The Effect of Camera Angle and Investigator Bias on Observer Perceptions of Eyewitness Identification

Brenee Alyce Mitchell

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The Effect of Camera Angle and Investigator Bias on Observer Perceptions of Eyewitness Identification

by

Brenee A. Mitchell

A Master’s Thesis Submitted to the Faculty of Montclair State University In Partial Fulfillment of the Requirements For the Degree of

Master of Arts

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Abstract

Investigator bias is an ongoing problem in police interrogations and eyewitness identification. Recently, videotaping these processes has been suggested to combat this problem. Participants watched an eyewitness identification video depicting an interaction between an investigator and witness. Following the video the participants answered questions designed to tap observers’ perception of the lineup, the witness, and the investigator. Three variables were manipulated. Participants either saw a female or a male witness. Participants either saw a video with a biased or non-biased investigator. Participants viewed this interaction from one of three camera angles: witness focused, investigator focused, and equal focused. Results of this study provided evidence that observers are capable of recognizing investigator bias when present regardless of camera angle or witness gender.
THE EFFECT OF CAMERA ANGLE AND INVESTIGATOR BIAS ON OBSERVER PERCEPTIONS OF EYEWITNESS IDENTIFICATION

Brene Alyce Mitchell
Montclair State University

A thesis submitted in fulfillment of the requirements for the degree of:
Masters of Arts in Psychology

May 2014
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The Effect of Camera Angle and Investigator Bias on Observer Perceptions of Eyewitness Identification

Eyewitness evidence plays a critical role in identifying criminals and solving cases. Unfortunately, eyewitness memory is also fallible. Of the first 40 DNA exonerations in the United State, 90% involved false eyewitness identifications (Wells, et al., 1998). Factors that affect the reliability of eyewitness evidence fall into two categories. Estimator variables are factors that affect eyewitness memory that the police have no control over. These include factors as diverse as lighting, distance, the presence of a weapon during a crime, the age of the witness, and whether or not the witness is intoxicated when the crime is committed. System variables, in contrast, are factors that affect eyewitness memory that the police have control over. These include the lineup format, the content of the lineup, how lineup members are selected, and pre-identification instructions. Not surprisingly, because the police have direct control over system variables, most of the research on eyewitness memory has focused on these factors. This research has lead to a number of recommendations in order to increase the likelihood that witnesses will make correct decisions and reduce the chances that they will make a false identification.

Reforms For The Collection of Eyewitness Evidence.

The Attorney General of NJ has proposed a number of reforms to increase the reliability of eyewitness evidence. The first recommendation is that prior to showing the witness the lineup, the witness should be informed that the suspect may or may not be present in the lineup. The logic behind this recommendation stems from the fact that many witnesses come to the lineup situation with the belief that the police suspect is
included in the lineup (which he is—but that person may or may not be the person who committed the crime) and his or her job is to identify the police suspect. Thus, informing the witness that the suspect may or may not be present is believed to induce a more stringent criterion for choosing a person from the lineup, thus reducing false identifications. This instruction is also believed to reduce witnesses' reliance on the relative judgment decision strategy. This decision strategy takes place when witnesses use a process of elimination to select a person from the lineup. To provide an analogy, when confronted with a multiple-choice question, the test-taker knows the correct answer is among the options. If the test-taker does not know the answer, he or she will engage in a process of elimination to find the best answer (relative to the other answers). This is an excellent strategy when the correct answer is among the options (as it is in a testing situation), but it is a poor strategy when the answer may not be present (as may be the case with the lineup). Thus, informing the witness that the suspect may or may not be present is believed to heighten participants' response criterion and reduce reliance on the relative judgment process. Importantly, this instruction has not been found to reduce correct identifications (when the police suspect is the perpetrator).

The second recommendation is that the lineup be presented in a sequential rather than a simultaneous format. With the simultaneous lineup, which has been traditionally used by police, all the lineup photographs are presented at the same time (simultaneously). When lineups are presented in this format witness tend to rely on the relative judgment strategy when making decisions. As an alternative, it is recommended that the lineup photographs be presented in a sequential format. That is, the photos should be presented one at a time (one after another). Like the pre-identification instruction, the
sequential lineup format has been found to reduce false identifications without reducing correct identifications.

