

Do people discount testimony by eyewitnesses who received testimony-bolstering feedback?

by

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A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE

Major: Psychology

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Ames, Iowa

2006

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Table of Contents

Abstract	iv
Introduction	1
Experiment 1: Prediction Study	14
Experiment 2: Trial Study	24
Conclusion	34
References	36
Appendices	40
Tables	49

Abstract

Eyewitnesses who receive confirming post-identification feedback from a lineup administrator have bolstered testimony regarding their identification. This research examined whether people who were evaluating an eyewitness's testimony would notice that feedback occurred and realize the effect that it could have on an eyewitness's testimony. Experiment 1 was a prediction study in which 98 participants either learned that the eyewitness received confirming feedback or not. Participants did not differ in their estimations of how the eyewitness would answer questions about her retrospective confidence, view, attention, or current confidence as a function of feedback. They also thought that the most important question in determining an eyewitness's accuracy would be about her attention, followed by view, retrospective confidence, and current confidence, respectively. The order in which the questions were posed to the participants may be able to account for these findings. Experiment 2 was a trial study that utilized a 2(feedback: feedback, no feedback) x 2(confidence: high, low) x 2(type: retrospective, current) between-subjects design. The 259 participants in this study thought that the eyewitness was more likely to be accurate in her identification and the suspect should be charged with the crime more if the eyewitness expressed high confidence than if she expressed low confidence in her identification. The other manipulations did not affect the participants' ratings on these questions. Participants in Experiment 2 were unable to accurately report on the manipulations regarding the existence of feedback and the type of feedback. The null findings in this study may be explained by methodological issues, but the problems experienced in this research can be used to inform future research on whether or not people will be able to notice that an eyewitness has

received feedback, realize the distorting powers of feedback on an eyewitness's memory, and discount an eyewitness's testimony because of it.

Introduction

Mistaken eyewitness identifications are the leading cause of wrongful convictions in the United States. Since the inception of the use of DNA as forensic evidence in 1989, over 170 individuals who were wrongfully imprisoned have been exonerated as a result of DNA evidence. Of the first 40 individuals who were convicted of crimes but later proven innocent by DNA, 90% were mistakenly identified by at least one eyewitness (Wells et al., 1998). As indicated by this statistic, eyewitness testimony can be an extremely powerful form of evidence against a suspect. However, when an eyewitness identifies an innocent suspect in a lineup, it does not guarantee that the suspect will be found guilty. In order for a mistaken identification to result in the conviction of an innocent person, jurors must accept the identification evidence as trusted and vote to convict. The purpose of the proposed research is to investigate what factors influence peoples' opinions of eyewitness testimony.

People routinely overestimate the accuracy of eyewitnesses (Brigham & Bothwell, 1983). This may be due to the fact that eyewitnesses are, at times, unduly confident in their identification of a suspect, even if they have "identified" an innocent person (see meta-analysis of the correlation between eyewitness accuracy and confidence by Sporer, Penrod, Read, & Cutler, 1995). One contribution to the weak relationship between eyewitness confidence and accuracy is that an eyewitness's testimony about a crime and the subsequent identification of the suspect may be bolstered by certain events that occur after the crime or the pre-trial lineup (Bradfield, Wells, & Olson, 2002; Luus & Wells, 1994; Semmler, Brewer, & Wells, 2004; Wells & Bradfield, 1998, 1999; Wells, Ferguson, & Lindsay, 1981; Wells, Olson, & Charman, 2003). Some examples of events that bolster an eyewitness's testimony include briefing a witness about the types of questions that might be encountered

in an upcoming cross examination (Wells et al., 1981), leading a witness to believe that a co-witness identified the same suspect from a lineup (Luus & Wells, 1994), or providing an eyewitness with feedback about the identification (see meta-analysis by Douglass & Steblay, under review). As defense attorneys are becoming increasingly aware of the prevalence of these events and the effect that they have on eyewitness testimony, more jurors are being informed during trials of the events surrounding an eyewitness's identification of a suspect in a lineup. Therefore, the aim of this research was to examine people's perceptions of eyewitness testimony after they are told about the process of the witness's identification of the suspect from a lineup and the events surrounding the identification. If people know about a testimony-bolstering event that occurred during the identification process, and not just about the result of this event, are they able to reason about the effects of the testimony-bolstering event and discount the eyewitness's testimony?

What do we know about how people make judgments concerning eyewitness testimony and what variables are important to jurors when deciding whether or not to accept an eyewitness's identification as trusted? One variable that consistently influences jurors' opinions of eyewitness testimony is the eyewitness's reported confidence in her identification (e.g., Bradfield & Wells, 1999; Brigham & Bothwell, 1983; Cutler, Penrod, & Dexter, 1989; Tetterton & Warren, 2005, Wells et al., 1981; Wells, Lindsay & Ferguson, 1979). Simply stated, people believe an eyewitness who expresses confidence in an identification more than they believe an eyewitness who does not. Belief in an eyewitness's confidence is so great that people may distort other portions of an eyewitness's testimony if an eyewitness is highly confident. This was shown in a study by Bradfield and Wells (1999) in which people read testimony from an eyewitness who was either highly confident or was unsure of her

identification. Those people who read testimony from an eyewitness who was highly confident remembered the eyewitness as having a better view of the crime and paying more attention to the culprit during the crime than did the people who read testimony from an eyewitness who was not very confident in her identification. The same experiment showed that although confidence is a large determinant of whether participant-jurors believe an eyewitness's testimony or not, they do not merely accept a confidence statement without examining other aspects of the testimony. In fact, participant-jurors appeared to weigh each of the variables presented during testimony and add their effects together in order to reach a decision of the accuracy of the eyewitness's identification.

Jurors are not the only people who are asked to evaluate eyewitness testimony. Judges must first decide whether or not to allow the eyewitness to testify during a trial and some must later render their own decision as to the validity of the identification. When judges decide whether or not they will allow an eyewitness to testify in court, they must base their decisions on five criteria (*Neil v. Biggers*, 1972). These criteria are: 1) the opportunity of the witness to view the criminal at the time of the crime, 2) the witness's degree of attention, 3) the accuracy of the witness' prior description of the criminal, 4) the level of certainty demonstrated by the witness at the time of the confrontation, and 5) the length of time between the crime and the confrontation. Notice that three of these five criteria are based on a witness's report of his or her own memory. Although the accuracy of the witness's pre-lineup description and the amount of time between the event and the attempt to identify can be objectively quantified by an outside observer, one must rely on the witness to tell the judge about his subjective recollection of how good a view the witness had of the perpetrator's face during the crime, how much attention the witness was paying to the

perpetrator's face during the crime, and how confident the witness was of the identification at the time that the witness selected the suspect from the lineup. Such self-reports have been shown to be susceptible to being bolstered by a detective's reaction to an eyewitness's identification.

If a detective provides an eyewitness with confirming feedback after making a mistaken identification, this bolsters the witness's subsequent reports of the witnessed event, the identification, and conclusions about the identification (Bradfield, Wells, & Olson, 2002; Douglass & Steblay, under review; Semmler, Brewer, & Wells, 2004; Wells & Bradfield, 1998, 1999; Wells, Olson, & Charman, 2003). For example, eyewitnesses who receive positive feedback after making an identification report having a better view of the perpetrator and paying more attention to the perpetrator's face during the crime than eyewitnesses who did not receive feedback. Additionally, when eyewitnesses are asked how certain they were *at the time that they identified the person in the lineup* that the person they identified was the perpetrator, eyewitnesses who receive feedback about their identifications give higher ratings than those who do not receive feedback. A meta-analysis of the research regarding the post-identification feedback effect highlights the consistently robust influence that receiving feedback has on the eyewitness. Namely, receiving confirming post-identification feedback increases eyewitness reports of how good their view of the perpetrator (Cohen's $d = .50$), the amount of attention they paid to the perpetrator (Cohen's $d = .46$), how confident they were when they identified the suspect from a lineup (Cohen's $d = .79$), and how confident they are of their identification after receiving feedback (Cohen's $d = .53$) (see meta-analysis by Douglass & Steblay, under review).

What is interesting about the first three of these effects is that the people who receive feedback are *distorting their memories* of the crime and the identification. In experiments of the post-identification feedback effect, before the detective has a chance to react (or not react) to a witness's identification, all witnesses in the experiment experience the exact same sequence of events. Therefore, all witnesses have the exact same view of the crime, are paying the same amount of attention to the perpetrator during the crime on average, and would express the same amount of confidence at the time of the identification, on average. However, witnesses who receive confirming feedback about their identifications remember these events differently than witnesses who did not receive confirming feedback. They "remember" having a better view of the culprit, paying more attention to the culprit's face, and being more confident when they "identified" the suspect in a lineup. Therefore, the feedback is distorting their memory of the crime and the subsequent identification.

When reasoning about how a witness would report her view, attention, and retrospective confidence, will people be able to intuitively recognize and account for the possibility of retrospective distortions? Witnesses themselves do not appear to appreciate the effects of confirming feedback. In one study of the post-identification feedback effect, participants were able to accurately report on the feedback that they were given 90% of the time (Wells & Bradfield, 1998). Of the participants that correctly reported that they received feedback, 58%, 78%, and 73% denied that the feedback influenced the way in which they answered questions about retrospective confidence, view, and accuracy, respectively. However, the participants that did report that they had been influenced by the feedback did not differ in their ratings of their confidence, view, and attention from those that said the feedback did not influence them. This is not altogether surprising given that social

psychological researchers have long noted that people do not have introspective access to their cognitive processes and are not always able to accurately report on what influences them (Nisbett & Wilson, 1977). However, the aim of the current research was to find out whether or not outside observers (namely potential jurors) were able to recognize and account for a witness receiving feedback, even though the witness may not be able to do this.

