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Claremont McKenna College

Before Witnessing a Crime, Eyewitnesses Possess a Negative

Confidence-Accuracy Correlation

submitted to

Dr. Daniel Krauss

by

Trent Lindsey

for Senior Thesis

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Abstract

The ability to determine the accuracy of eyewitnesses has been explored by many researchers. During the exploration, they examined the correlation between the eyewitness's confidence and the accuracy of the identification. Wixted and Wells (2017) determined that the strongest confidence-accuracy correlation occurred immediately after identifying a suspect. However, are there other times that a "strong" correlation occurs? At least 120 participants ($n \ge 120$) were assigned into one of three condition groups: post-identification only, pre-crime/post-identification, and pre/post-identification. Depending on the condition group, participants provided confidence assessments in their ability to identify the correct culprit at different times during the experiment. Based on past research, participants' confidence assessments made before viewing the crime will have a negative correlation with the accuracy of a subsequent identification of the staged crime.

Introduction

In 1909, Hugo Münsterberg's book, *On the Witness Stand: Essays on Psychology and Crime*, questioned the accuracy of eyewitnesses. His book was broken into different sections covering potential errors in human memory. In the section "Illusion", Münsterberg demonstrates how different witnesses can contradict each other when describing the same event despite both parties proclaiming to be telling the truth (i.e., seeing a man with his dog versus a woman with her child). In the section "The Memory of the Witness", he discusses that people's memories are malleable. Memory malleability occurs when people fill their gaps of knowledge, especially small details, with what is most common to them. Ultimately, Münsterberg argued that the current justice system is subject to human error. His solution was to involve experimental psychology to determine the accuracy of an eyewitness's testimony. Following Münsterberg's call to action, other scholars examined how to determine the accuracy of eyewitnesses. In particular, during the 1970s and 1980s, researchers explored the correlation between the confidence of the eyewitnesses' identification and the accuracy of the identification but to this day have not fully explored the extent of this relationship.

As researchers investigated eyewitness testimonies, they discovered that certain practices caused eyewitnesses to be overconfident in their identification regardless of their accuracy. This included suspects standing out from the fillers during a police line-up. Fillers are known innocent people that are in the lineup alongside the suspect. Another example of faulty practice is police officers administering a lineup that influences the witness's confidence because they were provided with feedback about whether their identification matched the alleged perpetrator.

As of 2016, 375 people have been released from prison due to new DNA evidence suggesting that they were innocent of the crimes they allegedly committed. According to the Innocence Project (2020), of these 375 mistaken decisions, 69% of them involved eyewitness misidentifications. Despite not identifying the right person, evewitnesses testified with higher confidence due to the mistaken practices that increased their confidence. When witnesses testify, jurors, in particular, are susceptible to the level of confidence the witness presents in their identification. Douglass et. al (2010) evaluated the effect of a witness's confidence on a sample of mock jurors. These participants were selected to be evewitnesses of a crime. The witnesses watched a video of a crime and were asked to identify the culprit. Subsequently, the officer conducting the lineup provided one of three different post-identification pieces of information: no feedback on their identification, disconfirming feedback on their identification, or confirming feedback on their identification. Post-identification feedback involved the eyewitness selecting a person from a police lineup, and then the lineup administrating officer would make one of several statements regarding their answer. After hearing the feedback, the witness would offer their testimony. A separate group of participants played the role of jurors. They evaluated the witness's testimony based on what the eyewitness said and inferences the jurors derived from the witness's testimony. The jurors reported witnesses who received confirmatory feedback about their identification as having a better viewing point and a better view of the crime compared to a witness that received no response even though there was no difference in these attributes between conditions. In addition, jurors that receive testimony based upon confirmatory feedback testimony evaluated the witness as more accurate in their recollection of the crime. Overall, the higher confidence evewitnesses were viewed as more believable witnesses to jurors and their testimony was weighted more heavily. This demonstrates the impact misplaced confidence can

have on the verdicts, and may partially explain the number of DNA exonerations in cases due to eyewitness misidentifications. Jurors simply placed too much weight on witness identification, and in particular, those of highly confident witnesses that may not be accurate.

Although some psychologists continue to hold the belief that there is a significant correlation between eyewitness confidence and accuracy, research is less supportive. Early research demonstrated a weak relationship between the confidence of the eyewitness and their accuracy. For example, 4 decades ago, Wells and Murray (1984) argued that even under the most pristine conditions there was at best a weak correlation. To test this hypothesis, the researchers staged a robbery. The people that witnessed the theft were eyewitnesses to the crime. Wells and Murray (1984) had the eyewitnesses indicate their confidence before making an identification (pre-identification), after making an identification (post-identification), and then asked if they were willing to go to the police station and sign a statement swearing what they reported was true. They evaluated people's confidence using an 11-point Likert Scale. The strongest correlation between confidence and accuracy was post-identification. This was 0.40, demonstrating a small effect, with 16% of the variance in accuracy being determined by confidence. However, Wells and Murray (1984) concluded that the sole use of confidence post-identification was not a strong indicator of accuracy, and another form of verification should be used for reliability.

Other scholars have suggested the correlation between confidence and accuracy is moderately strong. Witnesses demonstrated a moderately strong correlation if identifying a "present" suspect, a "present" suspect occurs when the suspect is in the current lineup for the witness to select. Eyewitnesses have been revealed to be overconfident with their abilities to identify the correct witness in the best conditions (Sauer et. al, 2010; Juslin et. al, 1996). Sauer et. al (2010) used participants who were approached by a confederate. After agreeing to participate, another confederate, confederate B, would approach the participant for 10 seconds. After time passed, confederate B would walk away. Participants were selected into one of two groups: immediate identification or delayed identification. In the immediate identification condition, after confederate B left, the participant would be given a lineup of 8 photos that may or may not contain confederate B. Subsequently, participants were asked to identify the person they saw. For the delayed identification condition, an email was sent 18-21 days after the meeting with a link to an online identical lineup to the immediate condition. They were told the lineup may or may not contain confederate B. Finally, the participants were asked to identify confederate B. In both groups, participants were asked to rate their confidence in their identification immediately afterward. The study demonstrated a significant correlation between confidence and accuracy. Furthermore, high confidence led to a higher number of correct identifications. However, the percentage was not equivalent to how accurate the participants evaluated themselves. High confidence participants evaluated themselves as "90-100 percent" confident in their identification. If accurate, it would follow that the high confidence participants would have an accuracy of 90 percent or higher. However, this group correctly identified the suspect 83.3 percent of the time. For the delayed condition, high confidence participants were only accurate 79.2 percent of the time. For every level of confidence, the confidence-accuracy correlation was not significantly different between immediate condition and delayed condition. However, the correlation is weaker for the delayed condition than the immediate condition. While the strength of the correlation between accuracy and confidence was significant, it demonstrated that witnesses were still overconfident in their identifications.

Unfortunately, in real life, confidence statements are not taken in the pristine conditions that occur in most laboratory studies. Post-feedback confirmation of the identification and other forms of post-identification misinformation lead to a lower correlation between confidence and accuracy for evewitness identifications. People can also have their confidence influenced by pre-identification conditions as well. People determine how accurate a memory is based on intrinsic cues, extrinsic cues, and self-credibility cues (Leippe et. al, 2009). Intrinsic cues are how vivid the memory in question is. Extrinsic cues are the factors that could influence the accuracy of the memory (i.e., distance between the witness and culprit, the lighting, etc.). Self-credibility cues are the beliefs that a person has in their own abilities. Of the three, self-credibility cues can negatively influence the accuracy of an identification the most. If a person is irrationally confident in their ability, an eyewitness can provide an overconfident, inaccurate suspect identification. There are multiple ways to influence a person's self-credibility cues. For example, participants could be given questions starting easy and increasing in difficulty (Michael & Garry, 2019). These influences could be as dangerous as delayed confidence evaluations based upon post-identification feedback.

Using self-credibility cue manipulation, Michael and Garry (2019) explored the effects of question order on the eyewitness confidence-accuracy correlation. The researchers had participants watch a video of a crime being committed. Participants were assigned to one of two groups. Group 1 had their subsequent questions ordered from most difficult to easiest. Group 2 had their questions ordered from easiest to most difficult. There were 30 questions in total. After each question, both groups were asked to rate how confident they were in their answer. After completing the exam, the participants were asked to guess how many of the 30 questions they answered correctly. Both groups performed similarly on the test. However, Group 1 believed

they answered more questions correctly than Group 2. The researchers hypothesized that the first question caused an anchoring effect. Anchoring is a mental bias that causes people to use the first piece of information they receive as an anchor. All subsequent evaluations are adjusted with respect to the anchoring point. So, as a result, those receiving easier questions become more confident in their identifications because they were more confident in their initial responses (i.e., the initial responses were the anchor). On the other hand, both groups reported similar levels of confidence in their memory of the crime. In this experiment, the participants' confidence anchor was associated with only the manner: the difficulty of the questions asked. This could explain the disconnect between "answer" confidence and "memory" confidence. Since in real life a test would not be administered, if questioning started easy and increased in difficulty about the crime, the eyewitness would anchor their memory confidence of the crime with the easy questions. Thus, consistent with research, the eyewitness's confidence level would inflate during the suspect identification without adding any accuracy.

Another form of manipulating self-credibility cues is pre-identification feedback. Pre-identification feedback also boosts the confidence of an eyewitness without increasing any accuracy. Iida and Mah (2020) examined how participants would react when given the results of a "fake" assessment. The assessment claimed to determine how accurate an eyewitness testimony of the participant would likely be. After taking the assessment, they watched a video of a crime. Before they were given a test regarding the crime, the participants were assigned one of three types of feedback on their "fake" assessments: good score, bad score, and no feedback. These evaluations were not related to actual performance. The participants then completed a questionnaire composed of normal questions and leading questions, questions that mislead participants with false information, regarding the mock crime. For both leading and normal questions, participants that received a "good score" through feedback, reported more confidence in their answers; however, they did not show improved accuracy in their answers. This suggests that such feedback negatively inflates the confidence of the eyewitness. Thus, the type of "fake" positive feedback reduces the favorable correlation between accuracy and confidence.