The third recommendation is that immediately after a witness makes a lineup decision (i.e., chooses someone from the lineup) their confidence in that decision should be documented. Intuitively, one would presume that a witness’s confidence in his or her decision would bear a positive relationship to the accuracy of their decision. However, this is not the case. That is, there is a weak relationship between eyewitness confidence and accuracy (Cutler, Penrod, & Dexter, 1990; Lindsay, Wells, & O'Connor, 1989). There are a number of reasons that confidence cannot be used to postdict accuracy. All can be traced to the concept of confidence malleability, which is the finding that an eyewitness’s confidence can easily be influenced by external factors. For example, as time goes on, a person who has witnessed a crime may repeatedly tell others about his or her ordeal. Research demonstrates that when a story is repeatedly retold, the storyteller becomes increasingly confident in their account. If police take a confidence statement immediately after an identification, it effectively “freezes” their confidence in place. In other words, that confidence statement becomes parts of the official evidentiary record. If later, during trial, the witness’s confidence in their identification increases, the original confidence statement can be consulted to determine if the witness’s confidence has changed over time.

Recording the witness’s confidence can also protect against investigator bias, which occurs when the police exhibit verbal or behavioral cues that influence the witness’s identification decision (or confidence). In the context of confidence, research has demonstrated that when the lineup administrator provides confirming feedback to the
witness (e.g., “Good job. You identified the suspect. That’s him.”) it can dramatically increase the witness’s confidence in his or her decision and it can quite literally change their memory for the crime. For example, in a study by Wells and Bradfield (1999), witnesses who are given confirming feedback estimated that they got a better look at the perpetrator than control group participants—who received no confirming feedback. Recording a witness’s confidence immediately after they make an identification is one way to protect against confidence malleability.

Another way to prevent confidence inflation and investigator bias is for the lineup administrator to be blind to the suspect’s identity. Thus, the fourth and final recommendation provided by the New Jersey Attorney General guidelines is that the lineup should be administered in a blind fashion, meaning that the police detective who administers the lineup should not know who the suspect is. Of course, if the lineup administrator is blind to the suspect’s identity the lineup administrator cannot verbally or non-verbally influence the witness’s decision, and they cannot provide post-identification feedback to the witness that might inflate their confidence. Garrioch and Brimacombe (2001) studied how lineup administrators’ knowledge of the suspect’s identity affected eyewitness confidence. Lineup administrations with witnesses were videotaped. When the lineup administrator knew the suspect’s identity they successfully refrained from providing verbal reactions to the witness’ lineup choices, but many showed post-identification feedback through their intonation and nonverbal behaviors. The results showed that witnesses whose administrator believed they chose the correct lineup member were more confident about their lineup decision than were witnesses whose interviewers were blind to the suspect’s identity. These results support the hypothesis that
the lineup administrators’ knowledge of the suspect’s identity can affect a witness’s confidence in their lineup choices and supports the recommendation that lineups should be blindly administered.

All of these guidelines are meant to increase the reliability of eyewitness evidence. However, it is unclear the extent to which the police actually follow these recommendations. One way to protect against investigator bias, ensure that police are following procedures, and to protect police from bogus accusations of bias, is to videotape lineups with witnesses. It is not known how many police departments currently videotape lineup administrations. Still, videotaping lineups seems like a reasonable request of police. Police have video cameras in their patrol cars to document their interactions with motorists and some police departments issue officers cameras that are worn on their persons to document their everyday interactions with the people they encounter while on patrol. Given the ubiquity of videotaping in American society, and the important role that eyewitnesses play in identifying criminals, it seems as if it is only a matter of time before the police are required to document eyewitness evidence.