There is some evidence that people are able recognize when an eyewitness receives feedback and discount some of the witness's testimony because of it (Hasel & Wells, 2005). Participants read a description of a crime and the investigation of the crime during which the eyewitness either received feedback about the identification or did not and the eyewitness expressed either high or low current confidence in the identification. People who read testimony from an eyewitness who was highly confident in the identification believed the eyewitness more than people who read testimony from an eyewitness who was not very confident in the identification. However, when they knew that the eyewitness had received feedback, participants significantly discounted the highly confident witness's testimony to a point where it was believed no more than the testimony from a witness who was not confident. Therefore, people *do* appear to discount an eyewitness's *current* confidence statement if they know that she received post-identification feedback.

This finding is not too surprising, given that in order for someone to recognize the effects of feedback on current confidence, the person would not have to possess a very profound theory of memory. This person would merely have to notice that the eyewitness received confirmatory feedback and understand that if an eyewitness is told that she has made "the correct" decision, then the eyewitness might be more confident that she had made the right decision. However, in order for someone to recognize the effects of feedback on

eyewitness' *retrospective* reports of their confidence, view and attention, the person must possess a relatively complex understanding of human memory. Namely, this person must not only be able to notice that the feedback occurred, but also be able to understand that a) memory for retrospective judgments of certainty can be distorted and b) receiving positive feedback may have produced memory distortions in this particular eyewitness. This research attempted to determine whether people possess an understanding of how this complex memorial process works.

Juror Perceptions of Eyewitness Evidence

There are different ways in which people's knowledge of the factors that influence eyewitness testimony have been examined. Three methodologies that have been utilized are 1) surveying knowledge through questionnaires, 2) assessing ability to predict the outcome of eyewitness identification experiments, and 3) examining verdicts and opinions about written or videotaped trials (Devenport, Penrod, & Cutler, 1997; Wells, 1984; Wells & Olson, 2003). The following is a brief review of some of the advantages and disadvantages of these three types of studies.

Survey studies. Survey studies typically involve having participants read statements and give ratings on how much they agree or disagree with them. Surveys tend to show that people's judgments about issues that are related to eyewitness identifications do not reflect knowledge about the factors that influence identification accuracy (e.g., Deffenbacher & Loftus, 1982; Kassin & Barndollar, 1992; McConkey & Roche, 1989; Noon & Hollin, 1987). Most recently, Kassin and Barndollar found that people disagreed with experts on 15 of 21 statements about factors that affect identification accuracy. For example, more experts than survey-respondents agreed with the statements that "An eyewitness's confidence is not a

good predictor of his or her identification accuracy,” and that “Eyewitness testimony about an event often reflects not only what they actually saw but information they obtained later on.” This indicates that some of the findings in the field of eyewitness psychology are not commonsensical.

Although survey studies are important and provide researchers with an idea as to what people intuitively know about eyewitness evidence, there are inherent problems with drawing conclusions from them (Wells, 1984). To begin with, a survey respondent may attempt to second-guess the questionnaire administrator and provide answers that either confirm or disconfirm the hypothesis. This might skew the data to non-intuitive findings. It is also possible that some survey questions may have unintended demand characteristics that nudge a participant to respond in a certain way because of the wording of the question. Additionally, jurors would not typically receive information about eyewitness evidence in a survey. A questionnaire does not simulate a real-world situation in which jurors learn about multiple characteristics of the eyewitness testimony and must subjectively weigh the importance of each. Lastly, people do not appear to be able to accurately report on what influences them or what is going to influence them (Nisbett & Wilson, 1977). Although survey respondents may believe that certain aspects of eyewitness testimony would influence their evaluation of the identification, it is impossible to draw an inference about what the respondents would actually do when confronted with all the evidence at a trial.

Prediction studies. In prediction studies of juror knowledge, participants are typically presented with the methods section of a previously-conducted eyewitness identification experiment and are asked to predict the outcome of the study. These predictions are then compared with the outcome of the original study in order to assess whether or not people

have an understanding of how different situations affect eyewitness behavior. For example, Wells (1984) conducted a prediction experiment based on an experiment by Malpass and Devine (1981). In the original study, participants were presented with either biased or unbiased lineup instructions and presented with either a target-present or a target-absent lineup. After that study had been conducted and published, Wells presented the methods section of this paper to a different group of participants and asked them to predict what percentage of people in the original study would have chosen the culprit, an innocent suspect, or made no choice. The results of both the original study and the prediction study are reprinted in Table 1 (Wells, 1984). As can be seen, participants did not intuitively know or reason about the effect that different instructions would have on people's propensity to choose an innocent suspect in a lineup rather than to indicate that the culprit was not there. Therefore, it can be concluded that nonexperts do not have an understanding of this particular phenomenon.

Another interesting finding by a prediction study is that when estimating the results of three different studies, over 80% of the participants overestimated the hit rates of eyewitnesses who were presented with target-present lineups (Brigham & Bothwell, 1983). This is a very strong indication of people's tendency to overestimate the accuracy of eyewitnesses.

Although prediction studies can give us insight into the intuitive knowledge that jurors have about eyewitness evidence, there are also some limitations to this type of study that one must take into account (Wells, 1984). For example, prediction studies lack the aspect of group discussion about a phenomenon that is an essential part of the deliberation process of juries. Also, participants in a prediction study may be able to reason about the base rate

with which a certain phenomenon might occur in eyewitnesses, but such studies cannot examine how jurors would reason about a *particular* eyewitness who provides emotion and a back-story along with the conditions under which she viewed and identified the suspect.

Trial studies. In trial studies, participants are given a description of a crime and an investigation, either through a written scenario or through a videotaped mock-trial, and asked to make judgments about the information presented. Typically, participants are asked whether or not they would find the defendant/suspect guilty and are asked to make other judgments regarding the evidence or the defendant. For example, Bradfield and McQuiston (2004) presented participants with a trial transcript in which either an eyewitness's confidence stayed consistent, was inflated between the time of the identification and trial, or was inflated between the time of the identification and trial but was challenged by an attorney. Participants were then asked to rate the credibility of the eyewitness. It was found that any inflation of the eyewitness's confidence decreased the jurors' belief in the eyewitnesses' accuracy a little bit, but it was not until the eyewitness's confidence inflation was explicitly challenged by the opposing attorney that belief in the accuracy of the eyewitness declined. Therefore, it was concluded from this study that people do not pay much attention to an eyewitness's inflated confidence unless it is explicitly pointed out during the cross-examination of that witness.

Whereas trial studies may provide some of the most accurate demonstrations of how jurors would respond to eyewitness evidence in the context of a trial, there are still some concerns about drawing conclusions from these trial studies (Wells, 1984). One major problem with this type of study is that the evidence presented in each of the "trials" is unique to that experiment. Therefore, it is very difficult to generalize to other situations in which the

evidence is different. Because of this, a trial judge might not allow eyewitness experts to report on such findings if the evidence utilized in the study is not sufficiently similar to the trial at hand. Additionally, because the trials that are utilized in these studies are typically fictitious, an eyewitness researcher may fail to capture some realistic aspect of the behavior of eyewitnesses when creating the trial (Wells, 1984).

As can be seen, each methodology for determining people's perceptions of the factors that influence eyewitness testimony has its advantages and its disadvantages. Therefore, the most effective way to examine what people intuitively know is to conduct multiple experiments, utilizing more than one methodology, and see whether the results from the different studies differ or coincide. The proposed research did just that. Two different experiments were conducted, one prediction study and one trial study, both of which examined people's awareness of the post-identification feedback effect. Both experiments utilized the same description of a crime and information about the investigation of that crime. The first was a prediction study, whose purpose was to see if participants are able to predict the effect that post-identification feedback has on eyewitness reports on retrospective confidence, view, attention, and current confidence. Although participants were either informed or not informed that the eyewitness received feedback, they did not know how the eyewitness answered questions about retrospective confidence, view, attention, or current confidence. Instead, the participants were asked to guess how the eyewitness would answer these questions. It was hypothesized that when the participant learned that the eyewitness received feedback, the participants would believe that her ratings of current confidence will be inflated but that her ratings of retrospective confidence, attention, and view will not be affected. Recall that people appear to be able to reason about how post-identification

feedback might influence a person's current confidence, but an intricate meta-theory of memory is necessary for people to discount bolstered testimony about events that occurred before the feedback was given.

The other study was a "trial" study, whose purpose was to see if participants would discount an eyewitness's self-reported retrospective confidence as much as they discount an eyewitness's current confidence when they learn that she received feedback. Consistent with the prediction study, it was hypothesized that participants would not discount eyewitness's inflated reports on this retrospective measures in the feedback condition. Although participants are able to discount an eyewitness's current confidence (Hasel & Wells, 2005), it was expected that participants in these studies would not be able to reason about how feedback influences an eyewitness's retrospective memorial report. However, as in the past study, we wanted to give participants the best possible opportunity to notice the presence of feedback and discount the eyewitness's testimony because this is a difficult task. In order to assist the participants, we had them learn about the presence of feedback before they learned about the eyewitness's confidence level. This situation is more likely to facilitate the discounting of the eyewitness's confidence statement than if people learn about the eyewitness's confidence level before they learn about the presence of feedback because of the belief perseverance effect (Anderson, 1995; Anderson & Lindsay, 1998; Anderson & Kellam, 1992). If participants were to learn about the eyewitness's confidence level before learning about the presence of feedback, then they may form beliefs about the eyewitness's accuracy. These beliefs may then persevere, regardless of whether the participants later learn that the eyewitness received feedback or not, and affect the participants' later ratings of the eyewitness's accuracy. Therefore, in the past and current research, participants learned about

the presence of feedback before they learned about the eyewitness's confidence level. That way, prior knowledge of the eyewitness's confidence would not have affected the amount to which participants discounted the eyewitness's testimony if they knew that she received feedback.

Experiment 1

This experiment was a prediction study, designed to examine whether people intuitively realize the effect that post-identification feedback has on witness reports of retrospective confidence, view, attention, and current confidence. The specific scenario utilized was fictitious, so there were not past experimental values of how much actual eyewitness reports of the aforementioned variables will increase if the witness receives post-identification feedback, as opposed to not receiving any feedback at all. Therefore, a quantitative comparison could not be made from past experiments to this one. However, the post-identification feedback effect is so robust that we know some inflation on all four variables would occur and we know the approximate effect size of each across studies. Recall that a meta-analysis of the post-identification feedback effect has found that participant-witnesses who receive feedback consistently express higher retrospective confidence, a better opportunity to view the perpetrator, paying more attention to the perpetrator, and higher current confidence (Cohen's $d = .79, .50, .46, \text{ and } .53$, respectively) than participants who received no feedback (Douglass & Steblay, under review).

