The Effect of Post-Identification Feedback, Delay, and Suspicion on Accurate Eyewitnesses

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We examined whether post-identification feedback and suspicion affect accurate eyewitnesses. Participants viewed a video event and then made a lineup decision from a target-present photo lineup. Regardless of accuracy, the experimenter either, informed participants that they made a correct lineup decision or gave no information regarding their lineup decision. Immediately following the lineup decision or after a 1-week delay, a second experimenter gave some of the participants who received confirming feedback reason to be suspicious of the confirming feedback. Following immediately after the confirming feedback, accurate witnesses did not demonstrate certainty inflation. However, after a delay accurate witnesses did demonstrate certainty inflation typically associated with confirming feedback. The suspicion manipulation only affected participants’ certainty when the confirming feedback created certainty inflation. The results lend support to the accessibility interpretation of the post-identification feedback effect and the erasure interpretation of the suspicion effect.

Keywords: accurate eyewitnesses, post-identification feedback, suspicion, delay, erasure hypothesis, cautiousness hypothesis, accessibility hypothesis

Forensic DNA testing in recent years has exonerated over 258 individuals who were wrongfully convicted (Scheck, Neufeld, & Dwyer, 2000; http://www.innocenceproject.org). Of the 258 exonerations to date, 75% contained at least one mistaken eyewitness (www.innocenceproject.org). Those 194 exonerees spent a total of 2,530 years in prison (information gathered 09/09/10). The certainty an eyewitness demonstrates in his or her own identification has an enormous impact on how persuasive that eyewitness is to a jury (Cutler, Penrod, & Dexter, 1990; Fox & Walters, 1986). Other testimony-relevant judgments that persuade jurors include how good the view was for the eyewitness and how much attention the eyewitness allocated to the event (Douglass, Neuschatz, Imrich, & Wilkinson, 2010). The U.S. Supreme Court has reinforced the importance of these factors by explicitly instructing jurors to consider certainty, view, and attention as important indicators of eyewitness identification accuracy (Manson v. Braithwaite, 1977; Wells & Quinlivan, 2009).

One of the most disturbing empirical findings relevant to Manson has been the discovery of the post-identification feedback effect (see Wells & Quinlivan, 2009). Post-identification feedback is any feedback given to an eyewitness after he or she has made a lineup decision. In the original Wells and Bradfield (1998) experiments participants viewed a video and made an identification from a target-absent lineup. Some participants received confirming feedback (“Good, you identified the suspect”) and others did not. Later, all the participants were asked questions such as “How certain were you at the time you made your identification that you identified the actual gunman”, “How good was the view you had of the gunman?”, and “How much attention did you pay to the gunman in the video?” The confirming feedback produced strong inflation of witnesses’ reports of their certainty, view, and attention (as well as several other testimony-relevant variables).

The current study has two main goals. The first goal is to examine the dominant theoretical account of the post-identification feedback effect—the accessibility hypothesis—by varying the re-
tention interval between the confirming feedback and the testimony-relevant questions for accurate eyewitness. The accessibility hypothesis (Wells et al., 2003) posits that participant-witnesses have little or no memory of how confident they were at the time they made the identification. Because eyewitnesses do not make online judgments of their certainty, view, attention, and so forth, they must infer how they felt when they made their identifica-
tion based on what is still retrievable from memory. Particip-
ants who receive confirming feedback (e.g., “Good, you identified the actual suspect”) should use this information to infer their certainty and other judgments about memory. If the confirming feedback information is primarily retrievable, this will influence eyewitness ratings. For example, the eyewitness may think, “I was told that I selected the correct person; therefore, I must have been certain, I must have been paying attention, and I must have had a good view.” It is possible that there is differential influence of confirming feedback for accurate witnesses tested immediately (i.e., when internal cues are strong) versus after a retention interval (i.e., when internal cues are weak).

The second goal is to investigate conditions that moderate the effect of suspicion on confirming feedback. When used with inaccurate witnesses, suspicion reduces the certainty inflation caused by confirming feedback (Neuschatz et al., 2007; Quinlivan, Wells, & Neuschatz, 2010). The manipulation of the retention interval for accurate eyewitnesses will allow us to compare two accounts of how suspicion may mitigate the effect of confirming feedback: cautiousness and erasure. We outline each of these goals in detail below.