However, there are currently no national or national policies in place to govern the videotaping of eyewitness evidence. Nor has much research been conducted on the effects of videotaping lineups on witnesses’ decisions. A recent study by Reardon and Fisher (2011) found that videotaping witnesses’ initial interviews with police (but not their lineup identifications) was effective at aiding mock-jurors discriminate between accurate and inaccurate testimony during a subsequent mock trial. However, this study did not look at how jurors evaluated videotaped eyewitness identifications. How might jurors evaluated videotaped eyewitness evidence? What guidelines should be in place for
collecting this evidence? The answer may be found in the research on the videotaping of police interrogations

**Videotaping Interrogations**

Like eyewitness evidence, suspect confessions play a critical role in solving criminal cases. However, it is also known that false confessions occur with alarming frequency. For example, of the first 300 post-conviction DNA exonerations to take place in the United States, approximately 30% have involved false confessions. A number of reforms for preventing false confessions have been proposed. The most important is that police interrogations should be videotaped. Videotaping police interrogations can protect the innocent from police coercion. Importantly, it can also protect the police from false accusations of coercion and brutality. For these reasons, many jurisdictions, including New Jersey, require police to videotape suspect interviews and interrogations with suspect's accused of serious crimes. However, research has revealed that how interrogations are videotaped can play an important role in how judges and juries evaluate confession evidence.

Lassiter, Geers, Handley, Weiland, and Munhall (2002) found that the angle that the interrogation is recorded at can influence observers’ perceptions and evaluations of interrogation evidence. Specifically, they found that participants who view the videotaped interrogation from a camera angle focused exclusively on the suspect were more likely to judge the resulting confession to be voluntary. In contrast, when observers saw a police interrogation from a camera angle that focused exclusively on the interrogator, they were more likely to judge the confession to be coerced. Importantly, when the camera angle was focused equally on both the suspect and the interrogation, the effect balanced out. In
other words, the "bias" caused by the camera angle was attenuated. Lassister and his colleagues reasoned that this effect was due to a perceptual heuristic called illusory causation. This occurs when observers attribute the outcome of a situation to the most salient actor in an actor-observer interaction. In the context of police interrogations, the actor is either the suspect or the interrogator (depending on the camera angle) and the observer is the judge or juror who is evaluating the interrogation. So, for example, when the camera is focused on the suspect, he becomes the most salient actor in the situation and the outcome of that situation (a confession) is more likely to be attributed to him rather than the interrogation who is the less salient actor.

The Current Study

The current study had two goals. The first was to determine if the camera angle effect found in the context of police interrogations applied to videotaped lineups. The second goal was to determine if participants could identify investigator bias in the context of eyewitness identifications, and if participants' ability to do so is influenced by the camera angle. A similar study has conducted by Roll-Guadios (2014). In that student camera angle and investigator bias were manipulated in a similar fashion to the current study. That study found no effect of camera angle of participants' judgments of witness or investigator credibility. However, participants were found adept at identifying investigator bias, regardless of the camera angle. This study differs in two important ways. First, in that study, the interactions between the witness and the investigator were scripted and portrayed by actors. The current study used stimuli in which mock-witnesses rendered real eyewitness judgments after watching a crime video. Second, in an effort to increase the external validity of the study, the current study varied whether the witness
was male or female. This was done to rule out the possibility that significant findings could be attributable to the manipulations rather than to idiosyncratic features of the stimuli.

I made no predictions regarding the effect of camera angle on observer’s perceptions of the lineup, the investigator, or the witness. One the one hand, previous research on the camera angle in police interrogations would suggest that when the camera angle was focused on the witness participants would judge the identification to be more voluntary and more likely to be the result of investigator pressure when the camera was focused on the investigator. On the other hand, Roll-Gaudio found no effect of camera angle. I did predict that observers would judge biased lineups to be more biased than non-biased lineups. I predicted no differences as a function of witness gender because there is no theoretical reason to support the belief that evaluations of eyewitness evidence would differ by gender.

Method

Participants

Participants consisted of 264 individuals (83% females, 17% male) between the ages of 18 – 57 years old (M =20.96 years, SD = 6.44). The majority of participants were recruited through the SONA system subject pool of the psychology department. Other participants were recruited through Facebook and word of mouth.