Method

Ninety-six undergraduate students at a large Midwestern university participated in this study for partial credit in an introductory Psychology class. The full description of a crime and the subsequent investigation of that crime that participants were given is shown in Appendix A. Participants learned from this description that during the course of the investigation, the eyewitness was either given confirming feedback ("Great job, Miss Jones. You picked the guy we thought it was. Thank you Miss Jones") or not ("Thank you Miss Jones"). In the No Feedback condition participants also learned that the detective told the

prosecuting attorney that “Miss Jones did a great job. She picked the guy we thought it was,” in order to control for any influence of the participants knowledge of the detective’s belief in the guilt of the suspect. Additionally, the evidence described in the scenario did not point significantly towards the suspect’s guilt or innocence.

At the end of the description, participants learned that the prosecutor asked the eyewitness four questions: “First, at the time that you picked the man from the photo lineup, how certain were you that he was the man who robbed the store? I am not asking you how certain you *are* of your identification now, but rather how certain you *were at the time you picked the man from the photo lineup* on a scale from 1 to 10, with 1 indicating that you were not certain at all and 10 indicating that you were extremely certain. Second, on a scale from 1 to 10, with 1 indicating that you had a horrible view and 10 indicating that you had a perfect view can you tell me how good of a view you had of the robber? Third, on a scale from 1 to 10, with 1 indicating that you were not paying attention and 10 indicating that you were paying very close attention, how much attention were you paying to the robber’s face while the crime was occurring? Lastly, on a scale from 1 to 10, with 1 indicating that you are not confident at all and 10 indicating that you are extremely confident, how confident are you *now* that the man you picked from the lineup was the man who robbed the store?” After reading the entire description, participants were asked to guess how the eyewitness responded to each of these questions on a scale from 1 (*not certain at all, horrible view, not paying attention, not confident at all*) to 10 (*extremely certain, perfect view, paying very close attention, extremely confident*), respectively. A full list of the questions that the participants were asked can be found in Appendix B.

After predicting how the eyewitness would respond to the previous questions, participants were asked to answer a few questions about the scenario from memory, including a question about what the detective said to the eyewitness after she made her identification. This was done in order to see whether the participants could remember whether the eyewitness was given feedback or not. The participants were also asked if there was anything about the procedure used by Detective Thompson in conducting the photo lineup that caused them some concern. If a participant answered “yes” to this question, he or she was asked to explain the cause for concern. This was done to see if the participants in the feedback condition would not only notice that feedback had occurred, but also express some concern about how it would influence the eyewitness. Finally, the participants were asked to rank-order the importance of Prosecutor Linskey’s questions of Miss Jones (i.e., retrospective confidence, view, attention, and current confidence). This was done in order to examine whether the relative weight that participants would assign to the answers of each of these questions would vary across feedback conditions. These manipulation check questions can be found in Appendix C.

Results

Dependent variables. Overall, the presence of feedback did not have a significant impact on participants’ ratings of how Miss Jones would rate her retrospective confidence, $t(94) = 1.72, p = .09, d = .35$, view, $t(94) = .92, p = .36, d = .19$, attention, $t(94) = .83, p = .41, d = .17$, or current confidence, $t(94) = .22, p = .83, d = .04$. Means, standard deviations, and confidence intervals are shown in Table 2. When the predicted level of confidence across time was examined in relation to the existence of feedback, there was a significant main effect for the predicted level of confidence between retrospective and current confidence $F(1,$

93) = 7.73, $p = .007$, Cohen's $f = .29$, with participants believing that Miss Jones would rate her retrospective confidence ($M = 7.08$, $SD = 1.68$) higher than she would rate her current confidence ($M = 6.39$, $SD = 2.32$). There was not a significant interaction for the predicted confidence levels between feedback and type of confidence statement given, $F(1, 93) = .91$, $p = .34$, Cohen's $f = .10$.

There were no significant differences between feedback conditions for participants' ranking of how important they thought the questions about retrospective confidence, $t(94) = .72$, $p = .47$, $d = .15$, view, $t(94) = .10$, $p = .92$, $d = .02$, attention, $t(94) = -.12$, $p = .91$, $d = .02$, or current confidence, $t(94) = .15$, $p = .88$, $d = .03$, would be to determining the accuracy of Miss Jones' identification. However, there were significant differences in how important participants thought each variable that the eyewitness reported on was in determining the accuracy of Miss Jones' identification, $F(3, 282) = 23.81$, $p < .001$, Cohen's $f = .50$. Paired comparisons showed that the question about attention was rated as more important than the question about view, $t(95) = 1.92$, $p = .05$, $d = .27$, the question about view was rated as more important than the question about retrospective confidence, $t(95) = 3.16$, $p = .002$, $d = .55$, and the question about retrospective confidence was rated as more important than the question about current confidence, $t(95) = 2.94$, $p = .004$, $d = .47$. Means, standard deviations, and confidence intervals for these ratings are shown in Table 3.

Were the participants' predictions of the eyewitness' ratings of retrospective confidence, view, attention, and current confidence related to one another? The correlation matrix in Table 4 suggests that they were because all four predictions are significantly correlated with one another. However, when separated by condition, as is done in Table 5, the results show a different pattern. The participants' estimates for the eyewitness's ratings of

retrospective confidence, view, attention, and current confidence in the condition where the eyewitness did not receive feedback showed a pattern very similar to that shown overall, in that all of the ratings were significantly related to one another. The participants in the condition where the eyewitness did receive feedback, however, did not show this same pattern. In fact, every correlation, except for the one between view and attention is significantly lower for the participants who learned that the eyewitness received feedback than for the participants who did not learn this. Is this, perhaps, due to the fact that the participants in the feedback condition were concerned about the fact that the detective gave the eyewitness confirming feedback about her identification?

Concern question. Overall, 47 participants (48.96%) expressed some concern about the way in which the lineup was conducted. Significantly more participants in the condition where they learned that the eyewitness received feedback expressed concern than in the condition where no information about the detective's response was given, $X^2(1, N = 98) = 15.05, p < .001, \phi = .396$. Of those in the feedback condition who expressed concern, 66.67% indicated the detective's feedback to the eyewitness about her identification of the suspect.

Would those participants who noticed the feedback and had concern about the feedback predict that the eyewitness would give different ratings for her retrospective confidence, view, attention, and current confidence, than those who did not learn that the eyewitness received feedback? When only the predictions of the participants who expressed concern about the feedback and the participants in the no feedback condition were analyzed, participants predicted that Miss Jones's retrospective confidence would be higher in the no feedback condition ($M = 7.38, SD = 1.74$) than in the feedback condition ($M = 6.50, SD =$

1.50), $t(68) = 2.04, p = .04, d = .54$. Participants from this subset of the sample did not differ significantly in their predictions of how Miss Jones would rate her view, $t(68) = 1.18, p = .24, d = .31$, attention, $t(68) = .79, p = .43, d = .21$, or current confidence, $t(68) = 1.00, p = .32, d = .26$. Means, standard deviations, and confidence intervals of these predicted values can be found in Table 6. When the predicted level of confidence across time was examined in relation to feedback, there was no longer a significant main effect for the predicted level of confidence between retrospective and current confidence $F(1, 68) = .453, p = .50$, Cohen's $f = .08$. However, there was a cross-over interaction pattern between the predicted confidence levels between feedback and the type of confidence statement given, $F(1, 68) = 6.48, p = .01$, Cohen's $f = .31$. Participants who learned that Miss Jones received feedback believed that her current confidence would be higher than her retrospective confidence. But, contrary to what was predicted, participants who did not learn that Miss Jones received feedback believed that her retrospective confidence would be higher than her current confidence.

Further analysis of ratings of the participants who expressed concern about the feedback and the participants in the no feedback condition showed that there were no differences across conditions for participants' ranking of how important they thought the questions about retrospective confidence, $t(68) = 1.34, p = .19, d = .34$, view, $t(68) = .10, p = .21, d = .32$, attention, $t(68) = .03, p = .98, d = .01$, or current confidence, $t(68) = .42, p = .68, d = .11$, would be to determine the accuracy of Miss Jones' identification. Similar to the entire sample, there were significant differences in how important participants thought each variable that the eyewitness reported on was in determining the accuracy of Miss Jones' identification, $F(3, 204) = 11.72, p < .001$, Cohen's $f = .42$. Paired comparisons showed that attention was still rated as more important than view, $t(69) = 2.43, p = .02, d = .39$, view was

still rated as more important than retrospective confidence, $t(69) = 2.05, p = .05, d = .41$, and retrospective confidence was still rated as more important than current confidence, $t(69) = 2.44, p = .02, d = .45$. Means, standard deviations, and confidence intervals for these ratings are shown in Table 7.

Discussion

The presence or absence of feedback did not have a significant impact on the participants' estimates of how the eyewitness would rate her retrospective confidence, her view of the culprit during the crime, the attention that she was paying to the culprit during the crime, or her current confidence. Recall that there were strong reasons to believe that the presence of feedback would affect the eyewitness's estimated current confidence because Hasel and Wells (2005) showed that people were able to discount the testimony of a witness who expressed high current confidence if they knew that she received feedback. This discrepancy in results may have resulted from a variety of reasons, the first of which is the different methodology that was utilized in the past research and in the current research. The Hasel and Wells study was a trial study in which participants were presented with a witness who was asked only about her current confidence, and she either expressed high or low confidence in her identification. However, the current research was a prediction study in which participants were asked to estimate how the eyewitness would rate her retrospective confidence, view, attention, and current confidence. It is possible that when the eyewitness was only asked one of these questions, the participants were able to reason about the effect of feedback on that one question. However, when they were told that the eyewitness was asked all four questions, the participants may not have been able to reason about how the eyewitness would respond to all four questions. Additionally, when *given* an eyewitness's

confidence statement, people may be able to reason about how feedback may have inflated this confidence statement. However, when people are asked to *estimate* how an eyewitness would respond to a question about her confidence, people may not be able to reason about the eyewitness experiencing an increased feeling of confidence merely due to feedback. This might be because people may not realize that confidence is malleable unless they see evidence of confidence inflation.