Post-Identification Feedback and Accurate Identifications

Since the original study on post-identification feedback, researchers have replicated and extended the research. Confirming feedback, for example, inflates certainty of both children (Hafstad, Memon, & Logie, 2004) and elderly witnesses (Neuschatz et al., 2005). These inflation effects also occur when a co-witness provides feedback (Skagerberg, 2007), if the feedback is given 48 h after the identification (Wells, Olson, & Charman, 2003), and when the wit-
ess is questioned a week after the feedback was given (Neuschatz et al., 2005). Most importantly, perhaps, we now know that feedback effects occur with real witnesses (Wright & Skagerberg, 2007). It is evident that the post-identification feedback effect is quite robust (see meta-analysis by Douglass & Steblay, 2006).

All of the studies previously mentioned have focused on the post-identification feedback effect on false identifications. The reason for the focus on false identifications is that they are the more relevant forensic issue; self-report distortion among inaccurate witnesses has the potential to make those witnesses inappropriately convincing at trial, posing a significant danger to innocent defendants (Douglass et al., 2010). However, several studies have examined the effect of post-identification feedback on accurate identifications (Bradfield, Wells, & Olson, 2002; Semmler, Brewer, & Wells, 2004). Recent research questions the theoretical mechanisms underpinning the effect and this makes studying accurate identifications critical.

The initial research testing post-identification feedback with accurate witnesses revealed that accurate eyewitnesses do not demonstrate the typical distortions in retrospective judgments (Bradfield et al., 2002). Confirming feedback has a smaller effect on accurate witnesses because internal cues to accuracy, or mem-
ory traces, are strong. To the extent that internal cues are weak, people are more likely to use external cues to infer judgments about themselves. An example of an external cue could be an investigator smiling at an eyewitness after he or she has made an identification. Eyewitnesses who have weak internal cues about the face of the perpetrator may be more likely to use the external cue (i.e., the smile) to infer their accurate. Confirming feedback, which is also an external cue, should have more influence when the internal cues are weak or inaccessible. To explain the effect of external influences when internal cues are weak, Bradfield et al. (2002) suggested a process akin to ephoric similarity. Ephoric similarity refers to the degree of perceived similarity between a stimulus and one’s memory (Tulving, 1981). Ephoric similarity will vary depending on how well the memory trace matches the test stimuli. Eyewitnesses will be less prone to rely on the external information (i.e., confirming feedback) to the extent that the mem-
ory trace or internal cues are strong and a good match to the stimul.

In terms of eyewitness accuracy, ephoric similarity should be higher for accurate witnesses because there is an ident-
tical match between the stimulus (i.e., culprit) and the test item (i.e., lineup member) as opposed to inaccurate witnesses. There-
fore, confirming feedback should affect an accurate witness less than an inaccurate witness.

Contradictory to this hypothesis, Semmler et al. (2004) found that confirming feedback did inflate certainty reports of accurate witnesses, tested immediately. Those authors argued that their results might be due to the weak encoding experienced by even their accurate witnesses. Indeed, the percentage of witnesses mak-
ing an accurate identification from the target-present lineup was only 49.5%. In Bradfield et al. (2002), using a different set of materials, the accurate identification rate was 91%. Taken to-
gether, these feedback studies suggest that witnesses are vulnera-
tible to external influence when their memory cues are weak.

The accessibility hypothesis predicts a differential influence of confirming feedback for accurate witnesses tested immediately versus after a retention interval. If accurate witnesses have stronger internal cues when they are tested immediately compared to accu-
rate witnesses that are tested after a 1-week retention interval, then accurate witnesses tested after a delay should be more likely to succumb to the effects of confirming feedback after the reten-
ton interval. Time has passed between the feedback and the retrospective certainty questionnaire so memory traces are not as strong. Such a result would add to an increasing literature demon-
strating that the effects of external cues on judgments are strengthened as the internal cues weaken.

To test this idea, the current study manipulated the retention inter-
val between the event and the testimony-relevant questionnaire. Specifi-
cally, participants completed the identification task, received con-
firming feedback or no feedback, and were either immediately or after a 1-week retention interval given the post-identification questionnaire. To the extent that the internal cues to accuracy are available and strong, there should be no post-identification feedback effect for accurate participants who answered the questionnaire immediately, similar to the results of Bradfield et al. (2002). However, after a 1-week retention interval, if participants can no longer retrieve infor-
mation regarding the qualities of their memories, then they will need
to infer those qualities, and confirming feedback should inflate retrospective judgments.

The Moderating Effects of Suspicion: Cautiousness or Erasure?