Design

This study used a 3(camera angle: equal focus vs. witness focus vs. investigator focus) x 2(investigator bias: bias vs. no bias) x 2(witness gender: male vs. female) between-subjects factorial design. Participants were randomly selected to watch one of
the twelve-videotaped witness/lineup scenarios and subsequently answered questions based on the video they saw.

**Procedure**

Participants accessed an internet webpage hosted on psychsurveys.org, a website that hosted the study and its materials. Participants completed an informed consent page, answered basic demographic questions, and then watch 1 of 12 stimulus videos depicting a witness given a lineup by an investigator. Participants were only permitted to watch the video once. Next, participants completed the study’s dependent measures and exited the website. It took an average of 20 minutes for participants to complete the study.

**Stimuli: Crime Video and Lineup Video**

The stimuli for this study were created in two steps. First, a simulated crime was filmed in a local park that served as the “crime” that mock witnesses subsequently viewed (also part of the study’s stimuli). In the crime video, a young woman is walking in the parking speaking on her cell phone and carrying a backpack over one shoulder. An African American male approaches her from behind, grabs her arm and struggles with the woman, eventually stealing her backpack. He then runs toward the camera and out of view. The video was approximately 30 seconds long.

The second step in creating the stimuli was to have mock witnesses view a lineup (that did not include the man from the video) and make lineup decisions. Ten undergraduate students (5 male, 5 female) participated in the creation of this video. They individually watched the crime video and were subsequently escorted to another room where the lineup administrator was waiting (played by Mr. Edwin Carberry). Participants were seated at a table, given instructions, and then viewed the lineup and rendered a
decision, indicated their confidence in their decision, and were then excused. This interaction was filmed from three different camera angles (see below). Four videos (two males and two females, two biased and two unbiased lineups) were selected to serve as stimuli based on how well the participants could be heard speaking during the lineup administration.

Camera Angle Manipulation

The lineup administration was filmed from one of three camera angles. In the investigator focus condition, the lineup administration was filmed from an angle such that only the detective was in view. The witness focus condition, the camera angle was such that only the witness was in view. In the equal focus camera condition, both the witness and the detective were equally visible to observers.

Investigator Bias Manipulation

In the investigator bias condition, the investigator attempted to influence the witness’s decision though verbal and non-verbal cues. Prior to presenting the photo-array the investigator told the witness that he was confident the police apprehended the perpetrator. During the lineup, if the witness seemed hesitant to make a selection, the investigator looked annoyed and told the witness that he just needed her/him to pick them out from a group of photos. After the witness made a selection, the investigator provided confirming feedback by telling that witness “good job” and that he/she choose the police suspect. In the non-biased condition, the investigator largely followed the New Jersey Attorney General guidelines for conducting lineups. He instructed the witness that the perpetrator may or may not be present, he displayed a neutral body position and did not pressure the witness nor looked annoyed. After the witness made a decision he asked the
witness to indicate his or her confidence in his or her decision and provided no confirming feedback to the witness subsequent to the identification.

Dependent Measures

The dependent measures for this study are divided into three categories (see Appendix B): Perceptions of the lineup, perceptions of the investigator, and perceptions of the eyewitness. Perceptions of the lineup and perceptions of the investigator were scored on a 6 point scale, the higher scores indicating greater agreement with the statement. Perceptions of the eyewitness were scored on a 100 point scale with higher scores indicating greater agreement with the statement.

Results

Analyses of the dependent variables were divided into three categories: Perceptions of the lineup, perceptions of the investigator, and perceptions of the eyewitness. Because each category had multiple dependent variables, a multivariate analysis of variance (MANOVA) was used to analyze the three different categories of variables and analysis of variance (ANOVA) was used to compute follow-up tests where appropriate.

Perceptions of the Lineup

Means and standard deviations for the dependent variables for perceptions of the lineup across investigator bias and camera angle conditions can be found in Tables 1 and Table 2. Using Pillai’s Trace, there was a significant difference between investigator bias conditions on the perceptions of lineup fairness, $F(5, 248) = 2.78, p = .018, V = .053$. The main effect of camera angle and the interaction between camera angle and investigator bias were not found to be statistically significant.
Follow-up ANOVAs were calculated to analyze the differences between investigator bias conditions for each of the dependent variables. When participants were asked if they believed the lineup was fair, there was a significant main effect of investigator bias, such that participants were more likely to agree with this statement when the lineup was biased compared to when it was not, $F(1, 252) = 12.58, p < .001$. Participants in the biased lineup condition were also more likely to believe the lineup should have been conducted differently compared to the non-biased condition, $F(1, 252) = 6.40, p = .012$. However, several other questions designed to gauge participants' perceptions of the lineup produced non-significant results (see Table 1).