Another reason why the participants' estimates of the eyewitness's rating of her current confidence may not have been significantly different across feedback conditions is the order in which the eyewitness was asked the four questions. Participants always learned that the eyewitness was asked about her retrospective confidence, followed by a question about her view, followed by a question about her attention, which was followed by a question about her current confidence. In hindsight, this order may have triggered a variety of meta-theories about what the prosecutor and/or the experimenters were trying to achieve. For example, participants may have thought that the questions about view and attention were posed to the eyewitness in order for her to realize that she did not have a good view of the culprit and was not paying attention to the culprit's face while the crime was occurring. This may have led to the participants' estimations of the eyewitness's current confidence (the last question asked) being lower than the estimations of the eyewitness's retrospective confidence (the first question asked). Participants may also have thought that when the eyewitness was asked: "How confident are you *now* that the man you picked from the lineup was the man who robbed the store," the prosecutor was referring to how confident the eyewitness was after thinking about her view and attention during the crime, instead of how confident the eyewitness was, in general, the day after the identification. The possibility of this type of

meta-cognition is supported by the participants' ranking the questions about the eyewitness's view and attention as more important than questions about the eyewitness's retrospective and current confidence in determining the eyewitness's accuracy. The difference between retrospective and current confidence may have been better examined in a between-subjects design in which participants were either asked to estimate the eyewitness's retrospective *or* current confidence.

The different meta-cognitions that participants had across feedback conditions were also evidenced by the differing correlations between participants' ratings of retrospective confidence, view, attention, and current confidence. In the condition in which participants learned that the eyewitness received feedback, the correlation between retrospective and current confidence disappeared, as did the correlation between retrospective confidence and attention and the correlation between current confidence and view. It is possible that when the participants were not given any information about feedback, they referred to the description of the crime and the identification to determine how the eyewitness would rate her retrospective confidence, view, attention, and current confidence. However, when the participants were given information about feedback, it appears as though they were able to reason that there would be differences between the participants' ratings of retrospective and current confidence but were not quite sure which rating would be affected. This can be seen because of the lack of a correlation between participants' estimates of the eyewitness's retrospective and current confidence, accompanied by mean confidence ratings that do not differ significantly.

It does appear that people who noticed that the detective gave the eyewitness feedback and expressed some concern about it were somewhat able to reason about the effect

that feedback would have on the eyewitness's testimony. The eyewitness's retrospective confidence was estimated to be lower by the participants who were concerned about the existence of feedback than by the participants who did not learn that feedback occurred. Interestingly, the participants who expressed concern about feedback did not believe that there would be any differences between the eyewitness's ratings of her retrospective and current confidence. The participants who did not learn that the eyewitness received feedback, however, estimated that the eyewitness would report having higher retrospective confidence than current confidence. It is possible that, overall, the participants either believed that an eyewitness's confidence decreases over time or that they thought that an eyewitness's confidence would decrease after answering questions about her view of the culprit and the attention that she was paying to the culprit's face during the crime. However, the participants who expressed concern about the presence of feedback did not follow this same logic. Experiment 2 examined the different ways in which people reason about retrospective and current confidence by manipulating this factor between participants instead of presenting information about both types of confidence to everyone.

Experiment 2

Although prediction studies show what people believe about the variables that influence eyewitness reports, other experiments are needed in order to determine what people will do when presented with an actual eyewitness's report of either high or low retrospective confidence as opposed to high or low current confidence. Recall that although eyewitness reports of both retrospective and current confidence are typically inflated after a witness receives feedback (Douglass & Steblay, under review), only retrospective confidence is one of the *Biggers* criteria that factor in to judges' decisions of whether or not to allow an eyewitness to testify during a trial. Additionally, it has been shown that potential jurors will discount the accuracy of an eyewitness's identification if they know that the eyewitness received feedback and expressed high current confidence in her identification (Hasel & Wells, 2005). However, it is not clear whether people will treat an eyewitness's retrospective confidence statement the same way as they will an eyewitness's current confident statement. Experiment 2 attempted to answer this question.

Similar to past research, participants in Experiment 2 either learned or did not learn that the eyewitness received feedback and learned that the eyewitness either reported high or low confidence in her identification. However, in the current study, participants were presented with an eyewitness who was either asked to report her retrospective confidence level or her current confidence level. To test our hypotheses, a 2(feedback: feedback, no feedback) x 2(confidence: high, low) x 2(type: retrospective, current) between-subjects design was created. This design was utilized in order to examine if people were able to discount an eyewitness's high retrospective confidence statement just as much as they discount an eyewitness's high current confidence statement when they learn that she received

confirming post-identification feedback. Therefore, the over-arching question remains: “Do people realize that post-identification feedback affects an eyewitness’s memory for different aspects of events that occurred before the feedback was ever given and discount an eyewitness’s testimony because of this realization?” However, this research looked at whether people judge an eyewitness’s retrospective confidence report differently than an eyewitness’s current confidence report.

Methods

Participants were given the same description of the crime and the subsequent investigation of that crime that was utilized in Experiment 1, including the manipulation of learning whether the eyewitness received feedback or not. However, instead of the prosecuting attorney asking the eyewitness all four of the questions, she only asked the eyewitness about her retrospective confidence (i.e., “*At the time that you picked the man from the photo lineup, how certain were you that he was the man who robbed the store*”) or her current confidence (i.e., *How certain are you that the man you that the man you picked from the photo lineup was the man who robbed the store?*). In this scenario, which can be found in Appendix D, the eyewitness responded by either saying that she was highly confident or not very confident in her identification.

After reading the scenario, participants were asked to judge how likely they thought it was that the eyewitness made an accurate identification and whether or not they thought the suspect should be charged with the crime. The questions that were given to the participants can be found in Appendix E. After those questions were answered and the experimental materials were taken away, the participants were asked a series of questions about the experiment to see whether or not they noticed the presence (or absence) of feedback and

whether or not they could accurately report on how the prosecutor worded her question to the eyewitness about the eyewitness's retrospective confidence. All manipulation check questions can be found in Appendix F. These questions were asked in order to see whether the participants noticed the feedback and confidence manipulations because if the participants did not notice these intricacies of the investigation, then the manipulations may not have influenced them. Lastly, participants were asked if there was anything about the photo lineup procedure that caused them some concern. If they answered "yes" to this question, they were asked to write a statement regarding what bothered them. This was done in order to see whether participants in the feedback condition would express concern about the feedback and how that might influence the witness.

Results

Dependent variables. Participants thought that the eyewitness's identification of the suspect was more likely to be accurate $F(1, 351) = 8.72, p = .003$, Cohen's $f = .16$, and believed more strongly that the suspect should be charged with the crime, $F(1, 351) = 17.49, p < .001$, Cohen's $f = .22$, if the eyewitness expressed high confidence than if she expressed low confidence in the identification. However, there were no significant differences between the participants' ratings of the eyewitness's likely accuracy when the eyewitness received feedback or not, $F(1, 351) = 1.04, p = .31$, Cohen's $f = .05$, or if she was asked about her current or retrospective confidence $F(1, 351) = .532, p = .47$, Cohen's $f = .04$. There were also no significant differences in how much the participants believed that the suspect should be charged with the crime across feedback conditions, Cohen's $f = .05, F(1, 351) = 1.53, p = .22$, Cohen's $f = .06$, or across the type of confidence (i.e., retrospective or current) reported,

$F(1, 351) = .48, p = .49$, Cohen's $f = .03$. Means, standard deviations, and confidence intervals for these ratings are shown in Tables 8 and 9.

There were not significant interactions between conditions where the participants either learned or did not learn that the eyewitness received feedback and the eyewitness's reported confidence level on the participants' ratings of how likely it was that the eyewitness was accurate, $F(1, 351) = .03, p = .86$, Cohen's $f < .03$, or of whether the suspect should be charged with the crime, $F(1, 351) = .07, p = .79$, Cohen's $f < .03$. There were also not significant interactions between conditions where the participants either learned or did not learn that the eyewitness received feedback and whether the eyewitness was asked about her current or retrospective confidence in the participants' ratings of how likely it was that the eyewitness was accurate, $F(1, 351) = .36, p = .55$, Cohen's $f = .03$, or of whether the suspect should be charged with the crime, $F(1, 351) = .06, p = .82$, Cohen's $f < .03$. Lastly, there were not significant interactions between conditions where the eyewitness expressed either high or low confidence in her identification and where the eyewitness was asked about her current or retrospective confidence on the participants' ratings of the eyewitness's likely accuracy, $F(1, 351) = .13, p = .72$, Cohen's $f < .03$, or in whether they thought the suspect should be charged with the crime, $F(1, 351) = .10, p = .76$, Cohen's $f < .03$.

The three-way interaction between feedback, confidence level, and confidence type on participants' ratings of how likely it was that the eyewitness was accurate was also not significant, $F(1, 351) = .01, p = .94$, Cohen's $f < .03$. Additionally, this three-way interaction was not significant for participants' ratings of whether the suspect should be charged with the crime, $F(1, 351) = .22, p = .64$, Cohen's $f = .03$.

Manipulation checks. Overall, significantly fewer people in the feedback condition (29.6%) than in the no-feedback condition (58.9%) got all three critical manipulation check questions correct, $X^2(1, N = 359) = 31.18, p < .001, \phi = .30$. However, there were not significant differences the number of people who got all three critical manipulation checks correct between type of confidence reported, $X^2(1, N = 359) = 3.27, p = .07, \phi = .10$, and level of confidence reported, $X^2(1, N = 359) = 2.04, p = .09, \phi = .08$. Significantly fewer people in the feedback condition (42.5%) than in the no-feedback condition (75.6%) got the two manipulation check questions about the presence of feedback correct, $X^2(1, N = 359) = 40.66, p < .001, \phi = .34$. Additionally, significantly fewer people in the condition in which the eyewitness was asked about her retrospective confidence (68.0%) than in the condition in which the eyewitness was asked about her current confidence (77.7%) got the manipulation check question about what type of confidence the eyewitness was asked about correct, $X^2(1, N = 359) = 4.30, p = .04, \phi = .11$.