In addition to moderating post-identification feedback, the retention interval may also moderate the effect of suspicion by reducing the certainty inflation caused by confirming feedback. Recent studies have indicated that the post-identification feedback effect is largely eliminated if, following confirming feedback, witnesses are given information that leads them to be suspicious of the confirming feedback (Neuschatz et al., 2007; Quinlivan et al., 2010). We will call this the post-feedback suspicion effect to refer to the fact that suspicion about prior confirming feedback moderates the effect of confirming feedback. There remains some ambiguity about precisely how the post-feedback suspicion effect works. One possibility is that the suspicion manipulation makes participants-witnesses concerned about the reliability of the confirmatory feedback and they adjust their judgments downward (e.g., lower their certainty rating) out of a general cautiousness. According to this account, which we will call the cautiousness hypothesis, downward adjustments of certainty for those in the confirming feedback condition will follow the suspicion manipulation even if the confirming feedback had no effect. In other words, we expect that there will be no effect of confirming feedback compared to no feedback for accurate witnesses when eyewitnesses report retrospective certainty immediately after the confirming feedback. However, the cautiousness hypothesis would predict that even though there should be no differences in between the no feedback and the confirming feedback condition, that those who receive confirming feedback plus suspicion should still lower their certainty. This should result in significantly lower certainty for those who receive confirming feedback plus suspicion compared to those in the no feedback group as well as the confirming feedback group.

The other possibility is that the suspicion manipulation leads eyewitnesses to try to erase the perceived impact of the confirming feedback and, hence, the suspicion manipulation would lower retrospective judgments only if the confirming feedback actually had an effect. We will call this the erasure hypothesis. Fein (1996) provides support for the erasure hypothesis in a series of studies in which he demonstrated that suspicion elicits attributional thinking. According to Fein, suspicion creates an orientation that promotes careful scrutiny of one’s own behavior and the behavior of other actors. Applied to eyewitness identifications, suspicion motivates the eyewitnesses to devote cognitive resources to consider what they experienced and thus makes them better able to appreciate the possible biasing influence of the administrator, whether the influence be intentional or unintentional (Neuschatz et al., 2007). To the degree that suspicion makes the eyewitnesses carefully consider the experience, changes in their behavior should occur only when they think that the administrator has affected their responses (i.e., through post-identification feedback).

No previous post-feedback suspicion studies have examined accurate eyewitnesses and this group of witnesses represents a critical test of the cautiousness versus erasure hypotheses. According to the cautiousness hypothesis, accurate eyewitnesses should always reduce their retrospective judgments following a suspicion manipulation regardless of whether post-identification feedback affected their retrospective judgments. In contrast, according to the erasure hypothesis, accurate eyewitnesses will only reduce their retrospective judgments following a suspicion manipulation to the extent that post-identification feedback affected their judgments.

Overview and Predictions

We manipulated post-identification feedback to include no feedback, confirming feedback, or confirming feedback plus suspicion for eyewitnesses who made an identification from a target-present lineup. The suspicion manipulation and dependent measures were administered either immediately or 1 week later. For the purposes of this paper, we are primarily interested in accurate witnesses. Based on the accessibility hypothesis, we predicted that there would be no significant effects of confirming feedback when measured immediately. We predicted the post-identification feedback effect would emerge after a 1-week delay. Assuming that the post-identification feedback effect for accurate witnesses occurs in the delay conditions but not in the immediate conditions, the erasure hypothesis predicts that the suspicion manipulation will lower scores on the retrospective measures compared to those in the confirming feedback condition only for the delay conditions and not for the immediate conditions. The cautiousness hypothesis, in contrast, predicts that the suspicion manipulation would result in lower scores on the retrospective measures for suspicion compared to those in the no feedback and confirming feedback groups regardless of whether the suspicion manipulation was administered immediately or after a delay (i.e., regardless of whether the post-identification feedback effect occurred or not).

Method

Participants

Participants (N = 265) were recruited from introductory psychology, statistics, and lifespan courses at a small southeastern university. There were 159 female participants and 104 male participants. Students participated for partial course credit. We lost 23 participants due to due to failure to return for the second session. More specifically, there were 9 lost in the no feedback condition, 7 in the confirming feedback condition, and 8 in the confirming feedback plus suspicion condition. The experimenters followed all APA ethical guidelines.

Design

The study employed a 3 Feedback (no feedback, confirming feedback, confirming feedback plus suspicion) × 2 Retention Interval (immediate, delay) between-participants design.\(^1\) There

\(^1\) Participants who did not receive feedback did not receive the suspicion manipulation. In the pilot phase of the experiment, the suspicion manipulation confused those participants. The first part of the suspicion manipulation states, “Did he (or she) tell you that you selected the correct person,” most participants did not say anything and reported during the debriefing that the manipulation confused them. See “Discussion” section for implications.
were 39–45 participants per cell. The dependent variables of interest were participants’ identification accuracy as well as participants’ answers to a 13-item certainty questionnaire concerning testimony-relevant variables. Participants answered the questions using a 7-point Likert-type scale.