**Perceptions of the Investigator**

Means and standard deviations for dependent variables for perceptions of the investigator across investigator bias and camera angle conditions can be found in Table 3 and Table 4. Using Pillai's Trace, there was a significant effect of the investigator bias condition on the perception of the fairness of the investigator, $F(6, 247) = 8.38, p < .001, V = .169$.

Separate ANOVAs revealed there was significant effect when the observer was asked to choose their agreement with the statement: *It was clear that the investigator wanted the eyewitness to choose the suspect*, $F(1, 252) = 26.23, p < .001$. Observers who saw the biased witness in the video agreed with this statement more than observers who saw the non-biased witness video. A significant effect was also found with the statement: *The investigator was very fair in the lineup*, $F(1, 252) = 17.33, p < .001$. The observers in the non-biased condition agreed with this statement more than the observers in the biased condition. A significant effect was also found with the statement: *The investigator*
did not put any pressure on the eyewitness, \( F(1, 252) = 3.95, p = .048 \). Observers in the non-biased condition agreed with this statement more than the observers in the biased condition. No significant results were found for the camera angle conditions for this category of variables, nor was the interaction between camera angle and investigator bias significant, \( ps > .05 \).

No significant interaction was found for camera angle and investigator bias for the perception of the fairness of the investigator as a whole; however, a significant interaction was found between camera angle and investigator bias, \( F(2, 258) = 3.21, p = .04 \). In response to the question: The investigator did not put any pressure on the eyewitness, in the biased condition, when the observer saw the witness focused view they rated this statement higher than the investigator focused or equal focused views.

**Perceptions of the Eyewitness**

Means and standard deviations for dependent variables for perceptions of the eyewitness across investigator bias and camera angle conditions can be found in Table 5 and Table 6. Using Pillai’s Trace, there was a significant effect of the investigator bias condition on the perception of the fairness of the investigator, \( F(6, 247) = 4.38, p < .001, V = .13 \). The main effect for camera angle and the interaction between camera angle and investigator bias conditions were not statistically significant.

In the non-biased condition, participants judged the witness to be more honest than the biased condition, \( F(5, 258) = 5.27, p = .02 \). On the measure of believability, participants judged the witness to be more believable in the non-biased condition, though the effect was only marginally significant, \( F(5, 258) = 1.98, p = .06 \). No differences were
found on measures of likability, accuracy, or trustworthiness, though the means fell in the predicted direction.

**Discussion**

The goal of this study was to determine if observers could identify investigator bias when they saw it, and to determine if their ability to do so was influenced by the camera angle that recorded the eyewitness identification. Previous research conducted by Roll-Gaudio (2014) found that participants were adept at identifying investigator bias but their judgments were not influenced by camera angle. This study replicates and bolsters those results. The current study found no effect of camera angle on participants’ judgments, but they were influenced by the investigator’s behavior. Generally, speaking, the lineup administration was perceived as more fair when the investigator bias was not present.

Previous research has found that the camera angle of police interrogations can influence observers’ perception of the suspect’s confession. It is curious that this effect does not replicate in the eyewitness identification context. There are, however, fundamental differences between the two situations. When observers view a police interrogation, it is usually because the suspect is arguing that his confession was coerced and/or the confession was false. Observer’s who judge the validity of confession evidence are essentially asked to determine if the suspect is lying or telling the truth about the confession. This is a different situation than the eyewitness context. In this context, the key issue does not center on deception (i.e., lying or telling the truth). Rather, the key issue surrounds the evaluation of eyewitness evidence involves credibility. Deception is difficult to detect. In fact, there is no reliable method for detecting
deception. Detecting a genuine error, where someone is wrong but they believe their *right*, is arguably a more difficult task. Perhaps that null effects of the camera angle bias in the context of eyewitness identifications is somehow tied to the difference between detecting deception and assessing credibility.