If the confidence assessment does not occur immediately after the identification, misinformation can cause overconfident evaluations in between the identification and confidence assessment (Douglass & Neuschatz, 2010). However, misinformation can also come before the identification and cause people to report a subsequent identification with higher confidence (Spearing & Wade, 2021; Iida et. al, 2020; Flowe et al., 2018). Flowe et al. (2018) had women participate in a 2 (the alcohol content of their drink) x 2 (the participant's perception of their drink) study. The first independent variable was whether the women were drinking alcohol or tonic water. The second independent variable was whether they were told if they were drinking alcohol or tonic water. After drinking their assigned beverages, the participants went through a party simulation. During the party, the women talked to a confederate male, and the participants were able to continue the conversation with the man as far as they desired. Seven days after participating in the simulation, the women returned and were given 18 pieces of information regarding their experience. Each piece of information could be presented as a statement, and the statement could be either consistent, neutral, or inconsistent. Consistent statements were true pieces of information (i.e., the man was 25 years old). Neutral statements were broad truthful statements (i.e., the man was in his twenties). Finally, inconsistent statements would be false statements regarding the situation (i.e., the man was 21). Of the 18 statements, 6 were consistent statements, 6 were neutral statements, and 6 statements were inconsistent. The type of statements' order was randomized. Then, the women attempted to recall what happened during

the simulation. Finally, they were asked one statement-related question per statement provided. After each question, the participants reported how confident they were in their answer. Results across all conditions showed that participants reported inconsistent statements with higher confidence than other types of statements. This demonstrates that misinformation introduced at any stage of the process can boost confidence in inaccurate information, causing a drop in the confidence-accuracy correlation.

Wixted and Wells (2017) argue that an eyewitness's confidence *can* predict the accuracy of their accusation, but it depends on *when* the confidence is obtained and under what conditions. The most important consideration is *when* the witness is asked how confident they are. Confidence statements must be taken directly after the identification for higher accuracy to occur. An eyewitness often provides a less accurate confidence statement during a trial. The main reason for the flawed confidence evaluation is the time in between the identification and the confidence statement allows for outside or internal influences. To affect the witnesses' belief about confidence, one outside influence could be post-identification feedback (Sauer et. al 2010). An internal influence could be rehearsing faulty information multiple times, increasing confidence without increasing accuracy (Spearing & Wade, 2021). If the confidence statement is taken immediately, the witness only has their selection as their means to determine their confidence. Wixted and Wells found immediate confidence evaluations demonstrate a higher correlation between proclaimed confidence and identification accuracy than other times during the process. Namely, people with "high" confidence identify the correct suspect more often than the witnesses with low confidence. Wixted and Wells further determined the best conditions under which eyewitness identifications have the highest confidence-accuracy correlation. Accordingly, there are five conditions that must be met. One, the confidence assessment must be

taken immediately after the identification is made. Two, if there are multiple suspects, only one suspect should be in a lineup at a time. For example, if there are two suspects, there must be at least two prepared lineups with a different suspect in each. Three, the suspect should not stand out from the other fillers that surround them. To avoid the suspect from standing out, the officer should have the evewitness describe the suspect's appearance. When selecting the lineups, the fillers should match the description provided. In addition, everyone in the lineup should be wearing the same clothing. If the suspect stands out from the fillers, the eyewitness could confidently identify the suspect without seeing the crime, because the "suspect" is more salient for irrelevant reasons. Four, the evewitness should be informed that the suspect may or may not be present in the line-up. Eyewitnesses come to lineups determined to identify who committed the crime. This leads them to be reluctant to say the culprit is not in the lineup. Informing the eyewitness that the culprit may or may not be in the lineup, allows them to know that the correct answer may be none of the lineup is the culprit. Finally, the person who is administering the eyewitness identification should not know who the suspects or fillers are. If the person administering the lineup is aware of the suspect, they could consciously or subconsciously influence the eyewitness's identification. Having a double-blind lineup prevents this influence from occurring. These "pristine" conditions allow for the highest correlation between confidence and accuracy. The relationship and strength of the correlation extend to when the eyewitness's viewing conditions are not ideal (i.e., poor lighting, the presence of a weapon, etc.). With the pristine conditions in place, witnesses will intuitively adjust their confidence depending on their familiarity of factors that are influencing their ability to view the crime and the perpetrator properly.

As Wixted and Wells (2017) determined, the timing of the confidence statement is crucial for its strongest correlation with accuracy. The best practice to avoid misinformation with "high" confidence is to record the confidence statement immediately after the initial identification. By extension, this should be true for witnesses providing details about the crime. Spearing and Wade (2021) explored what "immediately" means when eyewitnesses report their confidence on multiple pieces of information from a crime. In their research, the definition of "immediately" had two possibilities: after each detail or after all the details. For their experiment, the researchers had people watch a recording of a crime and asked them to memorize as many details of the crime as possible. Before receiving a test, participants were unknowingly randomly assigned to one of two groups. The two groups differed when they would report their level of confidence for each response. For Group 1, participants were reminded after each of their answers to report their level of confidence. In contrast, Group 2 completed both sections of the evaluation before the examiners informed them to report the level of confidence they had in each individual response. The test was split into two different sections. The first section was a free response. Participants were asked to provide as many details as they could remember. While participants could make broader statements (i.e., the person looked to be in their mid-twenties), they were also asked to refrain from guessing any information. After each written detail, Group 1 was told to provide how confident they were in each detail. In the second section, both groups were provided a cued-recall test. After each question, Group 1 was reminded to provide a confidence statement. After the cued-recall test was completed, Group 2 was informed to provide a confidence statement for each individual detail they provided in the free-response and for each question on the cued-recall test. The researchers discovered that both groups' confidence-accuracy correlations were similar. Originally, the researchers hypothesized that

Group 2 would have a weaker correlation than Group 1. Based on past research, delaying a confidence evaluation inflates the person's confidence since they are exposed to the information for longer. This is because a longer delay allows the witness to evaluate their memories multiple times. If a person thinks about an event more times, they become more familiar with the information. Increasing their familiarity increases their confidence without also increasing their accuracy. Therefore, a longer delay leads to an overconfident evaluation. Despite past evidence, There are two possibilities for the similar relationship in this study. One, there was limited time in between answering the questions and reporting confidence. This inhibited rehearsing the information and misinformation interfering with the evewitness's memory. Two, participants used their common sense to accurately adjust. Koriatz's (1997) cue-utilization theory states that people will use their beliefs or cues to determine how confident they are in a task. For example, if a person is not good with faces, they will rate their confidence lower on a face identification task regardless of when they provide their confidence. Therefore, for Group 2, the participants knew their strengths and weaknesses, and they subsequently adjusted accordingly. Ultimately, while "immediate" does not necessarily mean directly after each item, it reinforces the concept that for a higher eyewitness confidence to accuracy correlation witnesses need the confident statement to be taken before other factors influence their evaluation of confidence.

To further demonstrate the strength of the correlation between accuracy and confidence, Wixted, Read, and Lindsay (2016) analyzed how the correlation was calculated. The old method of calculating used a calibration plot. First, identifications were grouped by the eyewitness's stated confidence. For example, The levels of confidence could be 0-40% confident as "low" confidence, 41-80% confident as "medium" confidence, and 81-100% confident as "high" confidence. Second, for each level of confidence they would record the number of subject identifications in a target present lineup, number of subject identifications in a target absent lineup, number of filler identifications in a target present lineup, and the number of filler identifications in a target absent lineup. Target refers to the person the police are looking for, so a target present lineup has the culprit, and a target absent lineup does not contain the suspect that committed the crime. A suspect identification in a target present (STP) lineup occurs when the eyewitness correctly identifies the suspect in a lineup. A suspect identification in a target absent (STA) lineup occurs when the eyewitness identifies a designated innocent suspect. Filler identifications (FTP and FTA) are when the eyewitness selects a person the police know did not commit the crime, and who were placed in the lineup because they look similar to the suspect. After collecting all the data, researchers created an equation to determine accuracy. The equation is the number of STP (n 1STP) divided by the sum of n 1STP, number of STA (n 2STA), number of FTA (n 3FTA), and number of FTP (n 4FTP). In equation form, n 1STP/(n 1STP + n 2STA + n 3FTA + n 4FTP = p, where p is the percentage of correct answers. The issue with this equation is the denominator. This equation reduces the strength of suspect identifications with filler identification information. Knowing how often a person makes a filler identification with certain confidence levels is important; however, the police know these identification are incorrect.

Yet, a more problematic issue occurs in eyewitnesses identifying the wrong suspect when it is not clear that they are the wrong suspect, leading to a wrongful conviction. If the police know the filler could not have committed the crime then this information is not important and only reduces the correlation between confidence and accuracy. Therefore, the researchers elected to focus only on suspect identifications. The new equation is $n_1STP/(n_1STP + n_3FTA/N) = p$. "p" is the percentage of correct suspect identifications, and N is the number of people in the lineup. For example, if the number of people in the lineup is 6, n_3FTA/6. Using this new equation, Wixted, Reed, and Lindsey (2016) using this formula demonstrated that previous delay identification research had a stronger confidence-accuracy correlation. For instance, Sauer et. al (2010) found that "high" confidence identification in the immediate group was 83.3% correct, and the delayed group was 79.2% correct. Using the new equation, with "high" confidence identifications, the researchers found the immediate group was 97.6% accurate and the delayed group was 96.8% accurate. This results in a stronger correlation between accuracy and confidence.