Materials

Video. The video was 2.75 min in duration, from a convenience store security camera, and was in color (Wells & Bradfield, 1998). The top part of the display showed a section of the store in which a female employee works while customers, who are visible only above their waists, walk successively across the bottom of the screen for the first 1.75 min of the video. Following a 16 s period of static, the video resumed and the criminal appeared in profile walking from right to left. This part of the tape played in slow motion to increase the number of accurate witnesses. As the criminal crossed the screen, 8 s elapsed and then the video ended.

Photo lineup. The photo lineup was in color and included six bearded Caucasian men, one of which was the actual culprit. The photographs were numbered and showed the front and side profiles of each man. The lineup was in the typical two-row by three-column matrix. The culprit was always in the third place on the top row of the lineup. Each participant marked his or her selection on a separate page that contained six blank boxes with numbers corresponding to the pictures in the photo lineup.

Questionnaire. The questionnaire targeted retrospective responses concerning how certain participants were in their identification, how good their view was, how well they could make out the face, how fair they perceived themselves to be from the target, how much attention they paid to the person, the basis on which they were able to make an identification, how easy or difficult the task was, how long it took them to make an identification, how willing they were to testify, how much their memory should be trusted, how good they are at distinguishing faces, and how sure they were concerning the identification (see Wells & Bradfield, 1998). Participants answered the questions using a 7-point Likert-type scale. In addition, a manipulation check was performed using two open-ended questions. The first question asked if an experimenter indicated that they made a correct identification; the second question asked if an experimenter indicated that some information they were given might not have been true.

Procedure

First experimenter. After the participant arrived at the laboratory, the participant sat in a designated chair that was 1.22 m (4 ft) from the 73.66 cm (29 in) screen television set. The experimenter stated that the study’s purpose was to determine how well people discern personality characteristics based on seeing a person for a short time. The experimenter told the participant he or she would watch a video and should pay close attention to the people in the video because a memory test would be given later. After the video, the experimenter gave the following instructions:

This is actually an eyewitness identification study. This is a real clip from a security camera. The person in the video shot a store security guard shortly after the video was taken. You are an eyewitness to the identity of the gunman. The actual purpose of the study is to see if you can identify the gunman from a photo spread. We have photographs from the original police lineup and in the lineup is a picture of the suspect police arrested for the robbery. Your task is to identify the person that you viewed in the video.

Next, the experimenter handed the participant a target-present photo spread. The experimenter was not blind to the target’s identity. The experimenter left the room during the identification and flipped a coin in order to randomize the administration of confirming feedback before the participant arrived. Therefore, the experimenter administered the confirming feedback independent of witness accuracy and before he or she had time to interact with the participant, thus removing bias in condition selection. Once the participants made a selection from the lineup, the experimenter provided either confirming feedback or no feedback regarding the selection. The experimenter told the participants in the confirming feedback condition, “Good, you selected the actual suspect in the case.” The experimenter remained silent during this time for participants in the no feedback condition. Afterwards, the experimenters told some participants to return the following week (delay condition). For participants in the immediate condition, the experimenter stated:

We only have one T.V. and V.C.R. and we are having participants back to back, so for the second part I am going to send you with the second experimenter.

Second experimenter. In the immediate conditions, a second experimenter asked the participant to follow him/her to another room that was located on the other side of the building. To keep the conditions similar, participants who returned exactly 1 week later (i.e., same time and day of the week) received instruction to go to the other side of the building because there was only one T.V. and V.C.R. and the other experimenter was using the room for new participants. During the walk to the room on the other side of the building, the experimenter casually told all participants the following:

Did (he or she) tell you this was a real case? A Tennessee District Attorney gave (him or her) a grant to run this study. (He or She) is interested in proving the accuracy of eyewitness identifications. You would think they would have given us enough money to get another TV so we don’t have to move everyone around. I don’t know if I am supposed to tell you this, but this is an actual security video from a case being tried in Tennessee.

After entering the second experimental room, the second experimenter told the participants in the confirming feedback plus suspicion condition:

Were you told that you selected the correct picture in the lineup? (He’s or She’s) telling everyone that. I know that the actual gunman isn’t always in the lineup, so not everyone is correct. Anyway, it is not possible that everyone selected the correct person, and it is just as unlikely that everyone selected the same picture. There is no way that you are all correct. Oh well, I suppose that she is just trying to make the DA happy. Maybe I am not supposed to say anything. Please don’t tell anyone I told you because I could get in trouble.

