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**The Effect of Post Identification Feedback and Delay on the Witnessing
Experience**

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The Effect of Post Identification Feedback and Delay on the Witnessing Experience

Two studies examined the effects that post identification feedback and retention interval has on eyewitness' confidence level. Participants in both experiments viewed a videotape from a store security camera and were asked to make a line-up identification from a culprit absent line-up. Once the identification had been made, participants were either given confirming feedback (e.g. you picked the correct suspect) or no feedback. A series of questions were then given to the participants either immediately, one week, or three weeks later in the first experiment and immediately or one week later in the second. Delay was used in between the lineup identification and the questionnaire in the first experiment and in between the crime and the lineup identification in the second. The results indicated a main effect of feedback, but no main effect of retention interval or interactions. Theoretical implications evaluating trace strength and the accessibility hypothesis are discussed.

Introduction

Eyewitness identification testimony is thought to be the most persuasive evidence in criminal cases (Bergman, 1996; Dorf, 2001; Kaci, 1995). A recent study reexamined these types of cases utilizing DNA evidence in comparison to the eyewitness identification. This study found that 75% of the cases where the eyewitness' identification was the sole or primary evidence for conviction were in fact wrongful convictions (Connors, Lundregan, Miller, & McEwan, 1996). The frequency of inaccurate eyewitness identification creates questions concerning the legitimacy of this form of evidence. The problem is compounded by the fact eyewitness identification is considered to be the most persuasive form of evidence (Wells and Bradford, 1998).

Jurors assess credibility of eyewitness testimony using several factors. The confidence of the eyewitness can have serious influence on the jury's decision (Cutler, Penrod, & Dexter, 1990). Juror's willingness to accept these identifications increases when the witness demonstrates confidence about the identification (*Neil v. Biggers*, 1972). This willingness to accept an eyewitness's identification as convincing evidence is problematic because confidence levels fluctuate on factors other than accuracy. Research shows that the person administering the line-up can influence the witness's confidence levels about the identification independent of

accuracy (Wells & Bradford, 1998). Thus the line-up administrator can have an adverse effect on the witness.

The Technical Working Group (1999) has constructed guidelines in an attempt to eliminate administrator bias. One of the rules states that no one person should stick out of the line up from the rest by the description given by the eyewitness. Although, the set of guidelines is thorough in addressing the line-ups, they have not put any prohibition on the feedback an administrator gives during the identification process. This sort of feedback is called post identification feedback (PIF) (Wells & Bradford, 1998).

The evidence showing that eyewitness confidence is malleable implies that confidence should be able to be inflated. To study how persistent the effects of initial information concerning participant's confidence levels had on later discreditations of that information, Luus and Wells (1994) conducted a study that systematically studied the effects of co-witness PIF on confidence, attention, etc. In the first of two studies, each participant was paired up with another participant and watched a staged theft, made individual identifications from a photospread, and was given post identification feedback regarding their co-witness's alleged identification. In the first Luus and Wells study, nine different types of feedback were given, but for this paper we will only detail the results of the confirmatory feedback, because this was the one variable that yielded widely significant results. The confirmatory feedback in this study was when the witness was told that they had selected the same person as the co-witness. Those that received confirmatory feedback reported higher levels of confidence in their identification, in comparison to the control, in later interviews by posing police officers. It is important to note that the administrators or police gave no indication of a correct identification. All identifications made

by the witnesses were inaccurate since they were only given the choices in a target-absent lineup, where the actual culprit is not present.

In addition, in Experiment 2, participant jurors watched videotapes of the interrogations of the witnesses from all nine conditions. The juror's reported that the witnesses who received the confirmatory feedback were more credible than the witnesses of the other conditions. This illustrates that the confirmatory feedback increased the witness's confidence and made their testimony seem more believable. This increase in believability occurred independent of the accuracy of the eyewitness. In the real world, however, although co-witness PIF effects may play a part in influencing a witness, a heavier influence on a witness could come from the administrator of the lineup. In order to identify what the effects of direct administrator feedback would have on PIF, Wells and Bradford (1998) conducted a study to test the hypothesis that the PIF would be stronger with the confirmatory feedback by an administrator than with no feedback or with disconfirming feedback.