Using the pristine conditions detailed by Wixted and Wells (2017), the confidence-accuracy correlation exists outside of the laboratory and in real life. From January 22, 2013, to December 5, 2013, 45 police investigators from the Houston Police Department took part in an experiment (Wixted et. al, 2016). The investigators performed witness lineups with one of four conditions: blind sequential, blind simultaneous, blinded sequential, blinded simultaneous. Each condition had eyewitnesses examine a 6 photo lineup. For the sequential conditions, the witness would see each photo individually. For the simultaneous conditions, all six photos would be presented at the same time. For the blinded conditions, the investigator conducting the lineup would not be informed of the suspects and fillers. After an eyewitness made a suspect-identification or filler-identification, they were asked to rate their confidence on a three-point scale. The results showed that there was a strong correlation between confidence and accuracy. A strong correlation was more prevalent when the investigator was in the blinded condition. This demonstrates the conditions established by Wixted and Wells (2017) are necessary for the confidence-accuracy correlation to be maximized in a real-world application. Throughout the history of eyewitness testimonies, the correlation between confidence and accuracy has been questioned. In the beginning, researchers believed that there was a weak relationship. However, under the "pristine" conditions established by Wixted and Wells (2017), research has shown a strong correlation between immediate confidence assessments and accuracy (Wixted et. al, 2016) and extended this to the real-world (Wixted et. al, 2016). The existence of a strong correlation at one time of the eyewitness process raises the possibilities of there being other times in the process when eyewitness's confidence more validly predicts accuracy. Since confidence statements are unreliable when not taken immediately after the identification (Sauer et. al, 2010; Innocence Project, 2020), perhaps there are times before the identification that yield higher confidence-accuracy correlations. For example, can eyewitnesses determine if they can identify the correct suspect before seeing the lineup? Taking it a step further, could a person determine if they were an accurate eyewitness before they witnessed a crime?

Past researchers have examined if the confidence-accuracy correlation occurs earlier than immediately after identification. Whittington et. al (2019) performed two experiments to test the confidence-accuracy correlation before the eyewitness even saw a lineup. In the first experiment, participants were shown a series of photos containing houses and faces for a face encoding task. The background of the photo was green for every non-target photo, and the background was red when the target's face was displayed. The green background images were shown for 0.5 seconds. The red background photo was shown for 1 second. Then, the researchers displayed a fair lineup. The participants were informed that the target may or may not be in the lineup. Finally, the participants identified which face had a red background. Participants repeated this process six times in total. Three of the six lineups were target present. The other three were target absent lineups. Participants were randomly assigned to one of three condition groups: pre-identification, post-identification, and pre/post-identification. In all conditions, participants provided a confidence assessment ranging from 0-10. The pre-identification condition had participants indicate how confident they were after the face encoding task and before the lineup was presented. The post-identification group provided their level of confidence after identifying who they believed was the culprit. Finally, the pre/post-identification condition offered confidence scores at both times. In a second experiment, participants were shown a video of a man stealing a woman's phone from her car. In the minute-long video, the man's face was visible for nine seconds total and directly faced the camera for 2 seconds. Participants were assigned to one of two condition groups: pre/post-identification and post-identification. In the pre/post-identification condition, during the pre-identification assessment, participants were asked how confident they were, ranging from 0-100%, in their ability to identify the culprit in a future lineup. Next, both groups performed a 30 question common-sense distractor task. Then, the participants were shown a lineup that they were informed may or may not contain the culprit. The lineup had an equal chance of being target present or target absent. After making an identification, the eyewitnesses provided a confidence rating from 0-100%. Over both experiments, the post-identification assessments had a strong confidence-accuracy correlation. On the other hand, the pre-identification assessments were poorly correlated with confidence and accuracy. Furthermore, whenever a participant made both a pre/post-identification, they had a weaker confidence-accuracy post-identification correlation than the only post-identification condition. One possible reason for this could be participants anchoring their post-identification confidence assessments based on the pre-identification assessment. This could demonstrate that confidence is only useful immediately after the identification.

If people are able to predict if they are a good eyewitness, there may exist a type of super-eyewitness. These super-witnesses possess certain skills that allow them to be superior to other eyewitnesses. Grabman et al. (2019) examined whether so-called "super-recognizers" would be better evewitnesses. For clarification, super-recognizers are people with the ability to recognize faces more accurately. In the beginning, participants were informed of three pieces of information. One, they would see a series of faces. Two, each face would appear three times. Three, they would be asked to recall these faces either after a five-minute delay or a day delay, depending on what condition group they were in. During the experiment, participants saw twelve different faces: six black and six white. Each face was displayed for three seconds with a one-second delay in between. The order of the pictures was randomized, and the same face never appeared consecutively. Finally, faces of the same race did not appear more than two times consecutively. To prevent primacy bias, the ability to remember the first piece of information better than subsequent information ("Primacy effect - biases & heuristics", 2021), and recency bias, the information presented last is remembered better than the prior information (Vallar, 2015), two different filler faces were shown at the start and end of the sequence.

After the participant's assigned delay, they were asked to identify the familiar face from the lineup. Also, the researchers informed the participants that the lineup may or may not contain a familiar face. There were twelve total lineups: 6 target present and 6 target absent. For the presentation of the lineups, only 2 consecutive target absent or target present were allowed to appear in a row. The same rule applied for the race of the lineup. Finally, the suspect was always in a different serial position from the previous lineup. After each selection, the participants were asked to fill out three evaluations. One, they typed in a textbox how certain they were in their identification. Two, the participants provided an expression of certainty by providing a detail that

made the face a familiar face. Three, they indicated how confident they were in their identification with a six-point scale, starting with 0% and increasing by 20% increments to 100% confidence. Once the participants were shown all twelve lineups, they took the Cambridge Face Memory Test. This test showed participants a face to memorize. Then, they were shown three photos of faces and asked to identify which was the original face. Overall, the researchers found a strong correlation between confidence and accuracy for the immediate condition and delay condition assessments. However, participants with "poor" and "average" face recognition abilities were more vulnerable to making high confidence misidentifications. The reasoning behind the increased errors was how detailed these participants recorded a target's face. Since their representations were less robust, higher confidence does not correlate with the same level of accuracy as a strong face-recognizer. Furthermore, strong face-recognizers were more likely to reject target absent lineups. One issue is the participants would not know whether they are super recognizers without being informed. So, despite being a "strong" face-recognizer, participants are not able to adjust their confidence based on this fact. In conclusion, strong face-recognizers appear to have the ability to be better eyewitnesses than other people.

Gettleman et. al (2021) further examined the abilities of super-recognizer compared to controls. The researchers informed the participants to memorize the presented faces. The participants were shown a total of twelve faces. Participants were told some of the faces would appear once, and others would appear four times. Each face was individually displayed for 3 seconds with a 1-second break in between. In the experiment, six of the faces were shown only one time. This caused the participants to have a weak encoding of these faces. The other six faces were shown four times throughout the sequence. This provided participants with a strong encoding of these faces. For the faces shown four times, the participants saw the same face twice

in the first half of the sequence and twice in the second half. However, the same face was never shown consecutively. Finally, to avoid potential recency and primacy biases, participants were shown two filler faces at the start and two different filler faces at the end. After seeing the entire sequence, participants were shown twelve different photo lineups. Each fair lineup contained 6 people wearing maroon shirts. Six of the lineup were target present, and six were target absent.

Participants were asked to identify amongst the lineup which face was shown in the sequence, or if none of the faces were familiar in the lineup, they would say no one matched a face shown. After making an identification, the participants were asked to indicate their level of confidence. After the lineups, they took the Cambridge Face Memory Test. While all levels of face recognition abilities produced a strong correlation between confidence and accuracy, strong face-recognizers had a stronger confidence-accuracy correlation compared to medium and weak face-recognizers. Furthermore, participants with lower face recognition abilities were more likely to make high confidence misidentifications. However, if a certain lineup's accuracy was low, both strong and weak groups had a lower accuracy percentage. On the other hand, if the participant's accuracy with a certain lineup was high, the correlation between accuracy and confidence was higher. The crucial point is that participants with strong face recognition abilities were less likely to make high confidence errors (26 false identifications compared to 192 false identifications for weak face-recognizers). They were able to use the confidence scale more validly. Thus, police officers appear to be able to trust the confidence assessment of a strong face-recognizer eyewitness as compared to the average witness. This demonstrates that the ability to encode more detailed memories of faces is a valuable skill for an eyewitness.

A primary reason eyewitnesses have a weak confidence-accuracy correlation is misinformation inflating their confidence. If the officer conducting a lineup provides positive post-identification feedback about their identification, the eyewitness's confidence would increase without increasing accuracy (Sauer et. al, 2010). The misinformation is the feedback provided. If the eyewitness has their self-credibility cues increased before the identification, they will provide overconfident assessment statements as well (Iida et. al, 2020; Micheal & Garry, 2019). The boost to the eyewitness's self-credibility cue is the misinformation. If outside information the eyewitness receives is the issue, eyewitnesses may become better predictors of their abilities without information. As Koriatz (1997) suggests with cue-utilization theory, people may know what they are skilled in and what skills they lack. This allows people to alter their level of confidence. As Grabman et. al (2021) demonstrated, there are skills (face recognition abilities) that make some eyewitnesses more reliable than others. Therefore, combining the two areas of research, people should be able to determine how accurate of an eyewitness they are based on their knowledge of themselves.

Kruger and Dunning (1999) performed four experiments about people's ability to evaluate their abilities. For Experiment 1, they had people rank humor based on what others would find humorous. Experiment 2 had participants perform logical reasoning based on situations crafted from the LSAT's guidelines. For Experiment 3, participants performed a grammar task. Also, they were shown high percentile performances (people who performed well on the exam) versus low percentile performances (people who performed poorly). Then, the participants were asked to determine how their performances were scored, testing the metacognition abilities of the participants. Metacognition is the ability to use prior knowledge to evaluate responses and determine the results ("Teal center fact sheet no. 4: Metacognitive processes", 2019). Experiment 4 had participants use logical reasoning to solve a problem. Then, the researchers explained how to correctly solve the logical reasoning task.