Concern question. Overall, more people expressed concern about the interaction between the detective and the eyewitness if they learned that the eyewitness received feedback (53.1%) than if they did not learn that the eyewitness received feedback (23.9%), $X^2(1, N = 359) = 32.30, p < .001, \phi = .30$. Of those participants who learned that the eyewitness received feedback and expressed concern about the interaction between the detective and the eyewitness, 76.8% mentioned having a concern about the presence of feedback. Additionally, more people expressed concern about the interaction between the detective and the eyewitness if the eyewitness was asked about her current confidence (43.5%) than if the eyewitness was asked about her retrospective confidence (33.1%), $X^2(1, N = 359) = 4.05, p = .04, \phi = .11$. However, of those participants who learned that the

eyewitness was asked about her current confidence, only 7.5% mentioned that the detective should have asked for an initial confidence statement. There were no differences in the number of people who expressed concern across conditions where the eyewitness expressed either low (39.1%) or high (37.8%) confidence, $X^2(1, N=359) = .07, p = .80, \phi = .01$.

Would those participants who noticed that feedback occurred and had concern about the feedback also be more sensitive to whether the eyewitness was asked about her current or retrospective confidence or whether the eyewitness reported high or low confidence in her identification? Apparently not. When only the responses of the participants who expressed concern about feedback were examined, there were not significant differences between how likely the participants thought it was that the eyewitness's identification was accurate across the type of confidence that the eyewitness reported, $F(1, 75) = .59, p = .45$, Cohen's $f = .09$, or across the level of confidence that the eyewitness expressed, $F(1, 75) = 2.99, p = .09$, Cohen's $f = .20$. Means, standard deviations, and confidence intervals are shown in Table 10. There was also not a significant interaction for the participants' ratings of how likely they thought it was that the eyewitness's identification was accurate between the type and level of confidence reported, $F(1, 75) = .41, p = .71$, Cohen's $f = .05$. Similarly, there was not a significant main effect for the type of confidence that the witness reported, $F(1, 75) = .60, p = .44$, Cohen's $f = .09$ when the participants had to rate whether the suspect should be charged with the crime. Means, standard deviations, and confidence intervals are shown in Table 11. However, the participants believed that the suspect should be charged with the crime more if the eyewitness expressed high confidence in her identification than if she expressed low confidence in her identification, $F(1, 75) = 11.84, p = .001$, Cohen's $f = .40$. There was not a significant interaction between the type and the level of the confidence

reported for the participants' ratings of whether the suspect should be charged with the crime, $F(1, 75) = .34, p = .56, \text{Cohen's } f = .07$.

Discussion

Participants thought that the eyewitness who expressed high confidence in her identification was more likely to be accurate than the eyewitness who expressed low confidence in her identification. Similarly, participants thought that the suspect who was identified by the highly confident witness should be charged with the crime more than the suspect who was identified by the eyewitness who expressed low confidence in her identification should be. However, participants who were informed that the highly confident eyewitness received feedback did not discount the eyewitness's testimony, as has been shown in past research (Hasel & Wells, 2005). This discrepancy in results is possibly due to the fact that participants in the past study were told that the eyewitness received feedback from the detective in-person, immediately after the eyewitness identified the suspect. However, in the current study the participants were informed that the eyewitness received feedback during a phone call made by the detective to the eyewitness later in the day after the identification. This was done so that participants in the *retrospective* confidence condition would understand that the prosecutor was asking for the eyewitness's confidence before the feedback ever occurred. However, this change may have required participants to possess a deeper understanding of feedback than was asked of participants in the past study to discount the eyewitness's testimony if she received feedback.

It appears as though participants in the current study might have reasoned that feedback that was not given directly following the identification does not have any effect on the eyewitness's testimony. In fact, feedback has the same testimony bolstering effects when

it is given up to 48 hours after the identification has taken place as when it is given immediately following the identification (Wells et al., 2003). However, participants in this study may not have realized that feedback affects an eyewitness's confidence statement, whether it is given immediately following the identification or in a phone call the evening of the identification. Although people's understanding of feedback's influence on an eyewitness's testimony, regardless of when it was given, was not the knowledge that we were attempting to investigate in this research, it is an interesting question that deserves further investigation. Future research might examine, in a controlled setting, whether people discount the testimony of an eyewitness who expresses high confidence in her identification after receiving feedback *48 hours after the identification occurs* as much as people discount the testimony of an eyewitness who receives feedback *immediately after the identification occurs*. It is possible that people in general do realize the confidence inflating effect of an eyewitness's testimony after feedback has occurred but that they do not realize that the time at which the feedback is given does not matter.

Another problem with the current study is that some of the critical portions of the scenario utilized may not have been fully understood by the participants. Note, for instance, that only 44.3% of the participants were able to correctly answer the two questions about the presence of feedback and the question about the type of confidence asked for during the investigation. It is possible that participants were able to remember that there was a statement about the eyewitness doing a good job because she picked the person the police suspected of the crime but that they were unable to remember whether the detective told this to the prosecutor or the eyewitness. This would have led to the low rate (59.1%) of participants who were able to accurately identify what was said to the prosecutor and to the eyewitness by

the detective. Past research (Hasel & Wells, 2005) has likely not had this same problem probably because the presence of feedback may have been more salient to participants who heard that the feedback occurred immediately after the identification than to participants who heard that feedback occurred later in the day. Another critical portion of the scenario that may have not been fully understood by the participants was the type of confidence that the eyewitness was asked to report. It is possible that participants noticed that the eyewitness was asked about her confidence in the crime without noticing whether she was asked about her retrospective or current confidence. This could have lead to the low rate (73.0%) of participants who were able to accurately identify the question that the eyewitness was asked about her confidence.

Because so few participants were able to accurately report on the critical portions of the scenario, it may have led to the null effects found in the current study. Future research might emphasize the fact that feedback has occurred by making it directly follow the eyewitness's identification or by having the prosecutor ask the eyewitness what the detective said to her about her identification. Additionally, future research might emphasize whether the eyewitness is being asked about her current or retrospective confidence by being a little more specific about the timing about which the eyewitness is asked to report. If these changes are made to the scenario so that the manipulations are more salient to the participants, then we may find patterns in the data more similar to the predicted patterns. However, if these changes are made to the scenario and there are still no differences in the ratings of the dependent variables across conditions, then there will be more definitive evidence that people are unable to take the presence of feedback into account when analyzing an eyewitness's testimony.

Although there appear to be the above-mentioned methodological problems with the current research, the participants that expressed concern about the presence of feedback show an interesting pattern in their responses to the question of whether the suspect should be charged with the crime. Namely, the participants who expressed concern about feedback believed that the suspect in the case where the witness is highly confident should be charged with the crime more than the suspect in the case where the witness is not confident. Additionally, there was a significant simple main effect for the participants who heard that the eyewitness expressed low confidence in her identification. Namely, participants thought that the suspect in the case where the eyewitness expressed low retrospective confidence should be charged more than the suspect in the case where the eyewitness expressed low current confidence. Therefore, people who are evaluating the testimony of an eyewitness who expresses low confidence in her identification might believe the eyewitness's retrospective confidence statement over the eyewitness's current confidence statement. This would suggest that people do not realize that feedback influences both retrospective and current confident statements of an eyewitness. Even though there is only an average of 20 participants per cell, the effect is significant and the effect size is almost a medium effect ($d = .39$). Future research that makes the feedback and the type of confidence asked about more salient might examine this measure further.

Conclusion

Despite the absence of evidence in this research that participants understand and appreciate the bolstering effect that post-identification feedback has on eyewitness testimony, it would not be appropriate to conclude that at this point. In hindsight, there were some methodological issues in this research that may have led us to not find this effect. In experiment 1, the order in which the questions were asked of the eyewitness (i.e., retrospective confidence, view, attention, current confidence) may have influenced the way in which the participants predicted that the eyewitness would answer them and the importance that they placed on each of the questions. This probably resulted in the finding that participants thought that questions about the eyewitness's view and attention were more important in determining the likely accuracy of the eyewitness than the questions about the eyewitness's confidence. Furthermore, this inflated importance placed on the view and attention questions may have resulted from the two confidence questions flanking the questions about view and attention. This may have led the participants to think that the questions about view and attention were posed to the eyewitness so that she would change her confidence statement.

In experiment 2, the feedback was not given to the eyewitness immediately following the identification, but rather in a phone call the evening of the identification. We did not think that people would not realize that feedback given to an eyewitness after a delay is just as powerful as feedback given to an eyewitness immediately following an identification. This may have led to our not replicating the findings of Hasel and Wells (2005). Additionally, the manipulated presence or absence of feedback and the manipulated question about the eyewitness's current or retrospective confidence were apparently confusing to the

participants because they were not able to accurately report on their existence in the study. This was evidenced by the low percentage of participants who were able to accurately report on the existence of these manipulations. If participants were completely unaware of critical elements in the scenario that was presented to them, then the presence of these elements would have had limited effect on the participants' evaluations of the scenario. Therefore, the confusing nature of the scenario may have led to the null effects in experiment 2.

The methodological problems in both studies were not easily discerned before the data were collected because the scenarios presented in the current research were nearly identical to the scenarios presented in past research (Hasel & Wells, 2005). Future research that fixes these methodological issues may find the hypothesized results. Namely, in a prediction study, it may be found that when people learn that an eyewitness received feedback, they will believe that her ratings of current confidence will be inflated but that her ratings of retrospective confidence, attention, and view will not be affected. Additionally, in a trial study, it may be found that participants who know that an eyewitness received feedback will discount an eyewitness's high current confidence statement but not an eyewitness's high retrospective confidence statement. Fortunately, future attempts to test the question of whether people understand the testimony bolstering effects of post-identification feedback can now take advantage of the methodological issues highlighted by this research.