Wells and Bradford (1998) studied the effects of post identification feedback on college-age eyewitnesses. The study assessed numerous factors associated with the witnessing experience, including confidence levels in the identification, attention paid during the video, and how good of a view the witness had of the culprit. In this study, participants watched a security camera video and then identified the person in the video from a line-up. The participants were instructed that the person in the video was the suspect in a crime. They were then asked to identify him from a culprit absent line-up. The culprit absent line-up ensured inaccurate identifications.

To study the effects of PIF, the participants were divided into three groups: confirming, disconfirming, and no feedback. The confirming group was told that they had made the correct

identification. The disconfirming group was told that they had made an inaccurate identification. The third group was not given any feedback and was used as a control. Following the feedback each participant answered a series of testimony relevant questions.

The results revealed significant differences in the participants of the confirming feedback group vs. the control feedback group. As expected, the PIF increased the levels of confidence reported by the participants relative to no feedback controls. Concurrently, the PIF also heightened the participants' self-reports of attention paid to the culprit, as well as view of the culprit during the video. There were only four significant results out of ten for the disconfirming vs. no-feedback group, and those were in the categories of attention, basis for identification, ease of identification, and willingness to testify. It was because of this low correlation between the disconfirming and the no-feedback controls that we did not utilize this variable in the current experiment.

While the effects of PIF are apparent, it is important to consider the applied value of this research. The consensus from the past twenty years of research has been that confirming feedback influences the eyewitness in such a way that they feel more confident that they have picked the correct culprit independent of how correct they are in that judgment. Researchers have also found that contrary to apparent logical reason, disconfirming feedback does not raise or lower the effect of the PIF. Most research on post-identification feedback has studied the effects of PIF on eyewitnesses immediately. The problem with the conclusions reached by said research is not in the theories they develop, but in the time frame in which the eyewitness makes the identification and the subsequent judgments of confidence, view, etc. Thus far, the longest interval in between the identification and assessment has been 48 hrs. performed in the Wells, Olson, and Charman (2003) study. However, The United States Department of Defense found

that the average case does not appear in court until 379 days after the arrest. This time frame suggests that in order for the effects of PIF to be valid they must be able to endure over a similar time frame. Yet, for research purposes, this time frame is too long; therefore the administrators for this study used two delays, one week and three weeks, and compared the two to identify differences between the delay conditions to determine if the PIF effects were independent of retention interval.

The first experiment to test the effects of PIF on delay was conducted by Wells, Olson, and Charman (2003). In their experiment, participants followed the same procedure as in the original Wells and Bradfield (1998), except that half of the participants were put in a delay condition of 48 hours. Therefore, after the lineup identification, the experimenters would either present the questionnaire measuring retrospective confidence, view, etc., immediately or two days later. The results from Wells et al. (2003) reported no interaction between retention levels and PIF. This finding is important because the conclusion was that one cannot prevent the effects of PIF merely by monitoring the events leading up to the identification, but that distortions appear 48 hrs. later as often as they do immediately. The theoretical question of why this occurred was answered by saying that the eyewitness had little or no directly accessible trace to their judgments at the time of identification, but instead they were mere inferences that were constructed at the time the measures were taken.

This theoretical position taken by Wells et al. (2003) is in concurrence with one of the two opposing theories that attempt to explain the persistent effects of PIF. Both make different predictions with respect to retention interval. First, the trace strength theory predicts that PIF has the strongest feedback when memory is the weakest. Second, the accessibility theory predicts

that after a passage of time people cannot remember the quality of their memory at the time they made the identification.

The prediction of the trace strength theory suggests that rapid forgetting may make the participant more susceptible to PIF (Brained & Reyna, 1988). It can then be argued that this rapid forgetting may lead to reliance on external cues (information given by the administrator) when the internal memory is weak. Therefore, the trace strength theory supports the hypothesis that the effects of PIF will increase through retention intervals.