For all the tasks, Kruger and Dunning had participants perform skills that required knowledge or innate abilities for good performance. For each experiment, the participants would evaluate how well they thought they did after they completed the task. Overall, participants' average evaluation of their abilities was in the 66th percentile. The group overestimated their abilities compared to the 50th percentile average. Furthermore, participants in the bottom quartile evaluated their performance higher than the standard average as well. In Experiment 3, the lower quartile also displayed a lower level of metacognition. Therefore, if the participant is ignorant about a certain topic, they are more likely to be overconfident, so, if logical reasoning abilities and metacognitions associated with them work similar to eyewitness ones. Then, in terms of being an eyewitness, this could lead participants to be overconfident in their abilities to be good eyewitnesses when they are in fact and especially poor eyewitnesses.

Present Research

For the present research, in regards to the confidence-accuracy correlation of a participant before seeing a crime, an eyewitness's preconception of their abilities negatively correlates with the accuracy of their recount of the crime. More accurate eyewitnesses possess prior knowledge or certain innate abilities that allow them to remember the culprit more accurately. Grabman et al. (2019) demonstrated that those include superior face recognition abilities. Kruger and Dunning (1999) revealed on average people tend to overestimate their abilities that require prior knowledge or innate skills. Furthermore, people that are ignorant of a skill will severely overestimate their abilities. Since identifying a culprit is a new task for most people, participants

will perform similarly to people in the lower quartile of other skills. Therefore, most participants will provide overconfident statements and produce a negative confidence-accuracy correlation. Next, if a participant makes their confidence assessment before making an identification, there will be no correlation or a weak correlation between confidence and accuracy. Whittington et. al (2019) showed that providing a pre-identification assessment lowers the strength of the confidence-accuracy correlation. Therefore, a confidence assessment before witnessing a crime or before seeing the lineup will weaken the correlation between the post-identification confidence and accuracy.

Hypotheses

- 1. Confidence assessments made before viewing the crime will have a negative correlation with the accuracy of a subsequent identification of a staged crime
- The confidence-accuracy correlation for the assessments performed before seeing the lineup will be weakest when compared to the ones that occur immediately after making an identification
- 3. For conditions where participants are provided a confidence assessment before the post-identification confidence-accuracy correlation, the post-identification correlation will be weaker than the post-identification only condition group because their second assessment will be anchored by the first level of confidence the participant provided.

Methods

Participants

Participants will be gathered from Turkprime to interface with Amazon Mechanical Turk in exchange for a payment of 10 dollars (Gettleman et. al, 2019). Participants will provide informed consent consistent with the APA Principle. If the participants fail the attention check or do not complete the study, they will not receive their payment. The number of participant responses will be at least 240, determined by G*Power 3.1.9.7 and accounting for potential participants that fail the attention checks (Faul et. al, 2009). This provides a sufficient number for a test with a weak effect size (d = 0.3), 0.05 error probability ($\alpha = 0.05$), 0.8 power ($\beta = 0.8$), and three conditions: post-identification only, pre-crime/ post-identification, and pre/post-identification (df = 2). Finally, multiply everything by two since there are two potential lineups: target present and target absent, but these are not going to be cross-examined, so two separate three conditions being compared.

Materials

Mock Crime Video

The video will be a first-person point of view using a shoulder-mounted camera elevated at a height of 5' 7". This height is based upon the average height of a person in the United States, being roughly 5'7". The video will be shot in good lighting during the middle of the day 25 feet from the crime. Past research has demonstrated that participants are able to accurately adjust their level of confidence based on the distance they witnessed the crime and the lighting of the crime scene (Wixted & Wells, 2017). Therefore, neither of these factors should influence the abilities of participants to make "high" confidence misidentification.

The crime the participants will be viewing is a woman having her bag stolen by a white man with short and brown hair, a clean shave, and in his early 20s. In the sight of the eyewitness, the man will sneak up behind the woman and attempt to snatch her bag. The women will struggle for a bit and cry for help. After the woman's bag is stolen, the witness will see the man run away. The video will end when the camera approaches the woman, checking to see if she is okay. The robber will not be carrying any weapons that will distract the participants (Carlson et. al, 2017). If a weapon is present, participants will focus on the weapon and less on the face of the perpetrator. This will cause less correct identifications and more filler identification. The video will be one minute long. 30 seconds of the video will contain the crime. Of the 30 seconds, the culprit's face will be visible in the shot for 9 seconds. Finally, the person committing the crime will look directly at the camera for 2 seconds (Whittington et. al, 2019).

Identification

The lineup will consist of six, 2 x 3-inch photos presented simultaneously on one screen. The photos will be organized three to a row. The positions will be randomized for each participant. Participants will be instructed that the target may or may not be present in the lineup (Wixted & Wells, 2017). Target absent and target present lineups will be the same probability of appearing. Wells et.al (2020) provides further recommendations for how to select fillers for a police lineup. For match-to-description, fillers will be white men with short, brown-haired, clean-shaven, and in their early 20s. In addition, the suspect will not stand out based on background or clothing. So, all the men will have blank expressions and wear maroon shirts with a plain white background (Gettleman et. al, 2021). During "mock witness" testing from randomly generated lineups, the culprit was only identified 17.6% of the time, roughly chance levels. This suggests the culprit is part of a fair lineup. Therefore, he should not be confidently identified without witnessing the crime.

Confidence rating scale

Using a scale similar to Whittington et. al (2019), the confidence rating scale will be a continuous scale, ranging from 0-100% confident (see Fig. 1). 0% means the participant has no confidence who the culprit is and guessed. 100% confidence means the participant believes without a doubt the person they identified was the culprit. "High" confidence for participants will be 81-100% confidence. "Medium" confidence will be 61-80% confidence. "Low" confidence will be 0-60% confidence.

✓ Q5

How confident are you in your identification or lack of identification?

0% means you have no confidence who the culprit is and guessed. 100% confidence means you believe without a doubt the person you identified is the culprit.



Figure 1 Example of the confidence rating scale, ranging from 0-100. The question is for the Time 3 confidence assessment. The participant is evaluating themself as 77 percent confident. Instructions for what 0 and 100 represent with each scale.

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Face Recognition Task

Participants will complete the Cambridge Face Memory Test (CFMT) to judge their face recognition abilities (Grabman et. al, 2019; Grabman et. al, 2021). In the task, participants will be shown six faces in three orientations to memorize. Then, the participants will select between three faces: one target and two fillers. The participants will identify 72 faces for three increasingly difficult blocks, and the sum of the correctly identified faces, ranging 0-72, will predict the performance of a respondent.

Procedures

The participants will be provided a consent form and informed of the task they will be administered. After consenting to the experiment, participants will be randomly assigned to one of three condition groups: post-identification only, pre-crime/ post-identification, and pre/post-identification. Each of these conditions will determine when the participant will provide a confidence assessment (see Fig. 2). The post-identification condition will evaluate the participant's confidence after they have identified a person as the potential culprit (Time 3). For the pre-crime/post-identification condition group, subjects will assess their confidence before seeing the mock crime video (Time 1). Then, they will perform another assessment after the identification, similar to the post-identification condition (Time 3). Finally, the pre/post-identification condition will evaluate their confidence immediately after seeing the mock crime video (Time 2). Additionally, like all other groups, they will provide another confidence assessment after the identification (Time 3).



Figure 2 Timeline for the experiment. Each confidence assessment only occurs if the participant is in the appropriate condition group. If not, the participant moves to the next section of the experiment.

Once assigned to a condition group, participants will either provide their confidence assessment or immediately watch the mock crime video. For the pre-crime conditions, participants will be asked about their confidence to perform multiple different skills not pertaining to being an eyewitness. Within the series of questions, the researcher would ask "How confident are you in your ability to identify the culprit in a crime you witnessed?" This skill assessment serves as a way to prevent the pre-crime condition group from having an advantage or being primed for an eyewitness identification task. If the participants were only asked about their abilities to be an eyewitness, they would be aware that the study is requiring them to be eyewitnesses. This is information the other condition groups would not have provided.

Before pressing play, the researcher will inform the participants to pay attention to the video and the events that transpire. After watching the video, the participants would answer an

attention check question. The attention check question is a multiple-choice question, "what was the crime that was committed in the video?" If the participant failed to answer "robbery", the participant is provided a second multiple choice question. The question reads, "what color was the culprit's hair?" If they failed to answer "brown", they will be removed from the experiment and not paid for their participation. Then, the subjects in the pre-identification condition would provide a confidence assessment. They will be asked, "How confident are you in your ability to identify the culprit in a future lineup?" Next, all participants will work on a sudoku puzzle for 5 minutes as a distractor task (Grabman et. al, 2019). Once the five minutes are completed, participants will be shown a lineup. The lineup will have an equal chance of being target present or target absent. The participants are told "Here is a lineup. The person who committed the crime may or may not be within this lineup. If the person is within the lineup, select the photo of the person. If the person is not in the lineup, select the button at the bottom of the screen." Stating the target may or may not be in the lineup is a condition that creates the pristine conditions for the confidence accuracy condition (Wixted and Wells, 2017). The participant will select one of the available options. Afterward, they are asked, "How confident are you in your identification or lack of identification?" Participants will use the confidence rating scale to indicate their level of confidence. Next, they would complete the CFMT. Finally, they will provide some demographic information (gender, race, and age), and the participants are debriefed.

Results/Prediction

Face Recognition Task

To determine the strength of the participants' face recognition abilities, the total number of correctly identified faces will be recorded for each participant. Then, the median will be determined from the collected data. Afterward, one median absolute deviation will be calculated. Participants within the interval of the median plus and minus one median absolute deviation are "average" face recognizers. "Strong" face recognizers are scores above the interval. "Poor" face recognizers are scores below the interval.