References

- Anderson, C. A. (1995). Implicit personality theories and empirical data: Biased assimilation, belief perseverance and change, and covariation detection sensitivity. *Social Cognition, 13*, 25-48.
- Anderson, C. A. & Lindsay, J. L. (1998). The development, perseverance, and change of naïve theories. *Social Cognition, 16*, 8-30.
- Anderson, C. A. & Kellam, K. L. (1992). Belief perseverance, biased assimilation, and covariation detection: The effects of hypothetical social theories and new data. *Personality and Social Psychology Bulletin, 18*, 555-565.
- Bradfield, A. L. & McQuiston, D. E. (2004). When does evidence of eyewitness confidence inflation affect judgments in a criminal trial? *Law and Human Behavior, 28*, 369-387.
- Bradfield, A. L. & Wells, G. L. (2000). The perceived validity of eyewitness identification testimony: A test of the five *Biggers* criteria. *Law and Human Behavior, 24*, 581-594.
- Bradfield, A. L., Wells, G. L., & Olson, E. A. (2002). The damaging effect of confirming feedback on the relation between eyewitness certainty and identification accuracy. *Journal of Applied Psychology, 87*, 112-120.
- Brigham, J. C., & Bothwell, R. K. (1983). The ability of prospective jurors to estimate the accuracy of eyewitness identifications. *Law and Human Behavior, 7*, 19-30.
- Cutler, B. L., Penrod, S. D., Dexter, H. R. (1989). The eyewitness, the expert psychologist, and the jury. *Law and Human Behavior, 13*, 311-332.
- Deffenbacher, K. & Loftus, E. F. (1982). Do jurors share a common understanding concerning eyewitness behavior? *Law and Human Behavior, 6*, 15-30.

- Devenport, J. L., Penrod, S. D., & Cutler, B. L. (1997). Eyewitness identification evidence: evaluating commonsense evaluations, *Psychology, Public Policy, and Law*, 3, 338-361.
- Douglass, A. B. & Steblay, N. (under review) Memory distortion in eyewitnesses: A meta-analysis of the post-identification feedback effect.
- Hasel, L. E. & Wells, G. L. (2005). Unpublished data.
- Kassin, S. M. & Barndollar, K. A. (1992). On the psychology of eyewitness testimony: A comparison of experts and prospective jurors. *Journal of Applied Social Psychology*, 22, 1241-1249.
- Luus, C. A., & Wells, G. L. (1994). The malleability of eyewitness confidence: Co-witness and perseverance effects. *Journal of Applied Psychology*, 79, 714-723.
- Malpass, R. S. & Devine, P. G. (1981). Eyewitness identification: Lineup instructions and the absence of the offender. *Journal of Applied Psychology*, 66, 482-489.
- McConkey, K. M. & Roche, S. M. (1989). Knowledge of eyewitness memory. *Australian Psychologist*, 24, 377-384.
- Neil v. Biggers, 409 U.S. 188 (1972).
- Nisbett, R. E. & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231-259.
- Noon, E. & Hollin, C. R. (1987). Lay knowledge of eyewitness behavior: A British survey. *Applied Cognitive Psychology*, 1, 143-153.
- Semmler, C., Brewer, N., & Wells, G. L. (2004). Effects of postidentification feedback on eyewitness identification and nonidentification confidence. *Journal of Applied Psychology*, 89, 334-346.

- Sporer, S. L., Penrod, S., Read, D. & Cutler, B. (1995). Choosing, confidence, and accuracy: A meta-analysis of the confidence-accuracy relation in eyewitness studies. *Psychological Bulletin*, 118, 315-327.
- Tetterton, V. S. & Warren, A. R. (2005). Using witness confidence can impair the ability to detect deception. *Criminal Justice and Behavior*, 32, 433-451.
- Wells, G. L. (1984). How adequate is human intuition for judging eyewitness testimony. In G. L. Wells & E. F. Loftus (Eds.), *Eyewitness testimony: Psychological perspectives* (pp. 256-272). New York: Cambridge University Press.
- Wells, G. L. & Bradfield, A. L. (1998). "Good, you identified the suspect": Feedback to eyewitnesses distorts their reports of the witnessing experience. *Journal of Applied Psychology*, 83, 360-376.
- Wells, G. L. & Bradfield, A. L. (1999). Distortions in eyewitnesses' recollections: Can the postidentification-feedback effect be moderated? *Psychological Science*, 10, 138-144.
- Wells, G. L., Ferguson, T. J., & Lindsay, R. C. L. (1981). The tractability of eyewitness confidence and its implication for triers of fact. *Journal of Applied Psychology*, 66, 688-696.
- Wells, G. L., Lindsay, R. C. L., Ferguson, T. J., (1979). Accuracy, confidence, and juror perceptions in eyewitness identification. *Journal of Applied Psychology*, 64, 440-448.
- Wells, G. L. & Olson, E. A. (2003). Eyewitness testimony. *Annual Review of Psychology*, 54, 277-319.
- Wells, G. L., Olson, E. A., & Charman, S. D. (2003). Distorted retrospective eyewitness reports as functions of feedback and delay. *Journal of Experimental Psychology: Applied*, 9, 42-52.

Wells, G. L., Small, M., Penrod, S. D., Malpass, R. S., Fulero, S.M., Brimacombe, C.A.E.
(1998). Eyewitness identification procedures: Recommendations for lineups and
photospreads. *Law and Human Behavior*, 22, 603-647.

Appendix A

Crime and Investigation Description for Experiment 1

Thursday night at about 7:45pm, a man dressed in a black, hooded sweatshirt and jeans walked into the 7-11. After walking around for a few minutes and picking up a few items, he approached the cashier, a 17-year-old girl named Sarah Jones, and pulled a gun and a plastic bag out of the front pocket of his sweatshirt. He told her to open up the register and put all the money into his bag. As she opened the register, she noticed that he was not wearing any gloves and that one of his hands was on the counter. Approximately \$280 was placed into the bag. Miss Jones hit the alarm button below the counter while emptying the register, but by the time the police showed up, the man had already fled in a small, dark green car.

Miss Jones was taken into the police headquarters and met with Detective Thompson, who asked her to give a complete description of the man who had robbed the store. Sarah described the culprit as a white man in his late twenties, about 6 feet tall and about 150lbs with short dark brown hair. She described his clothing and said that the car was a nondescript dark green sedan, and she thought that the license plate started with the number 9. She was too in shock after the incident to notice anything else about it.

Detective Thompson told the police officers in his precinct to stop any cars that fit the description, had the number 9 anywhere in the license plate sequence, and were being driven by a male between the ages of 20 and 35. The police stopped a few vehicles that evening, and two of the vehicles were being driven by males who fit the description of the culprit. Although neither man had a license plate that started with the number 9, both had license plates that had the number 9 somewhere in the sequence. Also, although neither of the drivers was wearing a black, hooded sweatshirt and neither had a bag of money with him, the police reasoned that the culprit could have changed and stashed the money somewhere. Both men, Sam Cooper and Robert Casey, were called in for questioning.

Robert Casey told the police that he had been out to eat with his girlfriend at the time of the crime. He was able to show the police his credit card receipt from ten minutes after the crime occurred. The waitress at the restaurant and his girlfriend confirmed that he was at the restaurant at the time of the crime, so he was released.

Sam Cooper, on the other hand, said that he was shopping for a birthday present for his mother at the local mall at the time of the crime but had not bought anything. He did not have a receipt to prove his whereabouts and could not name anybody to back up his alibi. Additionally, while investigating his record, the police found that he had been arrested about a year ago for driving under the influence. Since there was no other evidence linking Mr. Cooper to the crime, they asked if they could take a picture of him to place in a photo lineup. Mr. Cooper agreed and was released after the photo was taken.

The next day, Detective Thompson asked Miss Jones to come to the headquarters to look at a photo lineup. When she arrived he placed six pictures on the table in front of her. All of the pictures were of men who fit the general description that Miss Jones had given: male, late twenties, about 150lbs with short dark brown hair. The pictures were numbered one through six. Sam Cooper was number four. The rest of the pictures were of other men

who were either incarcerated or were police officers in civilian clothing, so none of the other men were suspects in the crime.

Detective Thompson asked Miss Jones to look carefully at the pictures and see if she recognized the culprit. He told her that the culprit may or may not be present among the photos and that she should take her time in studying each face. Miss Jones studied the pictures very carefully before indicating number 4, Sam Cooper, as the man who committed the crime. Detective Thompson reacted to her statement and said, "Great job, Miss Jones. You picked the guy we thought it was. Thank you Miss Jones." (Detective Thompson gave no reaction and said, "Thank you, Miss Jones.")¹ He then walked her to the door and told her that they'd be contacting her again soon.

When Detective Thompson returned to his desk, he placed a call to Lori Linskey, the prosecuting attorney, and told her of Miss Jones' identification of Sam Cooper. (and told her, "Miss Jones did a great job. She picked the guy we thought it was.") Prosecutor Linskey visited Miss Jones during her shift at the 7-11 the next day to ask her a few questions. First, she asked Miss Jones to tell her side of the story again. When Miss Jones had told her the story up through the lineup, Prosecutor Linskey said, "It is very important that we know a few things: First, at the time that you picked the man from the photo lineup, how certain were you that he was the man who robbed the store? I am not asking you how certain you *are* of your identification now, but rather how certain you *were at the time you picked the man from the photo lineup* on a scale from 1 to 10, with 1 indicating that you were not certain at all and 10 indicating that you were extremely certain. Second, on a scale from 1 to 10, with 1 indicating that you had a horrible view and 10 indicating that you had a perfect view can you tell me how good of a view you had of the robber? Third, on a scale from 1 to 10, with 1 indicating that you were not paying attention and 10 indicating that you were paying very close attention, how much attention were you paying to the robber's face while the crime was occurring? Lastly, on a scale from 1 to 10, with 1 indicating that you are not confident at all and 10 indicating that you are extremely confident, how confident are you *now* that the man you picked from the lineup was the man who robbed the store?" Prosecutor Linskey wrote down Miss Jones' responses in her notebook, thanked her and returned to her office.