By contrast, the accessibility hypothesis (Wells et al. 2003) states that a participant has little or no memory of their confidence levels at the time of identification. Therefore, at the time of the identification they are not assessing their confidence levels, and when the time comes to assess that judgment of confidence, as in a trial as an eyewitness, the eyewitness relies on memory that is currently available to them pertaining to that identification. This leaves the participant to infer levels of judgment on the PIF that was given to them at the time of identification. The accessibility theory suggests then that time will not mediate the effects of PIF.

The purpose of these studies is to investigate longer retention intervals for more ecological validity. These studies take both the trace strength and accessibility theory into account when studying the retention intervals. Both theories have mounting evidence of support, therefore, the researchers allowed for both to act as a possibility as an explanation of the data. The first study examines three time conditions (immediate, one week, and three week) and the effects of the confirming feedback. Again, the disconfirming feedback was not utilized by the researchers because of the low rate of significant results indicated in previous research. It is hypothesized, by the accessibility hypothesis, that all three conditions will be affected equally by

the PIF, because the effect of the PIF is impervious to time. The reason for choosing the accessibility hypothesis as the basis for the hypothesis was due to the fact that more research has supported the accessibility hypothesis in the past than has the trace-strength theory regarding PIF. The conclusion of the Wells et al. (2003) study stated that they found no support for either delayed feedback or delayed measures affecting PIF. The purpose of this study is to corroborate these findings thus strengthening the case for recommendations for double-blind lineup procedures and getting confidence statements directly after identification and before feedback.

The second experiment follows from the results from the first and the Wells et al. (2003) study as it examines two time conditions (immediate, one week) and the effects of confirming and control PIF on them. This experiment will change the delay from in between the identification and the measures to in between the “crime” and the identification. Both studies stand alone to attempt to expand upon the ecological validity of the nature of PIF. However, when both studies are taken into account, the results will yield much to the decision of using double blind line-ups and confidence measures taken at the time of the identification. Again, the prediction is that both conditions will be equally affected by the PIF. The reasoning behind this hypothesis follows from the accessibility hypothesis for the same reasons as in experiments performed by Wells et al. (2003) and Experiment 1.

Experiment 1

Methods

Participants

Participants included 180 Introductory Psychology students from The University of Alabama in Huntsville. There were a total of thirty participants for each of the six between

participant conditions. Students received partial fulfillment of required participation in experimental research or library research.

Design

The design of the research conformed to a 2 (feedback: confirming vs. none) X 3 (retention interval: immediate, one week, three weeks) between participant factorial analysis of variance (ANOVA). Both factors were manipulated between participants and the major dependent variables were the answers to the questionnaire. The questionnaire consisted of sixteen questions regarding the witnessing experience (see Appendix 1 for the full questionnaire).

Materials

Materials for the experiment consisted of a video, a photospread line-up, and a questionnaire. Participants were also given a booklet to fill out their responses to the questions asked in the questionnaire

Video. The video used in the experiment was a real clip taken from a store security camera; the video lasted for about three minutes. In the video a lady was shown who was working behind a store counter. For about two and a half minutes this lady was shown doing her regular work and this was to get the participants accustomed to the grainy quality of the video. At one point the screen went blank for a few seconds and when the video resumed a man was shown walking across the screen in slow motion, this was the person that participants were asked to focus their attention on.

Photospread. The photospread that was used in the experiment was the original lineup shown to the witnesses of the actual crime. There were five men pictured on this photospread and both a frontal and side view was shown of each of them. The pictures were lined up in a way so that

three sets of pictures were arranged along the top of the sheet and two sets of photos were arranged on the bottom. The photospread was a culprit absent lineup, meaning that the actual suspect was not in the lineup.

Questionnaire. The questionnaire given to participants contained sixteen questions. The first 14 questions required a number response, based on a 10-point likard scale. Question 15 required either a 1 or a 2 for the response and for question 16 any number was accepted. There were five questions that, in particular, have yielded significant results that will be of interest here: confidence, view, attention, basis, and willingness to testify (Wells and Bradford, 1998). It is these questions, especially willingness to testify and basis, whose results will be of interest to the judicial proceedings in an actual case.