Lineup decisions (Target Present and Target Absent)

Data will be collected to determine the response percentage for each condition for both target present lineups and target absent lineups. For the target present lineups, the three possible responses are Correct ID, Filler ID, or Rejection. Correct ID occurs when the participant correctly identifies the culprit. Filler ID occurs when a participant incorrectly identifies a filler as the culprit. Finally, Rejection occurs when the participant believes the culprit is not within the lineup. For the target absent lineup, the two possible responses are Filler ID and Correct Rejection. After collecting the number of each response, the information will be converted into percentages (see Table 1). These percentages will then be compared using a Chi-squared test. For example, the percentage of Correct IDs for a target present lineup will be compared for each condition.

Based on Whittington et. al (2019), no responses will be significantly different from the same response in different conditions. In other words, the percentage of Correct Rejections in a target absent lineup will not be significantly different between pre-crime/post-identification, pre/post-identification, and post-identification condition groups. This will be true for every possible response. The main difference between the conditions should stem from confidence assessments. The level of confidence is not a factor for this analysis, only the participants' skills

as an eyewitness. Participants were randomly assigned to a condition group, so the overall skill of the group should be similar for each condition. Unless one condition randomly ends up with more "super" identifiers. Therefore, the number of Correct IDs or Correct Rejections will be higher than the other conditions. If the "super" recognizers are separated equally, no group should produce a significantly different percentage on any response.

	TA Lineup Decisions				
Confidence Assessment	Correct ID rate	Filler ID rate	Rejection rate	Filler ID rate	Correct Rejection Rate
Pre-crime/Post- Identification	0.75 (30)	0.15 (6)	0.10 (4)	0.525 (21)	0.475 (19)
Pre/Post- Identification	0.725 (29)	0.125 (5)	0.15 (6)	0.35 (14)	0.65 (26)
Post-Identification	0.82 (33)	0.075 (3)	0.10 (4)	0.425 (17)	0.575 (23)

Table 1 Experiment identification and rejection rates for target present (TP) and target absent(TA) lineups. The raw number of a given response is present in the parentheses (Table 1A).

ROC Analysis

ROC is plotting the proportion of Correct IDs in a target present lineup (the number of correct identifications divided by the number of TP lineups presented) over the proportion of Filler IDs in a target absent lineup (the number of filler identifications divided by 6, then divided by the number of TA lineups presented) based on the confidence level. To get the points for the curve, the first point will be the proportion of Correct IDs over the proportion of Filler IDs of

participants that evaluated their level of confidence from 90-100%. The next point will be the cumulative proportion of Correct IDs over the proportion of Filler IDs of participants that evaluated their level of confidence at 80-100%. Each proceeding point will add the next 10 percent confidence interval to the previous cumulation, so the next point would be evaluating 70-100% (see Fig. 3). Then, each condition's ROC will have its partial area underneath the curve (pAUC) calculated. The pAUC indicates the overall accuracy of an eyewitness's ability to produce a Correct ID or select a filler when the target is absent. Finally, the pAUC of each condition will be compared using the pROC (Robin et. al, 2011). There will be five total curves to compare: post-identification only confidence assessment (Curve 1), pre-crime/post-identification Time 1 confidence assessment (Curve 3), pre/post-identification

Time 2 confidence assessment (Curve 4), and pre/post-identification Time 3 confidence assessment (Curve 5). Curve 4 and Curve 5 pull from the same participants since the information comes from that condition. However, participants should evaluate their level of confidence differently during the pre/post-identification Time 2 versus pre/post-identification Time 3. Therefore, the two curves should look very different, so there are two curves. The same logic applies to Curve 2 and Curve 3.

Using Whittington et. al (2019) as a point of reference, the pAUC for Curve 1, 3, 4, and 5 will all be similar and significantly different. However, Curve 2 will also be significantly different. Curve 2 involves the pre-crime/post-identification Time 1 confidence assessments. Kruger and Dunning (1999) demonstrated that people overestimate their abilities. This would lead to a greater number of high confidence misidentifications. Therefore, the proportion of Correct IDs will be lower, and the proportion of Filler IDs would be higher. Since the ending



value should be similar to the other curves, the lower start would cause a smaller area to be calculated.

Figure 3 Mock receiver operating characteristic curves using the raw data (Table 1A)

CAC calibration, Calibration, and Resolution

Calibration determines whether the participants that evaluate their level of confidence at 80 percent is actually 80 percent accurate. The equations to perform the calculations are provided in Brewer et. al (2002). Resolution is measured using ANDI, adjusted normalized discrimination index. Resolution determines how well confidence levels discriminate between Correct IDs and Filler IDs (see Yaniv et al., 1991, for the original formulas). The ANDI ranges from 0 to 1.0

means the level of confidence provided gives no discrimination. 1 means perfect discrimination for confidence level.

For the calibration analyses, every condition's Time 3 confidence assessment will have a lower value to show that they are close to perfect calibration. On the other hand, pre/post-identification Time 2 confidence assessment will have a significantly higher value for calibration (Whittington et. al 2019), and pre-crime/post-identification Time 1 confidence assessment calibration value will be significantly higher than all the other calibration values. This is because the participants will overestimate their abilities. Calibration determines how close the evaluated confidence percent is to the actual percent correct. If the participant is overconfident, they drop the group's correct percentage.

For resolution, the post-identification only confidence assessment will have the highest value since it will provide the strongest correlation. Pre/post-identification and pre-crime/post-identification Time 3 confidence assessments will discriminate less than the post-identification only confidence assessment but will be similar in value. Finally, pre-crime/post-identification Time 1 and pre/post-identification Time 2 confidence assessments will have values lower than the post-identification scores. These values will be closer to 0 than 1. Furthermore, the pre-crime/post-identification Time 1 confidence assessment value will have the smallest value of all assessments and discriminate less than the pre/post-identification Time 2 confidence assessment.

Confidence-accuracy characteristics are found using the suspect identification-focused equation (Wixted, Read, & Lindsay, 2016). This equation is n_1STP/(n_1STP +n_2FTA/N). n_1STP is the number of suspect identifications made in a target present lineup. n_2FTA/N is the number of filler identifications made in a target absent lineup divided by the number of people in

the lineup. CAC determines how accurate the eyewitness is with a certain level of confidence. The information would then be plotted on a graph. The x-axis represents the level of confidence: "low", "medium", or "high". The y-axis represents the percentage of correct identifications. On the CAC graph, there will be five lines, one line for each confidence assessment (Fig. 4). Finally, using the same equation as above, the point-biserial correlation will be evaluated.





For the pre/post-identification Time 2 confidence assessment, "low" confidence eyewitnesses will have the lowest percentage of correct IDs. However, as Whittington et. al (2019) demonstrated, the "high" confidence may not yield the highest percentage. For the CAC, "high" levels of confidence with the Time 3 confidence assessments will have the highest percentage of correct suspect identifications. Furthermore, regardless of which confidence level has the highest CAC for pre-crime/post-identification Time 1 and pre/post-identification Time 2 confidence assessments, this percentage will be lower than the Time 3 assessments. Pre-crime/post-identification Time 1 confidence assessment will have the highest CAC with the "low" confidence assessment. This is because participants will provide overconfident assessments and make a filler identification in a target absent lineup. Kruger and Dunning (1999) demonstrated that participants in the lower quartile will overestimate their abilities. If this translates to these participants will have a 25 percent chance of answering correctly, then both the "medium" and "high" confidence groups will have a great possibility of having filler identifications that reduce the percentage that other confidence assessment groups do not have.

For the point-biserial correlations, post-identification only Time 3 confidence assessment will have the strongest confidence-accuracy correlation. pre/post-identification and pre-crime/post-identification Time 3 confidence assessment will also have strong correlations between confidence and accuracy, but the correlations will be weaker than post-identification only Time 3 (Whittington et. al, 2019). For pre/post-identification Time 2 confidence assessment, the confidence-accuracy correlation will be weak (Whittington). Finally, pre-crime/post-identification Time 1 confidence assessment will have a negative correlation. This will be due to the same reasoning as the low percentage of correct IDs in the "high" confidence group for pre-crime/post-identification Time 1 confidence assessment. Participants overestimate their own abilities, so the low confidence will be similar to other conditions, but as the confidence increases, the accuracy will decrease because of the participant's poor self-evaluation.

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Appendix

Participant ID #	Condition Group/Confidence Assessment Time	Lineup	Level of Confidence	Identification Results
1	Pre-Crime/Post-Identification Time 1	TA	98%	Filler ID
1	Pre-Crime/Post-Identification Time 3	TA	91%	Filler ID
2	Pre-Crime/Post-Identification Time 1	TA	95%	Filler ID
2	Pre-Crime/Post-Identification Time 3	ТА	88%	Filler ID
3	Pre-Crime/Post-Identification Time 1	ТА	92%	Filler ID
3	Pre-Crime/Post-Identification Time 3	TA	77%	Filler ID
4	Pre-Crime/Post-Identification Time 1	ТА	95%	Filler ID
4	Pre-Crime/Post-Identification Time 3	ТА	79%	Filler ID
5	Pre-Crime/Post-Identification Time 1	TA	99%	Filler ID
5	Pre-Crime/Post-Identification Time 3	TA	62%	Filler ID
6	Pre-Crime/Post-Identification Time 1	ТА	97%	Filler ID
6	Pre-Crime/Post-Identification Time 3	ТА	63%	Filler ID
7	Pre-Crime/Post-Identification Time 1	TA	88%	Filler ID
7	Pre-Crime/Post-Identification Time 3	TA	55%	Filler ID
8	Pre-Crime/Post-Identification Time 1	TA	72%	Filler ID
8	Pre-Crime/Post-Identification Time 3	TA	52%	Filler ID
9	Pre-Crime/Post-Identification Time 1	ТА	69%	Filler ID
9	Pre-Crime/Post-Identification Time 3	ТА	47%	Filler ID
10	Pre-Crime/Post-Identification Time 1	ТА	67%	Filler ID
10	Pre-Crime/Post-Identification Time 3	TA	43%	Filler ID

