

Accuracy of Eyewitness Testimonies After Viewing a Staged Assault

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Abstract: Eyewitness testimonies attempt to show an objective, third party perspective of crimes and crime scenes during court hearings. Judges and juries expect the events that witnesses are recalling in the courtroom to be an accurate and unbiased reflection of what transpired. Information which is recalled accurately or inaccurately may have major implications for whether a defendant is found guilty or not. Eyewitness statements are not always reliable, with there often being many inconsistencies to how the events occurred. Both the verbiage and timing of questioning is crucial to how witnesses and victims recall information from the events that transpired. Accounts will often vary drastically, especially when questioned multiple times about events that may have occurred weeks or months prior. Investigators and lawyers may also ask leading questions, which often impact a witness' ability to recall information accurately. In this study, we asked participants to sit through a staged assault, taking a mental note of every important detail. We then asked them to recall the sex, race, demeanor, and outfits to get a general idea of the perpetrator. When questioned, participants recalled the entirety of the situation accurately 40% of the time, 40% only recalled a small amount, and 20% did not remember a single detail. Some questions that were given were formulated as leading questions, as a way to bait participants into straying away from what occurred in their video. Lastly, the study shows that participants were quick to remember the perpetrators' race and would often implement personal biases into responses when asked for statements from those proctoring the questions.

Key words: *Eyewitness testimony, biases, confusion, racism, cognitive dissonance.*

Introduction

An eyewitness testimony in the forensics world is essentially a statement from a bystander regarding the crime at hand. Eyewitness testimonies play a major role in court hearings and jury rulings. Despite its magnified importance in the judiciary system, eyewitness testimonies often come under scrutiny due to inaccurate claims and, graciously, poor memory (Gustafsson 2019). Unfortunately, those involved in our judicial processes have little to no scientific background; therefore, some judges and jurors cannot fully comprehend evidence. Instead, they heavily rely on eyewitness testimonies which have proven to be inaccurate and biased for the most part. These inaccuracies can be due to something as simple as dim lighting or as broad as racial bias; regardless, eyewitness statements scurry their way into the hearts of jurors and judges. (Albright et al. 2015) Still knowing about all these inaccuracies, police turn to eyewitness statements as their primary source of information, sometimes they even serve as the main lead in investigations (Morin 2021). Alongside these pitfalls of human error comes the ugly biases and stereotypes one holds for the outgroup. Regardless of people's racist, misogynistic, and even borderline ableist mindsets, eyewitness testimonies have been known to win both the jury and the judges over time and time again.

While many take these testimonies to heart, the information a witness provides may be dubious. Witness statements, as well as their confidence levels, are often inflated by the evidence they have been exposed to, which also opens the door for fabrication of statements from the opposing party (Bornstein 2017). Previous research has proven that a significant portion of witness statements will possess some level of inaccuracy no matter what. The difference between those who are genuinely retelling events, and those who are fabricating stories are often difficult to discern, making eyewitness testimonies as a whole lose credibility (Puddifoot 2020).

Current research, done under Elizabeth Loftus, suggests the misinformation effect decreases the accuracy and reliability of eyewitness testimonies. Loftus asserts the "misinformation effect" happens because witnesses never record the original information, so they simply adopt the new information as their own (Loftus 2019). Thus, the new information must be correct because they believe it must be correct.

In order to uncover accuracy and reliability of eyewitness testimonies, this research seeks to test memory from "witnesses" of a fabricated assault scene over the course of two weeks. Participants were challenged on their memory and their potential prejudices they carried from their memories.

Materials and Methods

An iPhone and iMovie recorded and edited the short crime scene. The fabricated crime scene took place in a college dorm, where eight different actors engaged in an altercation that ended in one actor unconscious and often presumably dead on the floor.

The four different actors were four men of different races and ethnicities: Black, White, East Asian, and Hispanic. The actors wore outfits that included pajamas and business casual attire. The demographics of the perpetrator and the victim changed for each version of the staged assault.

The objects used to perform the assault included a pillow, a breakaway glass bottle modeled after a long neck beer bottle, a fake gun, and a foam bat. The items changed slightly, yet the final shot of the victim on the floor remained the same.

Volunteers were sampled from various Texas A&M University Dorm Halls, with 38 female participants and 22 male participants of an initial sample pool of 60 students. Participants were warned that their video could potentially contain graphic imagery before they viewed the video. Participants who felt they were uncomfortable were told they could leave the study at any time they liked to.

