persuasion. Consequently, researchers are at least partially interested in determining what factors are related to a juror's determination that an eyewitness is credible or not.

A juror's evaluation of an eyewitness's testimony may be considered a judgment on the credibility of the eyewitness as an accurate reporter of fact. McGuire (1985) argues that credibility consists of trustworthiness and expertise. *Trustworthiness* relates to the degree to which the eyewitness is perceived as being honest; whereas *expertise* involves perceptions of the eyewitness's knowledge, ability, and accuracy.

A number of factors have been shown to be positively related to the perceived expertise of the eyewitness. These include verbal confidence (e.g., Whitley & Greenberg, 1986), powerfulness of speech (e.g., Erickson, Lind, Johnson, & O'Barr, 1978), eye contact (Beebe, 1977), speech rate (Miller, Maruyama, Beaber, & Valone, 1976), and speech volume (Robinson & McArthur, 1982). Another factor is the amount of detail an eyewitness provides in testimony (Bell

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& Loftus, 1988, 1989; Wells & Leippe, 1981). Obviously, details that are related to the crime are important in establishing cogent eyewitness testimony. However, testimony that includes unrelated details may also help sway a jury. Bell and Loftus (1989) coined the term *trivial persuasion* to describe the effect of unrelated details on the evaluation of eyewitness testimony.

In describing how this process might work, Bell and Loftus (1989) argued that trivial persuasion may be understood as a blend of heuristic and systematic processing (Chaiken, 1980). Superficially, at least, unrelated details may seem to be a feature of persuasion similar to that of attractiveness: a factor that has been shown to affect the perceived credibility of a witness (Catano, 1980) as a result of jurors' use of simplifying heuristics in their processing. After all, unrelated details are, by definition, inconsequential to the event of the crime. However, in evaluating eyewitness testimony, jurors must draw conclusions about the credibility of the witness as a reporter of fact: Does the witness have a reliable memory, and did he or she pay attention to the criminal event? In this sense, inferences about the witness's memory and attention during the crime are quite relevant to the issue because the testimony is, after all, the witness's memory of the event.

Bell and Loftus (1989) found that testimony that included more detail was associated with more favorable juror judgments. The witness including more detail was rated as being more credible, as having a better memory, and as having paid more attention to the crime. Interestingly, when details were high for either side, the other side's eyewitness was rated as less credible, as having worse memory, and as having paid less attention to the crime. No main effect was found for the relatedness of the details, indicating that the unrelated or trivial details had the same effect as did related details on the participant's judgments.

In a second experiment (Bell & Loftus, 1989), the main effects of detail on participants' perceptions of witness guilt, relative credibility, memory, and attention were qualified by interactions with whether or not the witness admitted that he or she did not remember some trivial details. When the witness did not admit this, there was little, if any, effect of defense detail on these judgments. Conversely, when the prosecution witness was forced to admit that she could not recall some trivial details, the defendant was judged to be less guilty; and the prosecution witness was found to be less attentive to the culprit, less credible, and to have a marginally worse memory.

In sum, these experiments support Bell and Loftus's (1988, 1989) model of trivial persuasion. Their model suggests that judgments of guilt are based on inferences about the eyewitness's credibility, which in turn are based on inferences about the memory and attention of the eyewitnesses. In addition, the effect of forcing a witness to admit that he or she could not remember certain details suggests that jurors may be less likely to make inferences about the eyewitness's memory when the eyewitness's memory is not explicitly called into question. In contrast, when eyewitnesses are asked if they can remember details of a crime, jurors then may generalize from the eyewitness's answer inferring that, because they can or cannot remember certain (trivial) details of the crime, they can or cannot reliably remember other (central and important) details: like what the culprit looks like. In essence, then, trivial persuasion suggests that if an eyewitness is perceived as possessing greater acuity of memory in general, then his or her memory for the crime will be perceived as being accurate.

The effect of forcing eyewitnesses to admit that they cannot remember certain details may be similar to discrediting them (Kennedy & Haygood, 1992; Whitley, 1986). The *discrediting effect* simply refers to the finding that when an eyewitness's testimony is discredited, jurors discount it.

The results of the Bell and Loftus (1988, 1989) studies seem to support the notion of trivial persuasion, but questions remain as to the generalizability of the model. For example, although Bell and Loftus did not find an effect for the relatedness of the details, their unrelated set of details still was related to the central action of the event. It is conceivable, however, that eyewitness testimony may include facts that are completely irrelevant to the event. In such a case, does trivial persuasion still hold? Perhaps more importantly, Bell and Loftus (1988) suggested that trivial details support a case, regardless of the details' relatedness. Based on this assumption, attorneys would want their eyewitnesses to include as much detail as possible in their testimony, whether or not it is relevant to the event under discussion. However, if the discrediting effect holds when trivial details are refuted, then this strategy may backfire. Bell and Loftus (1989) approached something akin to discrediting when they verified that an eyewitness could not remember certain details of an event. However, this is slightly different from directly refuting the accuracy of the eyewitness's details. In a criminal trial, surely the opposing attorneys would use every means at their disposal in order to counter the opposing eyewitness, including refuting the details of his or her testimony. Therefore, the utility of trivial persuasion must be evaluated against the possibility that the trivial details themselves could be refuted.