11	Pre-Crime/Post-Identification Time 1	TA	55%	Filler ID
11	Pre-Crime/Post-Identification Time 3	TA	38%	Filler ID
12	Pre-Crime/Post-Identification Time 1	TA	55%	Filler ID
12	Pre-Crime/Post-Identification Time 3	TA	39%	Filler ID
13	Pre-Crime/Post-Identification Time 1	TA	50%	Filler ID
13	Pre-Crime/Post-Identification Time 3	TA	31%	Filler ID
14	Pre-Crime/Post-Identification Time 1	TA	46%	Filler ID
14	Pre-Crime/Post-Identification Time 3	TA	30%	Filler ID
15	Pre-Crime/Post-Identification Time 1	TA	37%	Filler ID
15	Pre-Crime/Post-Identification Time 3	TA	22%	Filler ID
16	Pre-Crime/Post-Identification Time 1	TA	33%	Filler ID
16	Pre-Crime/Post-Identification Time 3	TA	21%	Filler ID
17	Pre-Crime/Post-Identification Time 1	TA	20%	Filler ID
17	Pre-Crime/Post-Identification Time 3	TA	19%	Filler ID
18	Pre-Crime/Post-Identification Time 1	TA	0%	Filler ID
18	Pre-Crime/Post-Identification Time 3	TA	15%	Filler ID
19	Pre-Crime/Post-Identification Time 1	TA	5%	Filler ID
19	Pre-Crime/Post-Identification Time 3	TA	0%	Filler ID
20	Pre-Crime/Post-Identification Time 1	TA	29%	Filler ID
20	Pre-Crime/Post-Identification Time 3	TA	0%	Filler ID
21	Pre-Crime/Post-Identification Time 1	TA	21%	Filler ID
21	Pre-Crime/Post-Identification Time 3	TA	5%	Filler ID
22	Pre-Crime/Post-Identification Time 1	TA	100%	Correct Rejection

				44
22	Pre-Crime/Post-Identification Time 3	TA	100%	Correct Rejection
23	Pre-Crime/Post-Identification Time 1	TA	90%	Correct Rejection
23	Pre-Crime/Post-Identification Time 3	TA	97%	Correct Rejection
24	Pre-Crime/Post-Identification Time 1	TA	82%	Correct Rejection
24	Pre-Crime/Post-Identification Time 3	TA	98%	Correct Rejection
25	Pre-Crime/Post-Identification Time 1	TA	83%	Correct Rejection
25	Pre-Crime/Post-Identification Time 3	TA	95%	Correct Rejection
26	Pre-Crime/Post-Identification Time 1	TA	70%	Correct Rejection
26	Pre-Crime/Post-Identification Time 3	TA	88%	Correct Rejection
27	Pre-Crime/Post-Identification Time 1	TA	75%	Correct Rejection
27	Pre-Crime/Post-Identification Time 3	TA	87%	Correct Rejection
28	Pre-Crime/Post-Identification Time 1	TA	78%	Correct Rejection
28	Pre-Crime/Post-Identification Time 3	TA	85%	Correct Rejection
29	Pre-Crime/Post-Identification Time 1	TA	60%	Correct Rejection
29	Pre-Crime/Post-Identification Time 3	TA	77%	Correct Rejection
30	Pre-Crime/Post-Identification Time 1	TA	50%	Correct Rejection
30	Pre-Crime/Post-Identification Time 3	TA	78%	Correct Rejection
31	Pre-Crime/Post-Identification Time 1	TA	55%	Correct Rejection
31	Pre-Crime/Post-Identification Time 3	TA	70%	Correct Rejection
32	Pre-Crime/Post-Identification Time 1	TA	54%	Correct Rejection
32	Pre-Crime/Post-Identification Time 3	TA	69%	Correct Rejection
33	Pre-Crime/Post-Identification Time 1	TA	45%	Correct Rejection
33	Pre-Crime/Post-Identification Time 3	TA	55%	Correct Rejection

				45
34	Pre-Crime/Post-Identification Time 1	ТА	75%	Correct Rejection
34	Pre-Crime/Post-Identification Time 3	TA	45%	Correct Rejection
35	Pre-Crime/Post-Identification Time 1	TA	33%	Correct Rejection
35	Pre-Crime/Post-Identification Time 3	TA	66%	Correct Rejection
36	Pre-Crime/Post-Identification Time 1	TA	69%	Correct Rejection
36	Pre-Crime/Post-Identification Time 3	TA	54%	Correct Rejection
37	Pre-Crime/Post-Identification Time 1	TA	88%	Correct Rejection
37	Pre-Crime/Post-Identification Time 3	ТА	30%	Correct Rejection
38	Pre-Crime/Post-Identification Time 1	TA	43%	Correct Rejection
38	Pre-Crime/Post-Identification Time 3	ТА	20%	Correct Rejection
39	Pre-Crime/Post-Identification Time 1	ТА	57%	Correct Rejection
39	Pre-Crime/Post-Identification Time 3	ТА	75%	Correct Rejection
40	Pre-Crime/Post-Identification Time 1	ТА	79%	Correct Rejection
40	Pre-Crime/Post-Identification Time 3	ТА	45%	Correct Rejection
41	Pre/Post-Identification Time 2	ТА	93%	Filler ID
41	Pre/Post-Identification Time 3	ТА	92%	Filler ID
42	Pre/Post-Identification Time 2	ТА	87%	Filler ID
42	Pre/Post-Identification Time 3	ТА	95%	Filler ID
43	Pre/Post-Identification Time 2	ТА	83%	Filler ID
43	Pre/Post-Identification Time 3	ТА	82%	Filler ID
44	Pre/Post-Identification Time 2	ТА	79%	Filler ID
44	Pre/Post-Identification Time 3	ТА	83%	Filler ID
45	Pre/Post-Identification Time 2	ТА	75%	Filler ID

				46
45	Pre/Post-Identification Time 3	ТА	87%	Filler ID
46	Pre/Post-Identification Time 2	TA	69%	Filler ID
46	Pre/Post-Identification Time 3	ТА	72%	Filler ID
47	Pre/Post-Identification Time 2	TA	54%	Filler ID
47	Pre/Post-Identification Time 3	TA	68%	Filler ID
48	Pre/Post-Identification Time 2	TA	49%	Filler ID
48	Pre/Post-Identification Time 3	TA	65%	Filler ID
49	Pre/Post-Identification Time 2	TA	48%	Filler ID
49	Pre/Post-Identification Time 3	TA	59%	Filler ID
50	Pre/Post-Identification Time 2	TA	45%	Filler ID
50	Pre/Post-Identification Time 3	TA	52%	Filler ID
51	Pre/Post-Identification Time 2	TA	39%	Filler ID
51	Pre/Post-Identification Time 3	TA	49%	Filler ID
52	Pre/Post-Identification Time 2	TA	33%	Filler ID
52	Pre/Post-Identification Time 3	TA	31%	Filler ID
53	Pre/Post-Identification Time 2	TA	25%	Filler ID
53	Pre/Post-Identification Time 3	TA	30%	Filler ID
54	Pre/Post-Identification Time 2	TA	0%	Filler ID
54	Pre/Post-Identification Time 3	TA	0%	Filler ID
55	Pre/Post-Identification Time 2	TA	98%	Correct Rejection
55	Pre/Post-Identification Time 3	TA	100%	Correct Rejection
56	Pre/Post-Identification Time 2	TA	96%	Correct Rejection
56	Pre/Post-Identification Time 3	TA	90%	Correct Rejection

				47
57	Pre/Post-Identification Time 2	TA	93%	Correct Rejection
57	Pre/Post-Identification Time 3	TA	81%	Correct Rejection
58	Pre/Post-Identification Time 2	TA	88%	Correct Rejection
58	Pre/Post-Identification Time 3	TA	85%	Correct Rejection
59	Pre/Post-Identification Time 2	TA	82%	Correct Rejection
59	Pre/Post-Identification Time 3	TA	95%	Correct Rejection
60	Pre/Post-Identification Time 2	TA	82%	Correct Rejection
60	Pre/Post-Identification Time 3	TA	87%	Correct Rejection
61	Pre/Post-Identification Time 2	TA	77%	Correct Rejection
61	Pre/Post-Identification Time 3	TA	82%	Correct Rejection
62	Pre/Post-Identification Time 2	TA	75%	Correct Rejection
62	Pre/Post-Identification Time 3	TA	84%	Correct Rejection
63	Pre/Post-Identification Time 2	TA	70%	Correct Rejection
63	Pre/Post-Identification Time 3	TA	75%	Correct Rejection
64	Pre/Post-Identification Time 2	TA	71%	Correct Rejection
64	Pre/Post-Identification Time 3	TA	88%	Correct Rejection
65	Pre/Post-Identification Time 2	TA	65%	Correct Rejection
65	Pre/Post-Identification Time 3	TA	83%	Correct Rejection
66	Pre/Post-Identification Time 2	TA	85%	Correct Rejection
66	Pre/Post-Identification Time 3	TA	72%	Correct Rejection
67	Pre/Post-Identification Time 2	TA	88%	Correct Rejection
67	Pre/Post-Identification Time 3	TA	73%	Correct Rejection
68	Pre/Post-Identification Time 2	TA	90%	Correct Rejection