Procedures

Upon entering the room, participants were seated and introduced to the experiment. Participants were told that the purpose of the study was to determine how much someone could tell about another person after seeing him/her for just a short time. Participants were then asked to watch the short video clip and to pay particular attention to the person walking across in slow motion. Participants were told that after the clip they would be asked a few questions. After the video had been shown, participants were informed of the real nature of the experiment. They were told that the experiment was actually an eyewitness identification study and that the video shown was a real clip from a store security camera and that the man who appeared in slow motion had shot a store clerk minutes after the footage was taken. At this point, if there was more than one person in the room the participants were separated.

Participants were then given a photospread sheet and asked to use their best judgment in identifying the gunman from the video. They were asked to record their response on the paper

provided with an X in the corresponding box to the person they identified as the gunman. Once a response was marked the experimenter either gave confirming feedback, “Yes, you picked the gunman,” or there was no feedback given and the next step was taken. For immediate participants the questionnaire was given and participants were asked to mark their answers on the provided answer sheet. If a participant had a question they were simply told to use their best judgment. After all questions had been answered, participants were then asked to read and sign the debriefing form on the following page in their booklet. After this, participants were thanked for their time, asked not to discuss the experiment with anyone and then dismissed.

Participants in the one-week condition and three week conditions were dismissed immediately after their identification of the gunman had been made unless feedback was first given and they were dismissed. Upon arrival of the second session, participants were given their booklets and the questionnaire. An overview of the questionnaire responses was given and once participants completed answering the questions they were asked to read and sign the debriefing form in their booklets. After this had been done, participants were thanked, asked not to discuss the experiment with anyone and then dismissed.

Results

The results from the questionnaire are summarized in Table 1. As you can see from Table 1, the hypothesis that the effect of post identification feedback on the retention intervals was the immediate group would be equal to the one week would be equal to the three week was supported. As can be seen in Table 1 participants in the feedback condition reported that they had a better view of the suspect, paid more attention to the video, and were more confident in their lineup identification relative to no feedback controls.

In order to confirm the above conclusions, we conducted separate 2 (feedback: none vs. confirming) X 3 (retention interval: immediate, one week, three week) on participant's confidence ratings. (All effects are reported at the .01 level unless otherwise noted). The analysis of participant's confidence revealed a significant main effect of feedback ($F(1,161) = 37.71$, $MSE = 3.56$). That is giving people confirming feedback increased their memory of how confident they were when they made their identification relative to no feedback controls. There was no significant effect of retention interval and no significant interaction. This indicates that the effect of confirming feedback was impervious to retention interval as the magnitude of the PIF effect was similar immediately and at retention intervals of one and three weeks. This is consistent with the findings of Wells et al. (2003).

The second question of interest was how good of a view did the witness perceive they had of the culprit. The analysis of the data pertaining to view also yielded a significant result ($F(1,161) = 22.59$, $MSE = 3.783$). That is, confirming that the witness' identification was correct increased their memory of good of a view they had when they made their identification relative to no feedback controls.

As was the previous two, the analysis of participant's attention also revealed a significant main effect of feedback, ($F(1,161) = 17.56$, $MSE = 4.948$), and generated no significant effects of retention interval or interactions. In other words, when people were given confirming feedback their memory of how much attention they felt they paid to the video when they made their identification increased. That we found main effects of feedback, but no effect of retention interval or interactions is interesting because it means that the confirming feedback was not influenced by retention interval as the magnitude of the PIF effect was similar in all three retention intervals. All three finding are consistent with Wells et al. (2003).

The results from the test to see if the overconfidence in a participant's identification, as well as an inflated memory of how good of a view they had, would have on their basis for making their decision revealed a significant main effect of feedback, ($F(1,161) = 29.70$, $MSE = 2.119$). In other words, at the time the researchers asked the witness to judge their attention and basis, their memory of how good of a basis they had for making their lineup identification increased relative to those who did not receive feedback. This result means that regardless of whether they were tested immediately, one week, or three weeks later, the confirmatory feedback was not influenced by retention interval.