Participants viewed one video upon each session. They were then asked to describe the video as they remembered.

Researchers asked for race, gender, demeanor, and any outstanding information they believed as important.

The researchers carefully jotted down every detail and thanked the participants for their participation. The researchers reached out to the participants both a week and two weeks after to ask the same questions alongside other questions that contradicted the video the participant was shown to get more accurate statements. Questions consisted of but were not limited to: “What color was the gun in the video?” “How many times did he strike the girl with the bat?” “At what point did the victim fight back, and what object did she use against the perpetrator?” Those questions were posed to see if the surveyed could recall that the video did not involve a gun or bat, and if the video didn’t even involve a girl in the first place. The eyewitness testimonies were then analyzed and compared to their initial statements, and to the video of the staged assault itself. All inaccuracies and potentially racial, sex, and personal biases were also taken account for.

Results

The data yielded no significant departures from questions on demographics (race and gender). All participants were able to successfully answer the race and gender of the perpetrator and the victim.

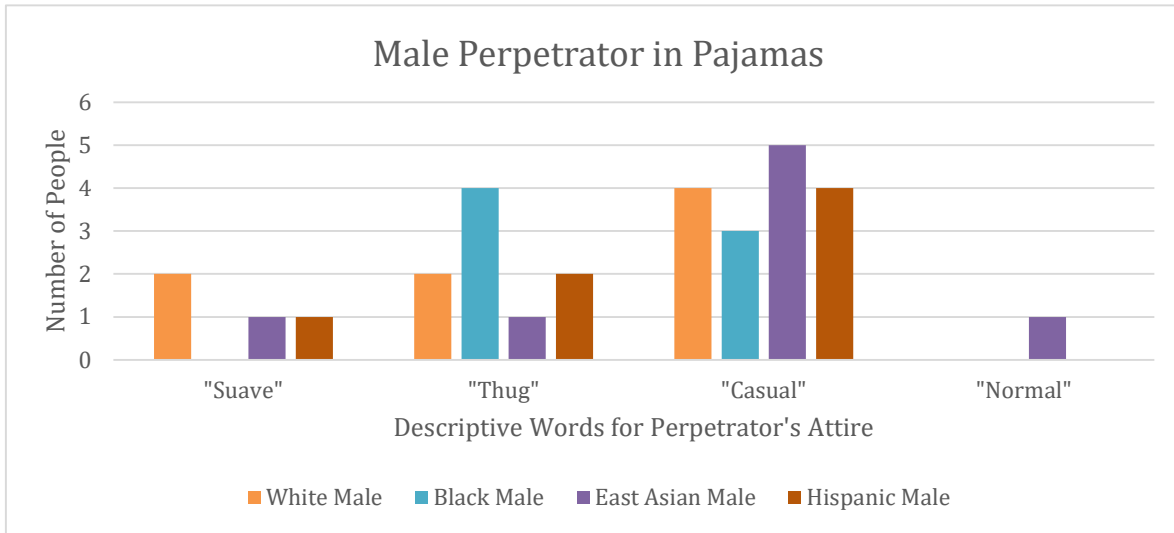


Figure 1-Descriptor used for male perpetrator in pajamas

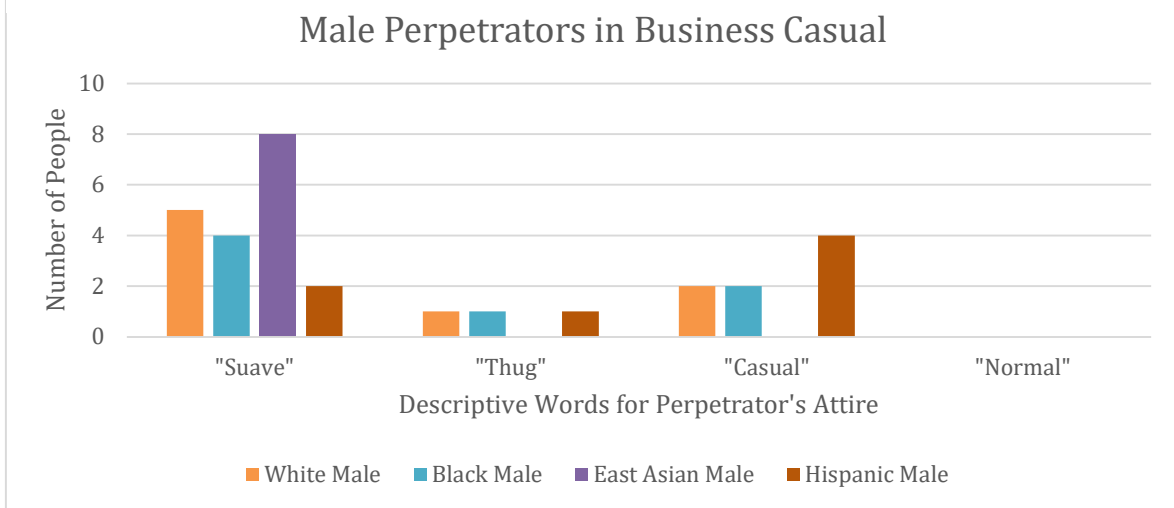


Figure 2-Descriptor used for male perpetrator in business casual

Major changes in data and memory collection varied depending on the “demeanor” of the perpetrator. Black male perpetrators were remarked as “thugs” 62.5% of the time when wearing pajamas, and 12.5% of the time when wearing business casual clothes. Hispanic perpetrators were deemed “thugs” 14% of the time when wearing pajamas. White and East Asian perpetrators were rarely

defined as thugs when wearing any set of clothes.

White male perpetrators were described as “Suave” 71% of the time they were shown in business casual and 33% of the time when they were in pajamas. Hispanic and East Asian male perpetrators were described as “Suave” 13% of responses. One of the participants remarked the East

Asian perpetrator as “normal” looking. The research also revealed that the participants lied more frequently when posed with questions that did not fit the scene involving both Black and Hispanic individuals. Participants went on to say, “If I remember correctly, the man (Hispanic) was holding a knife—actually, a gun.” Other participants did not budge after some misguided questioning, Ramiro Elizondo, a participant said, “No, the man was not even holding a gun, he had a bat in his right hand.” Upon questioning after the two-week period, 40% of participants recalled the entire scene, including the weapon used. The remaining 60% of participants can be broken into two parts: 40% of them slightly remembering the crime scene, while the other 20% did not recall a thing or simply misconstrued the entire situation at hand. A deeper look into the numbers allows one to see that the least forgetful assault is those involving Black Men, followed by Hispanic Men, White Men, and lastly East Asian Men.