				48
68	Pre/Post-Identification Time 3	TA	63%	Correct Rejection
69	Pre/Post-Identification Time 2	TA	55%	Correct Rejection
69	Pre/Post-Identification Time 3	TA	62%	Correct Rejection
70	Pre/Post-Identification Time 2	TA	40%	Correct Rejection
70	Pre/Post-Identification Time 3	TA	55%	Correct Rejection
71	Pre/Post-Identification Time 2	TA	33%	Correct Rejection
71	Pre/Post-Identification Time 3	TA	42%	Correct Rejection
72	Pre/Post-Identification Time 2	TA	84%	Correct Rejection
72	Pre/Post-Identification Time 3	TA	33%	Correct Rejection
73	Pre/Post-Identification Time 2	TA	90%	Correct Rejection
73	Pre/Post-Identification Time 3	TA	55%	Correct Rejection
74	Pre/Post-Identification Time 2	TA	40%	Correct Rejection
74	Pre/Post-Identification Time 3	TA	58%	Correct Rejection
75	Pre/Post-Identification Time 2	TA	67%	Correct Rejection
75	Pre/Post-Identification Time 3	TA	43%	Correct Rejection
76	Pre/Post-Identification Time 2	TA	60%	Correct Rejection
76	Pre/Post-Identification Time 3	TA	78%	Correct Rejection
77	Pre/Post-Identification Time 2	TA	99%	Correct Rejection
77	Pre/Post-Identification Time 3	TA	63%	Correct Rejection
78	Pre/Post-Identification Time 2	TA	30%	Correct Rejection
78	Pre/Post-Identification Time 3	TA	32%	Correct Rejection
79	Pre/Post-Identification Time 2	TA	69%	Correct Rejection
79	Pre/Post-Identification Time 3	TA	25%	Correct Rejection

80	Pre/Post-Identification Time 2	TA	79%	Correct Rejection
80	Pre/Post-Identification Time 3	TA	10%	Correct Rejection
81	Post-Identification Only Time 3	TA	91%	Filler ID
82	Post-Identification Only Time 3	TA	90%	Filler ID
83	Post-Identification Only Time 3	TA	73%	Filler ID
84	Post-Identification Only Time 3	TA	67%	Filler ID
85	Post-Identification Only Time 3	TA	68%	Filler ID
86	Post-Identification Only Time 3	TA	62%	Filler ID
87	Post-Identification Only Time 3	TA	58%	Filler ID
88	Post-Identification Only Time 3	TA	53%	Filler ID
89	Post-Identification Only Time 3	TA	44%	Filler ID
90	Post-Identification Only Time 3	TA	43%	Filler ID
91	Post-Identification Only Time 3	TA	37%	Filler ID
92	Post-Identification Only Time 3	TA	23%	Filler ID
93	Post-Identification Only Time 3	TA	25%	Filler ID
94	Post-Identification Only Time 3	TA	15%	Filler ID
95	Post-Identification Only Time 3	TA	20%	Filler ID
96	Post-Identification Only Time 3	TA	0%	Filler ID
97	Post-Identification Only Time 3	TA	0%	Filler ID
98	Post-Identification Only Time 3	TA	100%	Correct Rejection
99	Post-Identification Only Time 3	TA	92%	Correct Rejection
100	Post-Identification Only Time 3	TA	90%	Correct Rejection
101	Post-Identification Only Time 3	TA	95%	Correct Rejection

				50
102	Post-Identification Only Time 3	TA	89%	Correct Rejection
103	Post-Identification Only Time 3	TA	81%	Correct Rejection
104	Post-Identification Only Time 3	TA	82%	Correct Rejection
105	Post-Identification Only Time 3	TA	87%	Correct Rejection
106	Post-Identification Only Time 3	TA	100%	Correct Rejection
107	Post-Identification Only Time 3	TA	92%	Correct Rejection
108	Post-Identification Only Time 3	TA	74%	Correct Rejection
109	Post-Identification Only Time 3	TA	75%	Correct Rejection
110	Post-Identification Only Time 3	TA	67%	Correct Rejection
111	Post-Identification Only Time 3	TA	73%	Correct Rejection
112	Post-Identification Only Time 3	TA	68%	Correct Rejection
113	Post-Identification Only Time 3	TA	66%	Correct Rejection
114	Post-Identification Only Time 3	TA	0%	Correct Rejection
115	Post-Identification Only Time 3	TA	8%	Correct Rejection
116	Post-Identification Only Time 3	TA	24%	Correct Rejection
117	Post-Identification Only Time 3	TA	10%	Correct Rejection
118	Post-Identification Only Time 3	TA	56%	Correct Rejection
119	Post-Identification Only Time 3	TA	22%	Correct Rejection
120	Post-Identification Only Time 3	TA	26%	Correct Rejection
121	Pre-Crime/Post-Identification Time 1	ТР	97%	Correct ID
121	Pre-Crime/Post-Identification Time 3	ТР	100%	Correct ID
122	Pre-Crime/Post-Identification Time 1	ТР	99%	Correct ID
122	Pre-Crime/Post-Identification Time 3	ТР	99%	Correct ID

123	Pre-Crime/Post-Identification Time 1	ТР	95%	Correct ID
123	Pre-Crime/Post-Identification Time 3	ТР	95%	Correct ID
124	Pre-Crime/Post-Identification Time 1	ТР	93%	Correct ID
124	Pre-Crime/Post-Identification Time 3	ТР	97%	Correct ID
125	Pre-Crime/Post-Identification Time 1	ТР	92%	Correct ID
125	Pre-Crime/Post-Identification Time 3	ТР	98%	Correct ID
126	Pre-Crime/Post-Identification Time 1	ТР	100%	Correct ID
126	Pre-Crime/Post-Identification Time 3	ТР	93%	Correct ID
127	Pre-Crime/Post-Identification Time 1	ТР	88%	Correct ID
127	Pre-Crime/Post-Identification Time 3	ТР	95%	Correct ID
128	Pre-Crime/Post-Identification Time 1	ТР	87%	Correct ID
128	Pre-Crime/Post-Identification Time 3	ТР	96%	Correct ID
129	Pre-Crime/Post-Identification Time 1	ТР	79%	Correct ID
129	Pre-Crime/Post-Identification Time 3	ТР	97%	Correct ID
130	Pre-Crime/Post-Identification Time 1	ТР	71%	Correct ID
130	Pre-Crime/Post-Identification Time 3	ТР	94%	Correct ID
131	Pre-Crime/Post-Identification Time 1	ТР	69%	Correct ID
131	Pre-Crime/Post-Identification Time 3	ТР	92%	Correct ID
132	Pre-Crime/Post-Identification Time 1	ТР	64%	Correct ID
132	Pre-Crime/Post-Identification Time 3	ТР	91%	Correct ID
133	Pre-Crime/Post-Identification Time 1	ТР	59%	Correct ID
133	Pre-Crime/Post-Identification Time 3	ТР	100%	Correct ID
134	Pre-Crime/Post-Identification Time 1	TP	60%	Correct ID

				52
134	Pre-Crime/Post-Identification Time 3	ТР	93%	Correct ID
135	Pre-Crime/Post-Identification Time 1	TP	55%	Correct ID
135	Pre-Crime/Post-Identification Time 3	TP	88%	Correct ID
136	Pre-Crime/Post-Identification Time 1	TP	52%	Correct ID
136	Pre-Crime/Post-Identification Time 3	TP	85%	Correct ID
137	Pre-Crime/Post-Identification Time 1	ТР	53%	Correct ID
137	Pre-Crime/Post-Identification Time 3	TP	83%	Correct ID
138	Pre-Crime/Post-Identification Time 1	ТР	54%	Correct ID
138	Pre-Crime/Post-Identification Time 3	ТР	82%	Correct ID
139	Pre-Crime/Post-Identification Time 1	ТР	42%	Correct ID
139	Pre-Crime/Post-Identification Time 3	ТР	75%	Correct ID
140	Pre-Crime/Post-Identification Time 1	ТР	45%	Correct ID
140	Pre-Crime/Post-Identification Time 3	ТР	77%	Correct ID
141	Pre-Crime/Post-Identification Time 1	ТР	43%	Correct ID
141	Pre-Crime/Post-Identification Time 3	ТР	72%	Correct ID
142	Pre-Crime/Post-Identification Time 1	ТР	46%	Correct ID
142	Pre-Crime/Post-Identification Time 3	ТР	71%	Correct ID
143	Pre-Crime/Post-Identification Time 1	ТР	41%	Correct ID
143	Pre-Crime/Post-Identification Time 3	ТР	65%	Correct ID
144	Pre-Crime/Post-Identification Time 1	ТР	42%	Correct ID
144	Pre-Crime/Post-Identification Time 3	ТР	54%	Correct ID
145	Pre-Crime/Post-Identification Time 1	ТР	35%	Correct ID
145	Pre-Crime/Post-Identification Time 3	TP	45%	Correct ID

146	Pre-Crime/Post-Identification Time 1	ТР	32%	Correct ID
146	Pre-Crime/Post-Identification Time 3	ТР	44%	Correct ID
147	Pre-Crime/Post-Identification Time 1	ТР	20%	Correct ID
147	Pre-Crime/Post-Identification Time 3	ТР	47%	Correct ID
148	Pre-Crime/Post-Identification Time 1	ТР	15%	Correct ID
148	Pre-Crime/Post-Identification Time 3	ТР	33%	Correct ID
149	Pre-Crime/Post-Identification Time 1	ТР	30%	Correct ID
149	Pre-Crime/Post-Identification Time 3	ТР	25%	Correct ID
150	Pre-Crime/Post-Identification Time 1	ТР	29%	Correct ID
150	Pre-Crime/Post-Identification Time 3	ТР	0%	Correct ID
151	Pre-Crime/Post-Identification Time 1	ТР	90%	Filler ID
151	Pre-Crime/Post-Identification Time 3	ТР	80%	Filler ID
152	Pre-Crime/Post-Identification Time 1	ТР	85%	Filler ID
152	Pre-Crime/Post-Identification Time 3	ТР	75%	Filler ID
153	Pre-Crime/Post-Identification Time 1	ТР	73%	Filler ID
153	Pre-Crime/Post-Identification Time 3	ТР	60%	Filler ID
154	Pre-Crime/Post-Identification Time 1	ТР	75%	Filler ID
154	Pre-Crime/Post-Identification Time 3	ТР	55%	Filler ID
155	Pre-Crime/Post-Identification Time 1	ТР	60%	Filler ID
155	Pre-Crime/Post-Identification Time 3	ТР	50%	Filler ID
156	Pre-Crime/Post-Identification Time 1	ТР	55%	Filler ID
156	Pre-Crime/Post-Identification Time 3	ТР	30%	Filler ID
157	Pre-Crime/Post-Identification Time 1	TP	95%	Rejection