Finally, and probably the most interesting result, was that the analysis of willingness to testify was a significant main effect of feedback, ($F(1,161) = 29.70$, $MSE = 4.89$). So those witnesses who received confirming feedback were more willing to testify that the person they saw was the culprit than those who did not receive feedback. Compared to the other results, this significant result serves to show how much more confident a participant who has been given confirmatory feedback is over one who has not had any influence on their decision. Again this result means that the confirming feedback was not influenced by retention interval as the magnitude of the PIF effect was similar immediately as well as in both delay conditions.

Discussion

This study was motivated mainly by the question of how post identification feedback affected a witness' post identification feedback effect with a retention interval longer than three days. The immediate condition was used to corroborate the findings of previous research. The results were clear, the feedback had no affect on retention interval. We had expected that all of the retention intervals to be equal along the type of feedback and that is what we found. In other words, we found that the effect of retention interval did not weaken the post identification

feedback effect, even after a three-week retention interval. However, we did find that giving people confirming feedback increased their memory of how confident they were when they made their identification relative to no feedback controls. Giving feedback also increased their memory of good of a view they had when they made their identification, and increased their memory of how much attention they felt they paid to the video when they made their identification relative to no feedback controls. The participants were also more willing to testify in a court of law after having been given confirming feedback as compared to no feedback. All of these findings replicate Wells' et al. (2003) experimental results.

Experiment 2

The second experiment involved showing the videotape and then incorporating the delay in between the video and the lineup identification. The primary purpose of this manipulation was to investigate whether the results found in the first experiment would be manifest no matter where the delay was. In other words, the second experiment is further investigating the claim that delay has no effect on the magnitude of the PIF effect. A secondary purpose is to lend more ecological validity to the PIF effect literature by manipulating the delay in between the video and identification. The average number of days in between the actual crime and the lineup identification are not known since the identification requires both the acquisition of suspects and eyewitnesses. However, it is logical to assume that there is a longer delay than what had previously been presented in previous procedures, namely a couple of minutes.

In light of the first experiment, where there was no significant difference found between the one week and three week conditions on the magnitude of the PIF, for the second manipulation, the three week condition was not tested for. The hypothesis for this second manipulation was the same as in experiment one. That is, that both conditions will be equally

effected by the PIF. This hypothesis is logical because of the accessibility hypothesis that would state that the effects of the PIF would not be mediated by time.

Methods

Participants

Participants included 120 Introductory Psychology students from The University of Alabama in Huntsville. There were a total of thirty participants for each of the four between participant conditions. There were only four between participant conditions because in Experiment 1 there was no difference between the one week and three week conditions for either Feedback or No Feedback conditions. Students received partial fulfillment of required participation in experimental research or library research.

Design

The design of the research conformed to a 2 (feedback: confirming vs. none) X 2 (retention interval: immediate, one week) between participant factorial analysis of variance (ANOVA). Both factors were manipulated between participants and the major dependent variables were the answers to the questionnaire. The questionnaire consisted of sixteen questions regarding the view that the participant had, the confidence of the participant, and the length of time that the gunman appeared in the video (see Appendix 1 for the full questionnaire).

Materials

The materials were the same as in Experiment 1

Procedures

The procedure was repeated in Experiment 2 as in Experiment 1 except the retention interval was moved from in between the lineup identification and the questionnaire to in between the video and the identification. Upon entering the room, participants were seated and

introduced to the experiment. Participants were told that the purpose of the study was to determine how much someone could tell about another person after seeing him/her for just a short time. Participants were then asked to watch the short video clip and to pay particular attention to the person walking across in slow motion. Participants were told that after the clip they would be asked a few questions. After the video had been shown participants were informed of the real nature of the experiment. They were told that the experiment was actually an eyewitness identification study and that the video shown was a real clip from a store security camera and that the man who appeared in slow motion had shot a store clerk minutes after the footage was taken. At this point, the participants were dismissed and sent home. Upon the return of the participants, the rest of the procedure from Experiment 1 was followed to the completion of the experiment.