The research on the camera angle bias has led to recommendations that interrogations and confession should be recorded from an equal camera perspective. The findings of this study lead to no such recommendation. It appears that the camera angle has little effect in the eyewitness context. Still, as long as police are trying to adapt the habit of videotaping interrogations from an equal camera perspective, it seems reasonable that they should videotape eyewitness identifications from an equal camera perspective as well.

One the other hand, the finding that participants could identify investigator bias has implications for criminal trial involving eyewitness. One of the criteria for the admissibility of expert testimony is that the testimony must be relevant, meaning that the testimony must assist the trier of fact in determining the outcome of a case. Scientific experts are sometimes called upon to provide specialized or technical knowledge to juries. If observer’s (i.e., juries) can identify investigator bias, experts will not need to be called to testify about how it manifests in eyewitness investigations. On the other hand, in order for juries to perceive investigator bias, the eyewitness identifications first need to be videotaped. As noted, there is currently no policy that would require police to videotape eyewitness investigations.

Future research on this topic could study how videotaped eyewitness investigations influence jury decision-making. For example, how does videotape
evidence, biased or not, influence jurors ultimate decision about whether the suspect is guilty or not guilty? Can videotaped lineups help jurors assess the courtroom testimony of eyewitnesses? Previous research has found that it is very difficult for jurors to distinguish mistaken from accurate eyewitnesses. Perhaps seeing the procedure that generated the positive identification of the suspect would help jurors determine whether or not an eyewitness is mistaken or accurate.

This study had a number of limitations worth noting. Like many studies on eyewitnesses and jury-decision making, the study participants consisted of a large number of undergraduate students. Though many of these participants are presumably eligible for jury duty, they are hardly a representative sample of jury eligible citizens. This study did improve over previous studies by using mock witnesses who rendered eyewitness decisions (based on video they had seen previously). Still, these witnesses had not witnessed a real crime, nor were their decisions consequential as are the decisions of real eyewitnesses (e.g., potentially sending a person to prison).

In conclusion, the results of this study showed that observers’ are capable of recognizing investigator bias regardless of camera angle or witness gender. Observers in the biased condition recognized that the witness was pressured into making a decision, the investigator was less credible and trustworthy, and the lineup was unfair. This supports the use of videotaping eyewitness identifications in order to reduce the risk of investigator bias.
References


Table 1: Descriptive Statistics for Perceptions of the Lineup: Biased and Non-biased Conditions.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Biased</th>
<th>Non-Biased</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lineup was a fair lineup.</td>
<td>3.27 (1.28)*</td>
<td>3.55 (1.27)</td>
</tr>
<tr>
<td>The lineup was biased.</td>
<td>3.61 (1.36)</td>
<td>3.04 (1.14)</td>
</tr>
<tr>
<td>The lineup was conducted properly.</td>
<td>3.19 (1.38)</td>
<td>3.50 (1.32)</td>
</tr>
<tr>
<td>The lineup was unfair to the suspect.</td>
<td>3.79 (1.35)</td>
<td>3.55 (1.32)</td>
</tr>
<tr>
<td>The lineup should have been conducted differently.</td>
<td>4.23 (1.30)*</td>
<td>3.84 (1.23)</td>
</tr>
</tbody>
</table>

Note: * Denotes statistically significant comparison at $p=0.05$. between biased and non-biased conditions.
Table 2. Perceptions of the Lineup: Equal Focused, Investigator Focused, and Witness Focused Conditions