For the no suspicion condition, the experimenter said:

Did they tell you this was a real video from an actual crime?
Subsequently, all the participants answered a 13-item questionnaire to assess the general eyewitness identification experience. Manipulation checks questioned participants’ memory for confirming feedback and suspicion. Thereafter, the experimenter thanked and debriefed each participant. During the debriefing, participants were asked to keep information about the study private, if they knew of anyone who might be participating in the future.

Results

We expected that the experimental manipulations would produce a post-identification feedback effect for witnesses’ certainty only after a weeklong retention interval, i.e., when the internal cues were weaker or less accessible. After examining the effect of accuracy on certainty, we conducted additional tests to evaluate the effects of confirming feedback and retention interval on other testimony-relevant judgments. In addition, we examined how suspicion affected accurate witnesses who received the retrospective certainty questions after a retention interval.

Manipulation Checks

Participants were first given a written memory task to see if they remembered the post-identification feedback and the suspicion. Participants were asked if the experimenter told them anything about their identification. If so, a second question asked what they were told. All of the participants in the confirming feedback conditions correctly reported receiving confirming feedback. Likewise, all participants in the no feedback conditions responded that they were not told anything by the experimenter after the identification. To check to see if participants remembered the conversation about suspicion, participants were asked if they remembered being told the study was funded by an outside source, if so they were asked a second question about who funded the experiment. All except two participants in the confirming feedback plus suspicion conditions correctly reported that the study was funded by a District Attorney’s office, some participants even specified that it was a Tennessee District Attorney’s office. During the debriefing, an oral manipulation check was included to obtain participants’ reaction to the confirming feedback and suspicion. The debriefing used a post-follow up interview procedures proposed by Aronson, Wilson, & Brewer (1998). Participants that did remember receiving the post-identification feedback and the suspicion reported that both manipulations were realistic. All participants were included in all analyses. Based on the results it is clear that the participants were attending and remembering the confirming feedback manipulation as well as important points of the cover story.

During the debriefing, participants were asked how believable the suspicion manipulation was, only 5 participants expressed that they were skeptical of the suspicion manipulation and these people were left out of the analysis.

Accuracy

All participants made a lineup selection. Overall, 69% of the participants made correct identifications (183 out of 265), and 31% identified a filler (82 out of 265). A 3 (no feedback, confirming feedback, confirming feedback plus suspicion) × 2 (immediate, delay) hierarchical log linear analysis (HILOG) was performed to examine any differences in accuracy across the manipulated variables. The results revealed that participants were more likely to identify the culprit than a filler, $\chi^2(1) = 39.485, p < .01, \nu = 39$. No other main effects or interactions were significant (all, $\chi^2(2) > 5.63, p < .07, \nu < .14$).

Retrospective Certainty

Given the powerful influence of retrospective certainty of eyewitnesses on jurors, we conducted a separate analysis for certainty. We use only accurate witnesses for all remaining analysis. A 3 Feedback (no feedback, confirming feedback, confirming feedback plus suspicion) × 2 Retention Interval (immediate, delay) analysis of variance (ANOVA) was conducted to assess the effects of Feedback and Retention Interval on retrospective judgments of certainty. The results revealed a main effect of Feedback, $F(2, 177) = 4.43, p = .013, \eta^2 = .05$, but no main effect of Retention Interval, $F(1, 177) = .362, p = .55, \eta^2 = .002$. These effects were qualified by presence of a significant interaction effect between Feedback and Retention Interval, $F(1, 177) = 6.42, p = .002, \eta^2 = .07$. In order to investigate the interaction we conducted planned comparisons in immediate and delay conditions separately. (The means and standard deviations for all the 13 witnessing experience questions in the immediate and delay conditions are in Table 1.)

Immediate conditions. Planned comparisons conducted on participants’ retrospective certainty in the immediate condition revealed that the confirming feedback condition was not significantly different from the no feedback condition, $F(1, 177) = 2.57, p = .11, \eta^2 = .01$ or the confirming feedback plus suspicion condition, $F(1, 177) = 2.41, p = .12, \eta^2 = .01$. These results replicate Bradfield et al. (2002) and are consistent with the accessibility hypothesis. There was a significant difference between no feedback and confirming feedback plus suspicion, $F(1, 177) = 9.44, p = .002$.

Delay conditions. In contrast to the immediate condition, in the delay conditions participants who received confirming feedback reported higher retrospective certainty ($M = 6.44, SD = 1.9, CI_{95} = 5.82, 7.06$) than those in the no feedback condition, ($M = 5.37, SD = 2.0, CI_{95} = 4.58, 6.16$), $F(1, 177) = 6.75, p = .01, \eta^2 = .04$. Suspicion, however, eliminated this effect, as suspicious perceivers were less certain in their identification than were participants in the confirming feedback condition ($M = 5.0, SD = 1.4, CI_{95} = 4.25, 5.74$), $F(1, 177) = 11.13, p = .001, \eta^2 = .06$. In fact, the retrospective certainty reports for those in the confirming feedback plus suspicion group did not differ from the no feedback control group, $F(1, 177) = .69, p = .40, \eta^2 = .003$, which is consistent with Neuschatz et al. (2007).