Upon returning to her office, Prosecutor Linskey called Detective Thompson to find out if the police had uncovered any more evidence or followed up on Mr. Cooper's alibi. He told her that further investigation of Mr. Cooper's alibi revealed that a clerk at the local mall said he recognized Mr. Cooper's photo as a person who had been in the mall that evening. He could not, however, confirm the time of the evening that he thought he saw Mr. Cooper. Additionally, Miss Jones had stated that the robber touched the counter surface. No fingerprints lifted from the counter matched Mr. Cooper's prints, but there were several smudged prints that could not be identified.

¹ Items in parentheses will be included in the "No Feedback" conditions.

Appendix B
Dependent Measures for Experiment 1

For the following questions, circle a number that best how you believe Miss Jones would have answered each question:

At the time that you picked the main from the photo lineup, how certain were you that he was the man who robbed the store?

1	2	3	4	5	6	7	8	9	10
Not certain at all								Extremely certain	

How good of a view did you get of the robber?

1	2	3	4	5	6	7	8	9	10
Horrible view								Perfect view	

How much attention were you paying to the robber's face while the crime was occurring?

1	2	3	4	5	6	7	8	9	10
Not paying attention								Paying very close attention	

How confident are you *now* that the man you picked from the lineup was the man who robbed the store?

1	2	3	4	5	6	7	8	9	10
Not confident at all								Extremely confident	

Appendix C

Manipulation Check Questions for Experiment 1

What did Detective Thompson tell Miss Jones when he showed her the photo lineup?

- a) He told her to pick the person who looked most like the culprit
- b) He told her that the culprit may or may not be present among the photos
- c) He told her to pick someone, even if she was not positive

Which of the following did Detective Thompson say to Miss Jones when she picked number four out of the photo lineup?

- a) Detective Thompson gave no reaction and said "Thank you Miss Jones"
- b) Detective Thompson reacted to her statement and said "Great job, Miss Jones. You picked the guy we thought it was. Thank you Miss Jones."

What was the store clerk at the mall able to say regarding Mr. Cooper's alibi?

- a) He could not recognize a photo of Mr. Cooper as having been at the mall that night.
- b) He recognized Mr. Cooper's photo as having been at the mall that night, but could not confirm the time of the evening.
- c) He recognized Mr. Cooper's photo as having been at the mall that night, and said that it was approximately 7:30-8:00 PM.

Is there anything about the procedure used by Detective Thompson in conducting the photo lineup that causes you some concern?

- a) No, it appeared to be done objectively
- b) Yes, I was bothered by (fill in a statement below regarding what bothered you)

Consider again the four questions that Prosecutor Linskey posed to Miss Jones. Which of the answers to these questions would be the most important for you to know in determining the accuracy of Miss Jones's identification? Mark 1 for the most important, 2 for the next most important, 3 for the next most important, and 4 for the least important.

- ____ "Miss Jones, at the time that you picked the main from the photo lineup, how certain were you that he was the man who robbed the store?"
- ____ "Miss Jones, how good of a view did you get of the robber?"
- ____ "Miss Jones, how much attention were you paying to the robber's face while the crime was occurring?"
- ____ "Miss Jones, how confident are you *now* that the man you picked from the lineup was the man who robbed the store?"

Appendix D

Crime and Investigation Description for Experiment 2

Thursday night at about 7:45pm, a man dressed in a black, hooded sweatshirt and jeans walked into the 7-11. After walking around for a few minutes and picking up a few items, he approached the cashier, a 17-year-old girl named Sarah Jones, and pulled a gun and a plastic bag out of the front pocket of his sweatshirt. He told her to open up the register and put all the money into his bag. As she opened the register, she noticed that he was not wearing any gloves and that one of his hands was on the counter. Approximately \$280 was placed into the bag. Miss Jones hit the alarm button below the counter while emptying the register, but by the time the police showed up, the man had already fled in a small, dark green car.

Miss Jones was taken into the police headquarters and met with Detective Thompson, who asked her to give a complete description of the man who had robbed the store. Sarah described the culprit as a white man in his late twenties, about 6 feet tall and about 150lbs with short dark brown hair. She described his clothing and said that the car was a nondescript dark green sedan, and she thought that the license plate started with the number 9. She was too in shock after the incident to notice anything else about it.

Detective Thompson told the police officers in his precinct to stop any cars that fit the description, had the number 9 anywhere in the license plate sequence, and were being driven by a male between the ages of 20 and 35. The police stopped a few vehicles that evening, and two of the vehicles were being driven by males who fit the description of the culprit. Although neither man had a license plate that started with the number 9, both had license plates that had the number 9 somewhere in the sequence. Also, although neither of the drivers was wearing a black, hooded sweatshirt and neither had a bag of money with him, the police reasoned that the culprit could have changed and stashed the money somewhere. Both men, Sam Cooper and Robert Casey, were called in for questioning.

Robert Casey told the police that he had been out to eat with his girlfriend at the time of the crime. He was able to show the police his credit card receipt from ten minutes after the crime occurred. The waitress at the restaurant and his girlfriend confirmed that he was at the restaurant at the time of the crime, so he was released.

Sam Cooper, on the other hand, said that he was shopping for a birthday present for his mother at the local mall at the time of the crime but had not bought anything. He did not have a receipt to prove his whereabouts and could not name anybody to back up his alibi. Additionally, while investigating his record, the police found that he had been arrested about a year ago for driving under the influence. Since there was no other evidence linking Mr. Cooper to the crime, they asked if they could take a picture of him to place in a photo lineup. Mr. Cooper agreed and was released after the photo was taken.

The next day, Detective Thompson asked Miss Jones to come to the headquarters to look at a photo lineup. When she arrived he placed six pictures on the table in front of her. All of the pictures were of men who fit the general description that Miss Jones had given: male, late twenties, about 150lbs with short dark brown hair. The pictures were numbered one through six. Sam Cooper was number four. The rest of the pictures were of other men who were either incarcerated or were police officers in civilian clothing, so none of the other men were suspects in the crime.

Detective Thompson asked Miss Jones to look carefully at the pictures and see if she recognized the culprit. He told her that the culprit may or may not be present among the photos and that she should take her time in studying each face. Miss Jones studied the pictures very carefully before indicating number 4, Sam Cooper, as the man who committed the crime. Detective Thompson gave no reaction and said, "Thank you, Miss Jones." He then walked her to the door and told her that they'd be contacting her again soon.

Later that evening, Detective Thompson placed a call to Lori Linskey, the prosecuting attorney (, and told her, "Miss Jones did a great job today. She picked the guy we thought it was.") He confirmed with Prosecutor Linskey that she would visit Miss Jones the next day to ask her a few questions about the crime so that Prosecutor Linskey could begin to gather information about the crime.

After talking with Prosecutor Linskey, Detective Thompson also called Miss Jones(, and told her, "You did a great job today. You picked the guy we thought it was.") He (also) told her when and where Prosecutor Linskey would be meeting her the next day so that Miss Jones would be expecting her visit.

As promised, Prosecutor Linskey visited Miss Jones during her shift at the 7-11 the next day to ask her a few questions. First, she asked Miss Jones to tell her side of the story again. When Miss Jones had told her the story up through the lineup, Prosecutor Linskey said, "It is very important that we know this. *At the time that you picked the man from the photo lineup*, how certain *were* you that he was the man who robbed the store?" (How certain *are* you that the man you picked from the photo lineup was the man who robbed the store?") Miss Jones looked her straight in the eye and said, "I am/was extremely positive. You could say that I am/was 120% certain that the man in the photo that I picked is the man who did it. There is/was really no doubt in my mind at all." (Miss Jones looked at her and said, "Well, I think/thought that it was him, but I really can't/couldn't be positive. I guess I think/remember thinking that it might be him.") Prosecutor Linskey wrote down Miss Jones' responses in her notebook, thanked her and returned to her office.

Upon returning to her office, Prosecutor Linskey called Detective Thompson to find out if the police had uncovered any more evidence or followed up on Mr. Cooper's alibi. He told her that further investigation of Mr. Cooper's alibi revealed that a clerk at the local mall said he recognized Mr. Cooper's photo as a person who had been in the mall that evening. He could not, however, confirm the time of the evening that he thought he saw Mr. Cooper. Additionally, Miss Jones had stated that the robber touched the counter surface. No fingerprints lifted from the counter matched Mr. Cooper's prints, but there were several smudged prints that could not be identified.

Appendix E
Dependent Measures for Experiment 2

How likely do you think it is that Miss Jones made an accurate identification of Mr. Cooper?

1	2	3	4	5	6	7	8	9	10
Not likely at all								Extremely likely	

How good of a view do you think Miss Jones had of the robber?

1	2	3	4	5	6	7	8	9	10
Horrible view								Perfect view	

How much attention do you think Miss Jones was paying to the robber's face while the crime was occurring?

1	2	3	4	5	6	7	8	9	10
Not paying attention								Paying very close attention	

To what extent is the mall clerk's statement significant in backing up Mr. Cooper's alibi?

1	2	3	4	5	6	7	8	9	10
Not significant								Very significant	

To what extent do you think that Miss Jones' statement of her certainty in the identification accurately reflects how certain she was in her identification *at the time that she picked the man from the lineup*?

1	2	3	4	5	6	7	8	9	10
Definitely not									

To what extent does the failure to find Mr. Cooper's fingerprints on the counter raise concern that Cooper might not be the robber?

1	2	3	4	5	6	7	8	9	10
No concern								Maximum concern	

Do you think that Mr. Cooper should be charged with robbing the 7-11 store?

1	2	3	4	5	6	7	8	9	10
Definitely should Not be charged								Definitely should be charged	

Appendix F

Manipulation Check Questions for Experiment 2

What did Detective Thompson tell Miss Jones when he showed her the photo lineup?

- a) He told her to pick the person who looked most like the culprit
- b) He told her that the culprit may or may not be present among the photos
- c) He told her to pick someone, even if she was not positive

Which of the following did Detective Thompson say to Prosecutor Linskey when he called her? (Please be sure to read all of the options before answering)

- a) He told her, "Miss Jones did a great job today. She picked the guy we thought it was." He also confirmed when and where she would be meeting Miss Jones the next day.
- b) He told her that Mr. Cooper's alibi could not be definitively confirmed. He also confirmed when and where she would be meeting Miss Jones the next day.
- c) He confirmed when and where she would be meeting Miss Jones the next day.