<table>
<thead>
<tr>
<th>Question</th>
<th>Equal Focused</th>
<th>Investigator Focused</th>
<th>Witness Focused</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lineup was a fair lineup.</td>
<td>3.42 (1.23)</td>
<td>3.43 (1.28)</td>
<td>3.39 (1.33)</td>
</tr>
<tr>
<td>The lineup was biased</td>
<td>3.17 (1.24)</td>
<td>3.45 (1.27)</td>
<td>3.33 (1.33)</td>
</tr>
<tr>
<td>The lineup was conducted properly.</td>
<td>3.34 (1.30)</td>
<td>3.32 (1.40)</td>
<td>3.38 (1.38)</td>
</tr>
<tr>
<td>The lineup was unfair to the suspect.</td>
<td>3.55 (1.37)</td>
<td>3.60 (1.33)</td>
<td>3.85 (1.30)</td>
</tr>
<tr>
<td>The lineup should have been conducted differently.</td>
<td>3.90 (1.35)</td>
<td>4.16 (1.34)</td>
<td>4.03 (1.15)</td>
</tr>
</tbody>
</table>
Table 3: Descriptive Statistics for Perceptions of the Investigator: Biased and Non-biased Conditions.

<table>
<thead>
<tr>
<th></th>
<th>Biased</th>
<th>Non-Biased</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>M (SD)</em></td>
<td><em>M (SD)</em></td>
</tr>
<tr>
<td>The investigator was a good investigator for this case.</td>
<td>3.20 (1.25)*</td>
<td>3.39 (1.28)</td>
</tr>
<tr>
<td>It was clear that the investigator wanted the eyewitness to choose the suspect.</td>
<td>4.64 (1.27)</td>
<td>3.77 (1.46)</td>
</tr>
<tr>
<td>The eyewitness was pressured into a decision by the investigator.</td>
<td>3.05 (1.17)</td>
<td>2.78 (1.19)</td>
</tr>
<tr>
<td>The investigator put a lot of pressure on the eyewitness.</td>
<td>2.64 (0.99)</td>
<td>2.58 (1.12)</td>
</tr>
<tr>
<td>The investigator was very fair in this lineup task.</td>
<td>3.64 (1.37)*</td>
<td>3.95 (1.22)</td>
</tr>
</tbody>
</table>

Note: * Denotes statistically significant comparison at $p=.05$. between biased and non-biased conditions.
Table 4. Perceptions of the Lineup: Equal Focused, Investigator Focused, and Witness Focused Conditions

<table>
<thead>
<tr>
<th>Question</th>
<th>Equal Focused</th>
<th>Investigator Focused</th>
<th>Witness Focused</th>
</tr>
</thead>
<tbody>
<tr>
<td>The investigator was a good investigator for this case.</td>
<td>3.15 (1.24)</td>
<td>3.26 (1.32)</td>
<td>3.47 (1.23)</td>
</tr>
<tr>
<td>It was clear the investigator wanted the witness to choose the suspect.</td>
<td>4.01 (1.56)</td>
<td>4.34 (1.34)</td>
<td>4.22 (1.41)</td>
</tr>
<tr>
<td>The eyewitness was pressured into his decision by the investigator.</td>
<td>2.90 (1.17)</td>
<td>2.97 (1.23)</td>
<td>2.88 (1.19)</td>
</tr>
<tr>
<td>The investigator put a lot of pressure on the eyewitness</td>
<td>2.65 (1.04)</td>
<td>2.61 (1.14)</td>
<td>2.57 (1.02)</td>
</tr>
<tr>
<td>The investigator was very fair in this lineup task.</td>
<td>3.45 (1.27)</td>
<td>3.46 (1.19)</td>
<td>3.67 (1.17)</td>
</tr>
</tbody>
</table>
Table 5: Descriptive Statistics for Perceptions of the Eyewitness: Biased and Non-biased Conditions.

<table>
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<tr>
<th></th>
<th>Biased</th>
<th>Non-Biased</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M (SD)$</td>
<td>$M (SD)$</td>
</tr>
<tr>
<td>Likeability</td>
<td>59.34 (21.75)*</td>
<td>61.99 (20.46)</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>53.92 (22.36)</td>
<td>56.01 (21.45)</td>
</tr>
<tr>
<td>Honesty</td>
<td>63.38 (21.80)</td>
<td>69.13 (19.01)</td>
</tr>
<tr>
<td>Believability</td>
<td>55.78 (24.65)</td>
<td>61.23 (22.86)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>53.16 (25.27)*</td>
<td>50.23 (21.48)</td>
</tr>
</tbody>
</table>