Retrospective Judgments

A 3 Feedback (no feedback, confirming feedback, confirming feedback plus suspicion) × 2 Retention Interval (immediate, delay) MANOVA was conducted on the remaining 12 retrospective judgment questions. The results revealed a main effect of Retention Interval, $F(12, 163) = 2.78, p = .001, \eta^2 = .17, \nu = .83$, and an interaction between feedback and retention interval, $F(24, 326) = 2.94, p =$
.03, \( \eta^2 = .13, \lambda = .76 \). There was no main effect for feedback, \( F(24, 326) = 1.15, p = .28, \eta^2 = .08, \lambda = .85 \). To investigate this interaction we conducted univariate analysis separately in immediate and delay conditions as we did for the respective certainty analyses.

**Immediate condition.** None of the planned comparisons for the effects of confirming feedback in the immediate condition were significant. Participants who received confirming feedback did not show an increase in retrospective judgments compared to those who received no feedback, \( F(12, 163) = 1.51, p = .12, \lambda = .90 \) or compared to those in the confirming feedback plus suspicion condition, \( F(12, 163) = 1.44, p = .15, \lambda = .90 \). These null results, once again, replicate Bradfield et al. (2002) and are consistent with the accessibility hypothesis.

**Delay condition.** Participants in the confirming feedback condition reported higher retrospective judgments compared to those in the no feedback condition, \( F(12, 163) = 2.04, p = .023, \lambda = .87 \). Follow-up univariate results indicate significant effects for questions concerning view, feature, distance, attention, basis, testify, sure, and see (see Table 2). Retrospective reports for those in the confirming feedback plus suspicion group did not differ from the no feedback group, \( F(12, 163) = 1.33, p = .21, \lambda = .91 \).

**Discussion**

This experiment makes two clear contributions to extant literature on post-identification feedback. First, it advances our theor-