Results

The means and standard deviations for each question on the questionnaire are presented in Table 2. As you can see from Table 2 the effect of post identification feedback was equal immediately and after a one-week retention interval. Participants in the feedback condition consistently reported that they had a better view of the suspect, paid more attention to the video, and were more confident in their lineup identification, had a better basis for making their decision, and were more willing to testify. There was no significant effect of retention interval and no significant interactions between feedback and retention interval. This replicates the results from Experiment 1.

In order to confirm the above conclusions, the experimenters conducted separate 2 (feedback: none vs. confirming) X 2 (retention interval: immediate, one week) on participant's confidence ratings list all dependent variables. The analysis of participant's confidence revealed

a significant main effect of feedback ($F(1,118) = 18.512$, $MSE = 4.838$). That is giving people confirming feedback increased their memory of how confident they were when they made their identification relative to no feedback controls. This indicates that the effect of confirming feedback was impervious to retention interval as the magnitude of the PIF effect was similar immediately and at the retention interval of one week. This is consistent with the findings of Wells et al (2003) and Experiment 1.

The examination of the data from the second question regarding participant's view of the culprit revealed two significant main effects. The first significant effect was that of feedback ($F(1,118) = 11.2732$, $MSE = 3.512$) as similar to confidence. That is giving people confirming feedback increased their memory of how good of a view they had when they made their identification. There was also a significant main effect of retention interval ($F(1,118) = 7.3448$, $MSE = 3.512$). That is, when the participants were tested immediately they had an inflated memory of how good of a view they had when they made their lineup identification ($M=5.65$) as opposed to the participants in the one-week retention interval ($M=4.73$).

The result of the ANOVA on participant's attention also revealed a significant main effect of feedback, ($F(1,118) = 9.492$, $MSE = 4.076$). The results from the test to see if the overconfidence in a participant's identification, as well as an inflated memory of how good of a view they had, would have on their basis for making their decision revealed a significant main effect of feedback, ($F(1,118) = 23.158$, $MSE = 5.006$). In other words, giving people confirming feedback increased their memory of how much attention they felt they paid to the video when they made their identification and how good of a basis they had for making their lineup identification relative to those who did not receive feedback. This result means that regardless of

whether they were tested immediately or one week later, the confirmatory feedback was not influenced by retention interval.

Finally, the result of the test assessing participant's willingness to testify also revealed a significant main effect of feedback, ($F(1,118) = 18.499$, $MSE = 7.112$). Ergo, giving people confirming feedback increased their willingness to testify in a court of law that the person they picked from the lineup was the criminal they saw in the video relative to no feedback. The fact that this result corroborates that of Experiment 1 serves to show that eyewitnesses are more confident about their decisions and more willing to testify even after a delay in between either identification or measures. These eyewitnesses are more willing to testify even though they are 100% inaccurate in their identification, thus making them more believable.

Discussion

The primary motivation of this study was mainly the question of how post identification feedback affected a witness' post identification feedback effect with a retention interval as well as immediately. With the exception of how good of a view the participant had, the results were unanimous in showing that feedback had no effect on retention interval. We had expected that all of the retention intervals to be equal along the type of feedback. Similarly put, the results show that the effect of retention interval did not weaken the post identification feedback effect.

The only measure that did show a weakening in the PIF effect was the participant's view. Although, the effect size was barely significant, the result bears further investigation. It is my belief that the effect resulted from an overall lowering of the scores for this measure in general due to videotape degradation. As the experiment progressed, the tape lost clarity and sharpness of image, and it is this cause that could be attributed to the marked difference between those who viewed it immediately and was tested versus those in the one-week retention interval. However, we did find that giving people confirming feedback increased their memory of how confident

they were when they made their identification relative to no feedback controls. Giving feedback also increased their memory of good of a view they had when they made their identification, and increased their memory of how much attention they felt they paid to the video when they made their identification relative to no feedback controls. The participants were also more willing to testify in a court of law after having been given confirming feedback as compared to no feedback. All of these findings replicate Wells' et al. (2003) experimental results.