Which of the following did Detective Thompson say to Miss Jones when he called her after talking with Prosecutor Linskey? (Please be sure to read all of the options before answering)

- a) He told her when and where Prosecutor Linskey would be meeting her the next day.
- b) He said "You did a great job today. You picked the guy we thought it was." He also told her when and where Prosecutor Linskey would be meeting her the next day.
- c) He told her that Mr. Cooper's alibi could not be definitively confirmed. He also told her when and where Prosecutor Linskey would be meeting her the next day.

Which of the following questions did Prosecutor Linskey ask Miss Jones?

- a) Before you saw the photo lineup, how certain were you that you would be able to identify the culprit upon seeing him?
- b) How certain are you that the man you picked from the photo lineup was the man who robbed the store?
- c) At the time that you picked the man from the photo lineup, how certain were you that he was the man who robbed the store?
- d) At trial, how certain do you think you'll be that the man you picked from the photo lineup was the man who robbed the store?

What was the store clerk at the mall able to say regarding Mr. Cooper's alibi?

- a) He could not recognize a photo of Mr. Cooper as having been at the mall that night.
- b) He recognized Mr. Cooper's photo as having been at the mall that night, but could not confirm the time of the evening.
- c) He recognized Mr. Cooper's photo as having been at the mall that night, and said that it was approximately 7:30-8:00 PM.

Is there anything about how Detective Thompson interacted with the witness that causes you some concern?

a) No, everything appeared to be fine to me

b) Yes, I was bothered by (fill in a statement below regarding what bothered you)

Table 1

Eyewitness' choices from lineup as functions of the vandal's presence or absence and biasing instructions, and students' predictions (in %)

	Choice of vandal	Choice of innocent person	No choice
<i>Vandal present</i>			
Biased instructions	75 (79)	25 (12)	0 (10)
Unbiased instructions	83 (74)	0 (15)	17 (12)
<i>Vandal absent</i>			
Biased instructions	--	78 (16)	22 (84)
Unbiased instructions	--	33 (18)	67 (81)

Note: Students' predictions are in parentheses. Dashes indicate that the situation cannot occur.

Table 2

Participants' predictions of how the eyewitness would have answered questions about the witnessed event and the subsequent identification as a function of either finding out that the eyewitness received feedback or not.

		No Feedback (<i>n</i> = 48)	Feedback (<i>n</i> = 48)
Retrospective Confidence	M	7.38	6.79
	SD	1.73	1.58
	CI	(6.89, 7.87)	(6.34, 7.24)
View	M	6.85	6.50
	SD	1.92	1.85
	CI	(6.31, 7.39)	(5.98, 7.02)
Attention	M	5.35	5.04
	SD	2.04	1.64
	CI	(4.77, 5.93)	(4.58, 5.50)
Current Confidence	M	6.55	6.33
	SD	2.32	2.35
	CI	(5.89, 7.21)	(5.67, 6.99)

Table 3

Participants' ratings of how important they thought each question was to determine the accuracy of the eyewitness's identification, with 1 being the most important and 4 being the least important, as a function of either finding out that the eyewitness received feedback or not.

		No Feedback (<i>n</i> = 48)	Feedback (<i>n</i> = 48)
Retrospective Confidence	M	2.79	2.65
	SD	0.97	1.02
	CI	(2.53, 3.05)	(2.36, 2.94)
View	M	2.19	2.17
	SD	0.98	1.02
	CI	(1.91, 2.47)	(1.88, 2.46)
Attention	M	1.92	1.94
	SD	0.94	0.81
	CI	(1.65, 2.19)	(1.71, 2.17)
Current Confidence	M	3.29	3.25
	SD	1.51	1.16
	CI	(2.86, 3.72)	(2.92, 3.58)

Table 4

Correlation matrix for all participants' predictions of the eyewitness's ratings of retrospective confidence, view, attention, and current confidence.

	Retrospective Confidence	View	Attention	Current
Confidence				
Retrospective Confidence	1			
View	.542** CI (.39, .67)	1		
Attention	.386** CI (.21, .55)	.655** (.53, .77)	1	
Current Confidence	.278* CI (.08, .46)	.452** (.29, .60)	.468** (.31, .62)	1

Note: * Correlation is significant at the .006 level, ** Correlation is significant at <.001 level

Table 5

Correlation matrix for the participants' predictions of the eyewitness's ratings of retrospective confidence, view, attention, and current confidence, separated by feedback condition.

	Retrospective Confidence	View	Attention	Current
Confidence				
<i>No Feedback Condition</i>				
Retrospective Confidence	1			
View	.667*** CI (.47, .80)	1		
Attention	.486*** CI (.24, .68)	.708*** (.53, .83)	1	
Current Confidence	.550*** CI (.32, .73)	.667*** (.47, .80)	.578*** (.36, .75)	1
<i>Feedback Condition</i>				
Retrospective Confidence	1			
View	.386** CI (.11, .61)	1		
Attention	.233 CI (-.05, .49)	.585*** (.37, .75)	1	
Current Confidence	-.015 CI (-.31, .28)	.231 (-.06, .49)	.340* (.06, .58)	1

Note: * Correlation is significant at < .05 level, ** Correlation is significant at < .01 level, *** Correlation is significant at <.001 level

Table 6

Participants' predictions of how the eyewitness would have answered questions about the witnessed event and the subsequent identification as a function of either being concerned about the presence of feedback or not being aware that feedback occurred.

		Concern About	
		No Feedback	Feedback
		(<i>n</i> = 48)	(<i>n</i> = 22)
Retrospective Confidence	M	7.38	6.50
	SD	1.73	1.50
	CI	(6.89, 7.87)	(5.87, 7.13)
View	M	6.85	6.27
	SD	1.92	1.88
	CI	(6.31, 7.39)	(5.48, 7.06)
Attention	M	5.35	4.95
	SD	2.04	1.76
	CI	(4.77, 5.93)	(4.22, 5.69)
Current Confidence	M	6.55	7.05
	SD	2.32	2.38
	CI	(5.89, 7.21)	(6.06, 8.04)

Table 7

Participants' ratings of how important they thought each question was to determine the accuracy of the eyewitness's identification, with 1 being the most important and 4 being the least important as a function of either being concerned about the presence of feedback or not being aware that feedback occurred.

		Concern About	
		No Feedback	Feedback
		(<i>n</i> = 48)	(<i>n</i> = 22)
Retrospective Confidence	M	2.79	2.45
	SD	0.97	1.01
	CI	(2.53, 3.05)	(2.03, 2.87)
View	M	2.19	2.50
	SD	0.98	0.91
	CI	(1.91, 2.47)	(2.12, 2.88)
Attention	M	1.92	1.90
	SD	0.94	0.97
	CI	(1.65, 2.19)	(1.49, 2.31)
Current Confidence	M	3.29	3.14
	SD	1.51	1.28
	CI	(2.86, 3.72)	(2.61, 3.67)

Table 8

Participants' ratings on a scale from 1(not likely at all) to 10(extremely likely) of how likely they thought it was that the eyewitness made an accurate identification of the suspect.

		No Feedback	Feedback
<i>Retrospective Confidence</i>			
Low	M	5.36	5.02
	SD	1.66	1.78
	CI	(4.86, 5.86)	(4.51, 5.53)
	<i>n</i>	42	46
High	M	5.84	5.55
	SD	1.93	1.78
	CI	(5.28, 6.40)	(5.01, 6.09)
	<i>n</i>	45	42
<i>Current Confidence</i>			
Low	M	5.04	4.91
	SD	1.65	1.61
	CI	(4.56, 5.52)	(4.44, 5.38)
	<i>n</i>	46	45
High	M	5.64	5.61
	SD	2.27	1.98
	CI	(4.99, 6.29)	(5.04, 6.18)
	<i>n</i>	47	46

Table 9

Participants' ratings on a scale from 1 (definitely should not be charged) to 10 (definitely should be charged) of whether they thought that the suspect should be charged with the crime.

			No Feedback	Feedback
<i>Retrospective Confidence</i>				
Low	M		3.67	3.39
	SD		2.26	1.90
	CI		(2.99, 4.35)	(2.84, 3.94)
	<i>n</i>		42	46
High	M		4.56	4.19
	SD		2.15	2.11
	CI		(3.93, 5.19)	(3.55, 4.83))
	<i>n</i>		45	42
<i>Current Confidence</i>				
Low	M		3.50	3.12
	SD		2.02	1.50
	CI		(2.92, 4.08)	(2.68, 3.56)
	<i>n</i>		46	45
High	M		4.32	4.26
	SD		2.18	2.28
	CI		(3.70, 4.94)	(3.60, 4.92)
	<i>n</i>		47	46

Table 10

Ratings on a scale from 1(not likely at all) to 10(extremely likely) of how likely the participants who expressed concern about feedback (n=79) thought it was that the eyewitness made an accurate identification of the suspect.

		Low Confidence	High Confidence
Retrospective Confidence	M	4.85	5.38
	SD	1.84	1.45
	CI	(4.04, 5.66)	(4.59, 6.17)
	<i>n</i>	20	13
Current Confidence	M	4.40	5.23
	SD	1.57	1.80
	CI	(3.71, 5.09)	(4.54, 5.92)
	<i>n</i>	20	26

Table 11

Ratings on a scale from 1(definitely should not be charged) to 10(definitely should be charged) of whether the participants who expressed concern about the presence of feedback (n=79) thought that the suspect should be charged with the crime.

		Low Confidence	High Confidence
Retrospective Confidence	M	3.15	4.31
	SD	1.76	2.10
	CI	(2.38, 3.92)	(3.17, 5.45)
	<i>n</i>	20	13
Current Confidence	M	2.60	4.23
	SD	0.99	1.99
	CI	(2.17, 3.03)	(3.47, 4.99)
	<i>n</i>	20	26