The present study tests the hypothesis that the inclusion of trivial details by an eyewitness increases that witness's credibility relative to a witness who only includes information directly relevant to the incident in question. Additionally, this study examines the effects of refuting the accuracy of peripheral details on witness credibility.

Method

Participants

Undergraduate students enrolled in introductory psychology courses at the University of Tennessee at Knoxville ($N = 155$; 79 male, 76 female) were given extra credit for their participation in this study. The students' mean age was 19 years, and their mean reported grade point average (GPA) was 3.0.

Materials and Procedure

Participants were given a two-page handout that was from one of four counterbalancing sets. All handouts contained the following instructions:

> Pretend you are a member of a jury. You are going to read two different depositions from eyewitnesses to a car accident that occurred at the intersection of Main and Elm. Please read each deposition carefully and answer the questions that follow.

On the first page, participants read two depositions regarding a single fictional car accident. No information regarding the gender, age, or race of either witness was included. The depositions were almost identical, with the exception of the color of the car that purportedly was at fault. The order of presentation of the depositions was counterbalanced.

Four sentences containing peripheral details were inserted toward the beginning of one of the two depositions on each form. The details accounted for the witness's motive for being at the accident scene, while demonstrating that the witness was observant, but the details were unrelated to the accident itself. Handouts were also counterbalanced in terms of which deposition contained the details. The depositions and the four-sentence detail set are presented in Appendix A.

Following the depositions, participants were asked to assume that only one report was correct and to indicate which witness they believed. Following this, participants were presented with two 6-point Likert scales ranging from 1 (*not credible*) to 6 (*credible*). The scales were aimed at measuring participants' ratings of the credibility of each of the fictional people giving the depositions. Finally, participants were asked to indicate why they chose to believe that particular witness (Time 1).

On the second page, explicit information was presented suggesting that the peripheral details included in one of the depositions on the first page were actually false (Appendix B). Participants were asked to consider the credibility of the witnesses, given the new information, and the same questions from page 1 were presented again (Time 2).

Results

Logistic regression was used to determine the effects of detail presentation on participants' judgments of which witness was more credible at Time 1. There was no effect found for participant gender, age, GPA, order of presentation of the depositions, or order of presentation of the details in predicting which witness (detail witness or no-detail witness) was rated as more credible by participants at Time 1, $\chi^2(5, N = 153) = 5.77$, *ns*. After being presented with both depositions

Table 1

Parameter Estimates From Regression Equations at Time 1 and Time 2

Variable	Estimate	*SE*	χ^2	*p*
Time 1 (presentation of peripheral details only)				
$R^2 = .03$, $\chi^2(5, N = 153) = 5.77$, *ns*				
Intercept	-3.72	2.82	1.75	.19
Gender	0.40	0.30	1.75	.19
Age	0.15	0.14	1.15	.28
GPA	0.29	0.23	1.51	.22
Deposition order	-0.25	0.34	0.55	.46
Details	0.17	0.33	0.27	.60
Time 2 (after peripheral details were refuted)				
$R^2 = .81$, $\chi^2(5, N = 153) = 171.29$, $p < .0001$				
Intercept	-4.97	7.77	0.41	.52
Gender	-0.12	0.80	0.02	.88
Age	-0.17	0.40	0.19	.66
GPA	-0.61	0.62	0.96	.33
Deposition order	-1.50	1.15	1.71	.19
Details	7.47	1.22	37.35	<.0001

Note. GPA = grade point average.

(of which only one contained the peripheral details), 48.4% of participants chose the witness who presented the details as more credible, while 51.6% chose the witness who presented only facts.

However, at Time 2 (after the details had been refuted), 96.8% of participants chose the witness who did not present any peripheral details as more credible, versus 3.2% who selected the witness who presented the details. Refutation of the peripheral details at Time 2 resulted in the detail-inclusion variable significantly predicting witness credibility over and above age, GPA, and deposition presentation order, $\chi^2(5, N = 153) = 171.29$, $p < .0001$ (model $R^2 = .81$). Table 1 shows the parameter estimates from the regression models at Time 1 and Time 2. Participants selected the witness who did not present details (non-detail witness) to be the credible witness after the other witness's (detail witness) details had been refuted, demonstrating a discrediting effect.