### Table 1

**Means and Standard Deviations of Post-Identification Questions**

<table>
<thead>
<tr>
<th></th>
<th>No feedback</th>
<th>Feedback</th>
<th>Feedback + suspicion</th>
<th>CI.95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certainty</td>
<td>4.8 (1.7)</td>
<td>5.4 (1.7)</td>
<td>6.1 (1.7)</td>
<td>-1.43, 0.15</td>
</tr>
<tr>
<td>View</td>
<td>3.5 (1.6)</td>
<td>4.1 (1.6)</td>
<td>4.7 (1.6)</td>
<td>-1.42, 0.19</td>
</tr>
<tr>
<td>Features</td>
<td>3.7 (1.7)</td>
<td>4.4 (1.7)</td>
<td>4.7 (1.7)</td>
<td>-1.48, 0.19</td>
</tr>
<tr>
<td>Distance</td>
<td>4.0 (1.6)</td>
<td>3.2 (1.6)</td>
<td>3.0 (1.6)</td>
<td>0.02, 1.57</td>
</tr>
<tr>
<td>Attention</td>
<td>5.5 (1.6)</td>
<td>5.2 (1.6)</td>
<td>5.8 (1.6)</td>
<td>-0.65, 1.11</td>
</tr>
<tr>
<td>Basis</td>
<td>4.4 (1.6)</td>
<td>5.0 (1.6)</td>
<td>5.3 (1.6)</td>
<td>-1.38, 0.25</td>
</tr>
<tr>
<td>Ease</td>
<td>4.1 (1.9)</td>
<td>3.2 (1.9)</td>
<td>3.1 (1.9)</td>
<td>-0.99, 1.76</td>
</tr>
<tr>
<td>How long</td>
<td>3.4 (1.6)</td>
<td>2.8 (1.6)</td>
<td>2.8 (1.6)</td>
<td>-0.11, 1.44</td>
</tr>
<tr>
<td>Testify</td>
<td>3.7 (2.0)</td>
<td>4.3 (2.0)</td>
<td>4.6 (2.0)</td>
<td>-1.81, 0.20</td>
</tr>
<tr>
<td>Trusted</td>
<td>4.3 (1.9)</td>
<td>5.2 (1.9)</td>
<td>5.3 (1.9)</td>
<td>-1.79, 0.04</td>
</tr>
<tr>
<td>Memory</td>
<td>5.3 (1.7)</td>
<td>4.8 (1.7)</td>
<td>5.8 (1.7)</td>
<td>-0.37, 1.32</td>
</tr>
<tr>
<td>Sure</td>
<td>4.8 (1.7)</td>
<td>5.2 (1.7)</td>
<td>6.0 (1.7)</td>
<td>-1.20, 0.44</td>
</tr>
<tr>
<td>See</td>
<td>3.6 (1.6)</td>
<td>3.9 (1.6)</td>
<td>4.8 (1.6)</td>
<td>-0.99, 0.55</td>
</tr>
<tr>
<td>Delay</td>
<td></td>
<td></td>
<td></td>
<td>0.26, 1.87</td>
</tr>
<tr>
<td>Certainty</td>
<td>5.4 (1.7)</td>
<td>6.4 (1.7)</td>
<td>5.0 (1.7)</td>
<td>0.59, 2.30</td>
</tr>
<tr>
<td>View</td>
<td>4.6 (1.6)</td>
<td>5.1 (1.9)</td>
<td>4.0 (1.4)</td>
<td>-10.41, -8.82</td>
</tr>
<tr>
<td>Features</td>
<td>4.9 (1.7)</td>
<td>5.2 (1.7)</td>
<td>4.3 (1.7)</td>
<td>-10.86, -9.19</td>
</tr>
<tr>
<td>Distance</td>
<td>3.1 (1.6)</td>
<td>3.1 (1.6)</td>
<td>2.8 (1.6)</td>
<td>-6.89, -5.35</td>
</tr>
<tr>
<td>Attention</td>
<td>6.7 (1.8)</td>
<td>6.9 (1.8)</td>
<td>5.5 (1.8)</td>
<td>-12.73, -10.93</td>
</tr>
<tr>
<td>Basis</td>
<td>5.1 (1.6)</td>
<td>5.9 (1.6)</td>
<td>4.7 (1.6)</td>
<td>-11.74, -10.11</td>
</tr>
<tr>
<td>Ease</td>
<td>4.0 (1.9)</td>
<td>3.8 (1.9)</td>
<td>3.9 (1.9)</td>
<td>-8.87, -6.85</td>
</tr>
<tr>
<td>How long</td>
<td>3.2 (1.6)</td>
<td>3.8 (1.6)</td>
<td>3.5 (1.6)</td>
<td>-7.75, -6.20</td>
</tr>
<tr>
<td>Testify</td>
<td>4.3 (2.0)</td>
<td>5.1 (2.0)</td>
<td>3.7 (2.0)</td>
<td>-10.39, -8.39</td>
</tr>
<tr>
<td>Trusted</td>
<td>5.3 (1.9)</td>
<td>5.1 (1.9)</td>
<td>4.1 (1.9)</td>
<td>-11.34, -9.51</td>
</tr>
<tr>
<td>Memory</td>
<td>5.8 (1.7)</td>
<td>6.1 (1.7)</td>
<td>5.5 (1.7)</td>
<td>-12.77, -11.08</td>
</tr>
<tr>
<td>Sure</td>
<td>5.7 (1.7)</td>
<td>6.4 (1.7)</td>
<td>4.8 (1.7)</td>
<td>-12.89, -11.19</td>
</tr>
<tr>
<td>See</td>
<td>4.3 (1.6)</td>
<td>5.0 (1.6)</td>
<td>4.0 (1.6)</td>
<td>-10.11, -8.65</td>
</tr>
</tbody>
</table>

* Note: Standard deviation presented in parentheses.
* Indicate significance.

### Table 2

**Follow-Up Univariate Tests After a Delay**

<table>
<thead>
<tr>
<th></th>
<th>No feedback</th>
<th>Feedback</th>
<th>Feedback + suspicion</th>
<th>CI.95</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>t(163) = -25.58, p = .000*</td>
<td>t(163) = -2.41, p = .02*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Features</td>
<td>t(163) = -23.78, p = .000*</td>
<td>t(163) = -2.06, p = .04*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance</td>
<td>t(163) = -15.57, p = .000*</td>
<td>t(163) = -0.74, p = .46*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention</td>
<td>t(163) = -30.71, p = .000*</td>
<td>t(163) = -2.93, p = .01*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basis</td>
<td>t(163) = -26.62, p = .000*</td>
<td>t(163) = -2.75, p = .01*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease</td>
<td>t(163) = -16.56, p = .000*</td>
<td>t(163) = 0.27, p = .77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How long</td>
<td>t(163) = -17.75, p = .000*</td>
<td>t(163) = -0.63, p = .52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testify</td>
<td>t(163) = -18.53, p = .000*</td>
<td>t(163) = -2.75, p = .01*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trusted</td>
<td>t(163) = -22.48, p = .000*</td>
<td>t(163) = -1.95, p = .052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>t(163) = -27.90, p = .000*</td>
<td>t(163) = -1.41, p = .16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sure</td>
<td>t(163) = -28.9, p = .000*</td>
<td>t(163) = -3.66, p = .000*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See</td>
<td>t(163) = -23.86, p = .010*</td>
<td>t(163) = -2.39, p = .018*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Indicate significance.
The other important contribution from this experiment is clear evidence that, after a delay, suspicion reduces certainty inflation among accurate witnesses, just as it does for inaccurate witnesses (Neuschatz et al., 2007). The pattern was the same across all other testimony-relevant reports tested. Importantly, suspicion never produced judgments significantly lower than the control condition. These results provide strong evidence against the cautiousness hypothesis, which argues that suspicion would produce a main effect decrease in participants’ certainty and other reports, even if confirming feedback had no effect on participants’ responses.