				54
157	Pre-Crime/Post-Identification Time 3	ТР	85%	Rejection
158	Pre-Crime/Post-Identification Time 1	ТР	88%	Rejection
158	Pre-Crime/Post-Identification Time 3	TP	65%	Rejection
159	Pre-Crime/Post-Identification Time 1	TP	70%	Rejection
159	Pre-Crime/Post-Identification Time 3	TP	0%	Rejection
160	Pre-Crime/Post-Identification Time 1	TP	45%	Rejection
160	Pre-Crime/Post-Identification Time 3	TP	50%	Rejection
161	Pre/Post-Identification Time 2	ТР	94%	Correct ID
161	Pre/Post-Identification Time 3	ТР	95%	Correct ID
162	Pre/Post-Identification Time 2	ТР	94%	Correct ID
162	Pre/Post-Identification Time 3	ТР	94%	Correct ID
163	Pre/Post-Identification Time 2	ТР	95%	Correct ID
163	Pre/Post-Identification Time 3	ТР	91%	Correct ID
164	Pre/Post-Identification Time 2	ТР	96%	Correct ID
164	Pre/Post-Identification Time 3	ТР	100%	Correct ID
165	Pre/Post-Identification Time 2	ТР	99%	Correct ID
165	Pre/Post-Identification Time 3	ТР	97%	Correct ID
166	Pre/Post-Identification Time 2	ТР	82%	Correct ID
166	Pre/Post-Identification Time 3	ТР	98%	Correct ID
167	Pre/Post-Identification Time 2	ТР	87%	Correct ID
167	Pre/Post-Identification Time 3	ТР	95%	Correct ID
168	Pre/Post-Identification Time 2	ТР	85%	Correct ID
168	Pre/Post-Identification Time 3	ТР	93%	Correct ID

169	Pre/Post-Identification Time 2	ТР	82%	Correct ID
169	Pre/Post-Identification Time 3	ТР	94%	Correct ID
170	Pre/Post-Identification Time 2	ТР	89%	Correct ID
170	Pre/Post-Identification Time 3	ТР	92%	Correct ID
171	Pre/Post-Identification Time 2	ТР	75%	Correct ID
171	Pre/Post-Identification Time 3	ТР	100%	Correct ID
172	Pre/Post-Identification Time 2	ТР	72%	Correct ID
172	Pre/Post-Identification Time 3	ТР	99%	Correct ID
173	Pre/Post-Identification Time 2	ТР	69%	Correct ID
173	Pre/Post-Identification Time 3	ТР	91%	Correct ID
174	Pre/Post-Identification Time 2	ТР	67%	Correct ID
174	Pre/Post-Identification Time 3	ТР	94%	Correct ID
175	Pre/Post-Identification Time 2	ТР	62%	Correct ID
175	Pre/Post-Identification Time 3	ТР	89%	Correct ID
176	Pre/Post-Identification Time 2	ТР	63%	Correct ID
176	Pre/Post-Identification Time 3	ТР	85%	Correct ID
177	Pre/Post-Identification Time 2	ТР	60%	Correct ID
177	Pre/Post-Identification Time 3	ТР	82%	Correct ID
178	Pre/Post-Identification Time 2	ТР	55%	Correct ID
178	Pre/Post-Identification Time 3	ТР	83%	Correct ID
179	Pre/Post-Identification Time 2	ТР	56%	Correct ID
179	Pre/Post-Identification Time 3	ТР	74%	Correct ID
180	Pre/Post-Identification Time 2	ТР	53%	Correct ID

				56
180	Pre/Post-Identification Time 3	TP	73%	Correct ID
181	Pre/Post-Identification Time 2	TP	54%	Correct ID
181	Pre/Post-Identification Time 3	TP	75%	Correct ID
182	Pre/Post-Identification Time 2	TP	51%	Correct ID
182	Pre/Post-Identification Time 3	TP	71%	Correct ID
183	Pre/Post-Identification Time 2	TP	45%	Correct ID
183	Pre/Post-Identification Time 3	TP	65%	Correct ID
184	Pre/Post-Identification Time 2	TP	49%	Correct ID
184	Pre/Post-Identification Time 3	ТР	59%	Correct ID
185	Pre/Post-Identification Time 2	TP	40%	Correct ID
185	Pre/Post-Identification Time 3	ТР	34%	Correct ID
186	Pre/Post-Identification Time 2	TP	25%	Correct ID
186	Pre/Post-Identification Time 3	ТР	17%	Correct ID
187	Pre/Post-Identification Time 2	ТР	20%	Correct ID
187	Pre/Post-Identification Time 3	TP	9%	Correct ID
188	Pre/Post-Identification Time 2	TP	10%	Correct ID
188	Pre/Post-Identification Time 3	TP	94%	Correct ID
189	Pre/Post-Identification Time 2	TP	0%	Correct ID
189	Pre/Post-Identification Time 3	TP	93%	Correct ID
190	Pre/Post-Identification Time 2	TP	88%	Filler ID
190	Pre/Post-Identification Time 3	TP	85%	Filler ID
191	Pre/Post-Identification Time 2	ТР	90%	Filler ID
191	Pre/Post-Identification Time 3	TP	75%	Filler ID

192	Pre/Post-Identification Time 2	ТР	75%	Filler ID
192	Pre/Post-Identification Time 3	ТР	70%	Filler ID
193	Pre/Post-Identification Time 2	ТР	60%	Filler ID
193	Pre/Post-Identification Time 3	ТР	44%	Filler ID
194	Pre/Post-Identification Time 2	ТР	33%	Filler ID
194	Pre/Post-Identification Time 3	ТР	22%	Filler ID
195	Pre/Post-Identification Time 2	ТР	100%	Rejection
195	Pre/Post-Identification Time 3	ТР	90%	Rejection
196	Pre/Post-Identification Time 2	ТР	69%	Rejection
196	Pre/Post-Identification Time 3	ТР	62%	Rejection
197	Pre/Post-Identification Time 2	ТР	67%	Rejection
197	Pre/Post-Identification Time 3	ТР	14%	Rejection
198	Pre/Post-Identification Time 2	ТР	75%	Rejection
198	Pre/Post-Identification Time 3	ТР	34%	Rejection
199	Pre/Post-Identification Time 2	ТР	0%	Rejection
199	Pre/Post-Identification Time 3	ТР	20%	Rejection
200	Pre/Post-Identification Time 2	ТР	24%	Rejection
200	Pre/Post-Identification Time 3	ТР	10%	Rejection
201	Post-Identification Only Time 3	ТР	94%	Correct ID
202	Post-Identification Only Time 3	ТР	99%	Correct ID
203	Post-Identification Only Time 3	ТР	100%	Correct ID
204	Post-Identification Only Time 3	ТР	98%	Correct ID
205	Post-Identification Only Time 3	ТР	97%	Correct ID

				58
206	Post-Identification Only Time 3	TP	95%	Correct ID
207	Post-Identification Only Time 3	TP	95%	Correct ID
208	Post-Identification Only Time 3	ТР	98%	Correct ID
209	Post-Identification Only Time 3	TP	92%	Correct ID
210	Post-Identification Only Time 3	ТР	93%	Correct ID
211	Post-Identification Only Time 3	ТР	94%	Correct ID
212	Post-Identification Only Time 3	TP	99%	Correct ID
213	Post-Identification Only Time 3	ТР	94%	Correct ID
214	Post-Identification Only Time 3	ТР	96%	Correct ID
215	Post-Identification Only Time 3	ТР	95%	Correct ID
216	Post-Identification Only Time 3	ТР	100%	Correct ID
217	Post-Identification Only Time 3	ТР	82%	Correct ID
218	Post-Identification Only Time 3	ТР	81%	Correct ID
219	Post-Identification Only Time 3	ТР	82%	Correct ID
220	Post-Identification Only Time 3	ТР	79%	Correct ID
221	Post-Identification Only Time 3	TP	75%	Correct ID
222	Post-Identification Only Time 3	TP	76%	Correct ID
223	Post-Identification Only Time 3	ТР	69%	Correct ID
224	Post-Identification Only Time 3	ТР	66%	Correct ID
225	Post-Identification Only Time 3	TP	62%	Correct ID
226	Post-Identification Only Time 3	ТР	58%	Correct ID
227	Post-Identification Only Time 3	ТР	58%	Correct ID
228	Post-Identification Only Time 3	ТР	52%	Correct ID

229	Post-Identification Only Time 3	ТР	50%	Correct ID
230	Post-Identification Only Time 3	ТР	36%	Correct ID
231	Post-Identification Only Time 3	ТР	25%	Correct ID
232	Post-Identification Only Time 3	ТР	27%	Correct ID
233	Post-Identification Only Time 3	ТР	0%	Correct ID
234	Post-Identification Only Time 3	ТР	82%	Filler ID
235	Post-Identification Only Time 3	ТР	73%	Filler ID
236	Post-Identification Only Time 3	ТР	54%	Filler ID
237	Post-Identification Only Time 3	ТР	90%	Rejection
238	Post-Identification Only Time 3	ТР	69%	Rejection
239	Post-Identification Only Time 3	ТР	67%	Rejection
240	Post-Identification Only Time 3	ТР	0%	Rejection

Table 1A Measures collected from the experiment. The table has 5 columns: Participant's ID, the condition and time the confidence assessment was taken, the type of lineup, percentage of confidence, and the type of identification made. Raw data is based on Whittington et. al (2019) and Kruger and Dunning (1999).