Note: * Denotes statistically significant comparison at $p = .05$ between biased and non-biased conditions.
Table 6. Perceptions of the Eyewitness: Equal Focused, Investigator Focused, and Witness Focused Conditions

<table>
<thead>
<tr>
<th>Question</th>
<th>Equal Focused</th>
<th>Investigator Focused</th>
<th>Witness Focused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likeability</td>
<td>58.77 (22.22)</td>
<td>57.39 (22.04)</td>
<td>65.66 (18.20)</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>54.45 (21.92)</td>
<td>53.02 (23.56)</td>
<td>57.38 (20.14)</td>
</tr>
<tr>
<td>Honesty</td>
<td>66.27 (19.06)</td>
<td>63.23 (23.31)</td>
<td>69.39 (18.88)</td>
</tr>
<tr>
<td>Believability</td>
<td>58.05 (23.78)</td>
<td>55.25 (25.73)</td>
<td>62.34 (21.68)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>50.08 (22.83)</td>
<td>50.58 (25.02)</td>
<td>54.11 (22.39)</td>
</tr>
</tbody>
</table>
Appendix A

Implied Consent Form

You were selected as a possible participant because you chose this study for course credit through MSU’s SONA system, or you were invited by the Principle Investigator to participate in the study, or you contacted the Principle Investigator and expressed an interest in participating.

If you decide to participate, indicate below if you want to take part in the study. If you choose not to participate, you will be taken to another webpage. If you choose “yes,” follow the instructions to start the study. In this study, you will be asked to click on a link where you will see a video of a short conversation between two people. When the video is over, you will be asked to answer questions about the video. The questions will ask what you think about what was said and how people behaved in the video. The entire session will take about 20 to 30 minutes to complete.

No benefits accrue to you for answering the survey, but your responses will be used to help inform policy guidelines about how eyewitness evidence is collected and presented in court. There are minimal risks associated with this study and they are not expected to be any greater than anything you encounter in everyday life. If you do you are free to stop at any time. Data will be collected using the Internet; no guarantees can be made regarding the interception of data sent via the Internet by any third party (i.e. your employer). Confidentiality will be maintained to the degree permitted by the technology used. We strongly advise that you do not use an employer issued device (laptop, smartphone etc.) to respond to this survey. If you are participating in this study
for course credit at Montclair State University, you will be asked to enter your name at the start of the survey. This information will be used to assign you course credit.
Appendix B

Survey Questionnaire:

Part 1: The Lineup

Please indicate, by clicking on the appropriate number on the following 6-point scales, the extent to which you agree with the following statements.

Scale: Strongly Disagree, Disagree, Somewhat Disagree, Somewhat Agree, Agree, and Strongly Agree.

1. This lineup was a fair lineup.
2. In my opinion the administration of this lineup was biased.
3. I thought this lineup was conducted properly.
4. I thought the way this lineup was conducted was unfair to the suspect.
5. This lineup should have been conducted differently.

Part 2: The Investigator

Please indicate, by clicking on the appropriate number on the following 6-point scales, the extent to which you agree with the following statements.

Scale: Strongly Disagree, Disagree, Somewhat Disagree, Somewhat Agree, Agree, and Strongly Agree.

1. The investigator was a good investigator for this case.
2. It was clear that the investigator wanted the eyewitness to choose the suspect.
3. The eyewitness was pressured into his decision by the investigator.
4. The investigator put a lot of pressure on the eyewitness.
5. The investigator was very fair in this lineup task.
6. The investigator did not put any pressure on the eyewitness.

Please rate the eyewitness using the following series of adjective pairs. The scales are designed so that you can express the degree to which the witness seems to fit one end of the scale or the other. Which space you check should depend on the degree to which the word describes the witness.

1. Unbelievable $\leftrightarrow$ Believable
2. Unlikable $\leftrightarrow$ Likable
3. Trustworthy $\leftrightarrow$ Untrustworthy
4. Honest $\leftrightarrow$ Dishonest
5. Accurate $\leftrightarrow$ Inaccurate