A 2 × 2 ANOVA was conducted with time (before refuting details vs. after refuting details) and detail (witness presenting details vs. witness presenting no

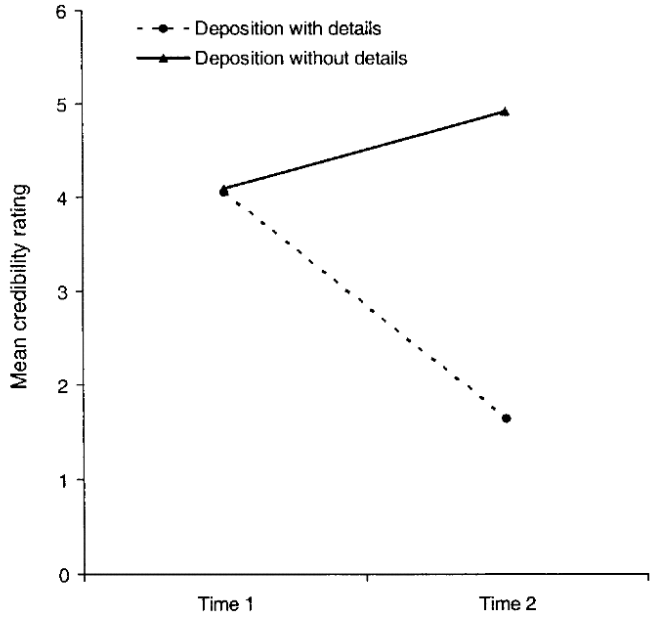

Figure 1. Mean credibility ratings of both witnesses at Time 1 (before refuting details) and Time 2 (after refuting details).

details) as independent measures. The dependent variable was participants' credibility ratings of the witnesses. Significant main effects were found for both time, $F(1, 154) = 157.57$, $p < .0001$; and detail, $F(1, 154) = 158.39$, $p < .0001$. The Time × Detail interaction, $F(1, 154) = 246.41$, $p < .0001$, also was significant.

The mean credibility rating of the detail witness at Time 1 was 4.05. At Time 2, the credibility rating dropped to 1.65, $t(154) = 16.97$, $p < .0001$. The credibility rating of the non-detail witness increased from 4.10 to 4.92, $t(154) = 8.59$, $p < .001$. The credibility of the non-detail witness increased as a result of refuting the details originally presented by the other witness. Figure 1 illustrates these results. Additionally, the mean amount of inflation in the credibility of the non-detail witness was greater when participants originally selected the detail witness ($M = 1.36$) as more credible than if they had originally selected the non-detail witness ($M = 0.29$), $t(154) = 6.277$, $p < .001$. However, the increase in credibility ratings of the non-detail witness by participants who originally chose the non-detail witness was still significant on its own, $t(78) = 2.90$, $p < .005$.

Discussion

While this study failed to support the notion that trivial persuasion influences jurors' ratings of witness credibility, it clearly demonstrates the discrediting effect, even when the refuted details are virtually unrelated to the crime itself. An interesting finding of this study is the effect of refuting one witness's details on the credibility of the other witness. The findings suggest an inflation of the credibility of the non-detail witness, despite the fact that the credibility of this witness was not directly manipulated experimentally. This relative credibility inflation is possibly a result of the means by which participant jurors evaluate witness credibility, given a limited set of witnesses (two, in this case). Since the main question posed to participants was "Which witness do you believe?" (which is categorical), it seems that participants judged each witness's credibility relative to the other's in order to simplify the evaluation process.

Despite the fact that participants were asked to rate the credibility of each witness independently on Likert scales, they also were asked to place each witness into the category of either *credible* or *not credible* and to assume that only one was correct. After the details were refuted, participants essentially were asked to recategorize the witnesses. After recategorization, participants appeared to try to reflect and maintain the difference in credibility between the two. This involved not only reducing the credibility rating of the detail witness, but also slightly increasing the credibility rating of the non-detail witness. However, this effect may be an artifact of the design in which participants were explicitly told to assume that only one witness was correct. Future research may wish to address this problem by giving participants the option that neither witness or both witnesses could be correct, to see if a similar effect is obtained. Additionally, future research may wish to examine situations in which the testimony is different but not contradictory, as well as situations involving more than two witnesses.

The tendency for participants to increase the numerical distance between witness's credibility ratings by increasing the non-detail witness's ratings was significantly more pronounced in the group that originally chose the detail witness at Time 1 (before the details were refuted). When the witness chosen by participants was discredited, and the participants were asked again to choose a witness to believe, participants (a) recategorized the witnesses (selecting the non-detail witness as credible), and (b) reflected their new decision in the Likert ratings of each witness's credibility relative to one another.

One reason this study failed to replicate the trivial-persuasion effect may be related to the quality of the trivial details. The degree to which the trivial details were related to the incident in question in Bell and Loftus's (1989) study was greater than in the present study. The trivial details in this study were considerably removed from the central theme of the incident and were arguably closer to

unrelated details than to trivial details. This may have affected the direction and degree to which they influenced participants' judgments.

Overall, this study supports the discrediting effect and demonstrates it even when the details are trivial or virtually unrelated to the crime at all. However, the most notable finding is the relative credibility inflation of the non-detail witness. It appears that discrediting a witness may not only discount that witness's credibility, but it may also increase the credibility of other witnesses. So, despite Bell and Loftus's (1988) findings that trivial details support a case, regardless of the details' relatedness, attorneys would be wise to consider that refutation of these details by opposing counsel may be problematic. A successful refutation of a witness's peripheral details may result in a significant decrease in that witness's credibility and an increase in an opposing witness's credibility.

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