Our results are consistent with the erasure hypothesis: suspicion eliminated the effect of confirming feedback, only for those witnesses whose reports indicated certainty inflation due to confirming feedback (i.e., accurate witnesses questioned after a 1-week delay). There are multiple possible explanations for the effect of the suspicion manipulation. First, suspicion might have caused participants to engage in attributional thinking about the source of the confirming feedback (cf. Fein, 1996). According to this explanation, participants produced feedback-free judgments after considering how the confirming feedback might have influenced them. This explanation requires participants to have a relatively accurate assessment of how much the confirming feedback would have influenced their responses.

Assuming that participants know how much the confirming feedback might have influenced them is difficult to imagine, especially knowing that people are generally unskilled at predicting how much external variables have influenced them (e.g., Wells & Bradfield, 1998). Fortunately, this assumption is not necessary according to a new theoretical interpretation of post-identification feedback effects. The selective cue integration framework argues that because witnesses do not assess certainty until queried, confirming feedback has no contaminating effect until the certainty measure is collected (Charman et al., 2010). This is consistent with our findings that it is possible to produce completely unaffected reports when participants are made suspicious about the experimenter’s confirming feedback (i.e., in Charman et al.’s evaluation stage).

An alternative explanation is that participants in the delay condition might have discussed the nature of the experiment. There are two reasons why we find this alternative unlikely. First, had participants talked between sessions we would expect a different pattern of results. More specifically, participants would not have shown the feedback effect even a week later because they would have had known they were being misled by the experimenter. Since the effect of confirming post-identification feedback did emerge we are confident that if participants did talk between session it did affect the results. Second, it is equally true that those who are in the immediate condition could have told other participants about the study before that participant took part in the study.

It is also possible that accurate participants tested immediately made their decisions more quickly. Eyewitnesses who make decisions more quickly may be less susceptible to feedback (Semmler et al., 2004). One way to test this would be to record participants response latencies. Although we did not do this in the present study, this may be an interesting avenue for future post-identification feedback research.

Future Research and Implications

Although this experiment advances our understanding of post-identification feedback, many unanswered questions remain. For example, what is the maximum time between identification and suspicion that would produce inoculation? Would the administration of suspicion work even if delivered after a large time lapse, such as during cross-examination at a trial? Would the additional pressure associated with public presentation of certainty reports obviate the effect of suspicion? Would this be true even though
public certainty reports are generally higher than private ones (Shaw, Zerr, & Woythaler, 2001, but not if witnesses think another person can challenge the accuracy of their report, Shaw, Appio, Zerr, & Pontoski, 2007).

As demonstrated here, suspicion is an ideal inoculation tool because it does not produce over-correction. However, the most damning report a witness gives is arguably at trial (i.e., in a public context). If participants have the pressure of presenting a certainty report in public, will suspicion cause them to produce reports below control condition levels to avoid the possibility of looking foolish? Will this be especially true if other witnesses can corroborate (or challenge) the witness’s report? In such a situation, suspicion could devalue the information available in uncontaminated witness reports. The questions posed above are critical ones for understanding how feedback and suspicion interact in a real trial environment, where the danger to innocent defendants is most pronounced.

Although suspicion appears to be an ideal inoculation tool, in that it does not produce judgments below those in the control group, we certainly do not think it is appropriate to recommend that defense attorneys implicate the integrity of all photo spread administrators. For one, we do not know the impact of suspicion beyond a 1-week delay or when delivered in a public context. Recommendations from this experiment echo past research: (a) collect certainty reports immediately after an identification and (b) ensure that the photo spread administrator does not know the identity of the suspect (Wells, Small, Penrod, Malpass, Fulero, & Brima-comb, 1998).

References