Discussion

Black perpetrators were often described as negative compared to White, East Asian, and Hispanic counterparts; Black male perpetrators, specifically, faced the brunt of this stereotyping. White perpetrators, especially White perpetrators in business casual outfits, tended to have fewer negative stereotypes associated with their demeanor and weapons.

Perhaps the most interesting part of the results is the lack of negative connotations for East Asian perpetrators. East Asian perpetrators were rarely described as any of the negative descriptors for demeanor (threatening, messy, unprofessional).

All but one participant were able to correctly describe the weapon used in the staged assault during initial questioning.

During the second questioning, however, participants were less accurate with their memory. Granted, the question proctors did supply questions that were meant to challenge the participant’s memory. While memory remained patchy, the most outstanding aspect was the participants willingness to “correct” their answer to match the question in the second questioning period. Participants answered questions as they remembered them—even if they never occurred.

Upon asking when the victim fought back, respondents answered that the victim fought back after the initial altercation. The victim never fought back in any of the videos. Over half of respondents reported a victim fighting back, despite no retaliation from the victim in the original video. Most participants, however, were able to remember the correct weapon from the crime scene, with one exception. The participant did attempt to change their answer after the questioning period, but this was not included in the data. This could likely be in cause of cognitive dissonance. Cognitive dissonance causes

feelings of unease and may arise tension of the unknown, so the participants could have just agreed with the proctors guiding the questions to relieve these tensions (Cooper 2019). The way questions are asked and how they are formatted have an immense impact on how it affects the participant's memory. A simple change in question structure can evoke an entirely new response in memory. This poses a bigger issue. Our criminal justice system relies heavily on the idea that it serves to protect the innocent, but with the abundance of power left in the hands of eyewitness testimonies, that may not always be the case (Wilson. Et al. 2013). This idea is referred to as the social contamination effect, in other words, when prompted with a question with a detail that does not quite fit the story you originally believed, it completely disrupts your own memory (Gabbert et al. 2004).

Several participants were unable to accurately remember gender of both parties, yet they were able to remember the correct race and ethnicity for their respective perpetrator in the video. This ties back to the biases behind race and eyewitness testimonies and how they play hand in hand in the court room (Brigham et al. 2007).

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