General Discussion

These studies were conducted to answer the question of how feedback or the lack of feedback affected a witness' post identification feedback effect with a retention interval as well as immediately. Both experiments served to show a significant result that feedback had no effect on retention interval. We had expected that all of the retention intervals to be equal along the type of feedback, and that is what we found. However, the main effect of retention interval measuring the participants' point of view in the second experiment was significant. As mentioned earlier, it is my belief that the result was from a degradation of the videotape used in the procedure rather than a robust effect that bears further research. However, since point of view is such an important qualification in making an eyewitness believable, the effect has interesting implications. Since the effect only arose when there was a delay in between the presentation of the culprit and the identification, the effect could be valid in that those in the one-week condition would have questioned themselves more strongly about the view they had before making the identification. However, the presence of other questions such as the clarity of the image of the culprit you have and the view from the camera did not yield such significant results. Therefore, it is my belief that the result was due to experimenter error.

We did find that giving people confirming feedback increased their memory of how confident they were when they made their identification relative to no feedback controls. Giving feedback also increased their memory of good of a view they had when they made their identification, and increased their memory of how much attention they felt they paid to the video when they made their identification relative to no feedback controls. The participants were also more willing to testify in a court of law after having been given confirming feedback as compared to no feedback. All of these findings corroborate Wells' et al. (2003) experimental results.

Two theories encouraged the current research, the trace strength hypothesis and the accessibility hypothesis, but only one can be used to explain our results. Both make predictions relating post identification feedback effects and retention intervals. The trace strength theory identifies post identification feedback effects in relation to memory and retention levels. It suggests that PIF effects are the strongest when memory traces are the weakest. This idea indicates that the magnitude of PIF affect will increase over the increasing retention interval. Therefore, the trace strength theory does not support the results of this study.

Conversely, the accessibility hypothesis does support the results of this study. The accessibility hypothesis proposes that people cannot recall the quality of memory at the time of identification and therefore rely on the post identification feedback to make judgments. Therefore suggesting that time will not mediate the effects of post identification feedback. Participants who received confirming feedback, regardless of retention interval, could infer that they were confident, had a good view of the culprit, paid attention, and had a good basis for making their decision, because they received positive reinforcement regarding the accuracy of their identification. According to the accessibility hypothesis, this inference of view, attention,

etc., did not vary with retention interval since all groups based their inferences on feedback, since they made no such judgments at the time of identification.

A problem with this research is the fact that there is no real measurement of trace strength, meaning that there is no way to measure the accuracy of people's memory. There is not a standard that can be used to compare to, no independent variable. Therefore, in order to strengthen this type of research, some type of measurement of memory would need to be done to give more validity to the trace strength hypothesis. One possible way to do this research would be to test people's memory prior to the experiment and then again after the experiment was complete. If the trace strength were stronger after the experiment then the post identification feedback would also be stronger.

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Table 1. Means and Standard Deviations as a Function of Feedback and Retention Interval Exp 1

		Feedback	Feedback	Feedback	No Feedback	No Feedback	No Feedback
		Immediate	1-Week	3-Week	Immediate	1-Week	3-Week
Certainty	<u>M</u>	7.73 ^a	7.86 ^a	7.67 ^a	5.51	6.20	6.08
	<u>SD</u>	1.20	1.53	1.49	2.40	1.98	2.53
View	<u>M</u>	9.00 ^a	6.86 ^a	5.80 ^a	4.76	4.72	4.64
	<u>SD</u>	17.27	2.29	1.67	2.15	1.54	2.16
Attention	<u>M</u>	7.57 ^a	8.90 ^a	7.47 ^a	6.41	6.40	6.88
	<u>SD</u>	2.30	1.37	2.50	2.43	2.31	2.01
Basis	<u>M</u>	6.30 ^a	7.33 ^a	6.82 ^a	4.50	4.67	5.46
	<u>SD</u>	2.39	2.34	2.02	2.27	1.92	2.41
Testify	<u>M</u>	5.53 ^a	6.48 ^a	5.45 ^a	3.30	3.37	3.78
	<u>SD</u>	2.86	2.64	2.76	2.20	2.57	2.78

* Superscript a = significant from the No Feedback condition at the .01 level.

Table 2. Means and Standard Deviations as a Function of Feedback and Retention Interval Exp 2

		Feedback	Feedback	No Feedback	No Feedback
		Immediate	1-Week	Immediate	1-Week
Certainty	<u>M</u>	6.41 ^a	5.33 ^a	7.55	7.61
	<u>SD</u>	2.59	2.43	1.59	2.08
View	<u>M</u>	5.12 ^a	4.13 ^a	6.19	5.43
	<u>SD</u>	2.06	1.87	1.70	1.81
Attention	<u>M</u>	7.47 ^a	6.70 ^a	7.87	8.61
	<u>SD</u>	2.41	2.14	1.91	1.45
Basis	<u>M</u>	5.06 ^a	4.97 ^a	7.00	6.93
	<u>SD</u>	2.70	2.22	1.98	1.96
Testify	<u>M</u>	4.72 ^a	3.07 ^a	5.84	6.00
	<u>SD</u>	2.95	1.91	2.82	2.83

* Superscript a = significant from the No Feedback condition at the .01 level.

Appendix 1. Post-Identification Questions

Qualities

1. At the time that you identified the person in the photo spread, how certain were you that the person you identified from the photos was the gunman you saw in the video?
2. How good of a view did you get of the gunman?
3. How well were you able to make out specific features of the gunman's face from the video?
4. What would you estimate was the distance between the camera-eye view and the gunman's face?
5. How much attention were you paying to the gunman's face while viewing the video?
6. To what extent do you feel that you had a good basis (enough information) to make an identification?
7. How easy or difficult was it for you to figure out which person in the photospread was the gunman?
8. After you were first shown the photos, how long do you estimate it took you to make the identification?
9. On the basis of your memory of the gunman, how willing would you be to testify in court that the person you identified was the person in the video?
10. Assume that an eyewitness had about the same view of the gunman that you had from the video. Do you think that an identification by this witness ought to be trusted?
11. Generally, how good is your recognition memory for faces of strangers you have encountered on only one prior occasion?
12. At the time you identified the person in the photos, how sure were you that the person you identified was the gunman in the video?
13. How well could you see the gunman?
14. How clear is the image you have in your head of the gunman you saw in the video.
15. Which one of the following statements best describes how you went about trying to identify the gunman from the five photos? (Indicate one and only one)
16. How many seconds would you estimate that the gunmans' face was in view?

Scale

- 1 (*not at all certain*) to 10 (*totally certain*)
- 1 (*very poor*) to 10 (*very good*)
- 1 (*not at all*) to 10 (*very well*)
- 1 feet (=1) to 10 feet (=10) in 10-foot increments
- 1 (*none*) to 10 (*my total attention*)
- 1 (*no basis at all*) to 10 (*a very good basis*)
- 1 (*extremely easy*) to 10 (*extremely difficult*)
- 1 (*I needed almost no time to pick him out*) to 10 (*I had to look at the photos for a long time to pick him out*)
- 1 (*not at all willing*) to 10 (*totally willing*)
- 1 (*definitely should not be trusted*) to 10 (*definitely should be trusted*)
- 1 (*very poor*) to 10 (*excellent*)
- 1 (*totally unsure*) to 10 (*totally sure*)
- 1 (*very poorly*) to 10 (*very well*)
- 1 (*not at all clear*) to 10 (*very clear*)
- 1= *The gunman's photo just "popped out" at me and I recognized it immediately.*
 2= *I used a process of elimination, deciding which photos were not of the gunman before deciding which photo must be that of the gunman.*
- Open response (Please write your answer in the space provided on the answer sheet).