

Determining the Validity of Eyewitness Evidence

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v8-i10/4708>

DOI:10.6007/IJARBSS/v8-i10/4708

Published Date: 28 October 2018

Abstract

Eyewitnesses are called to give evidence of occurrences that took place in a crime scene as well as identify the suspects that are culpable of committing the offense in a court of law. Thus jurors base their judgment of the case based on the evidence that eyewitnesses give. The empirical researches on the topic have over time made the legal system to be suspicious of eyewitness evidence. Thus, it is paramount that the legal system identifies the different factors that make eyewitness evidence to be incredible. The study discussed the following factors; weapon focus, stress, reconstructive memory, misleading information, alcohol, time, age, and gender; and assessed the possible ways through which the validity can be improved. According to the study findings, most of the witnesses, except the shy and autistic people, will be distracted by the weapon. Further, the study revealed that both genders tend to have an inclination towards remembering the suspects of the same gender. Also, the male eyewitnesses should be probed for the sequence of events during the crime because they are better at identifying such occurrences. The third finding was that children and the aged are vulnerable to forgetting key details. The last finding was that intoxication influences the memory of the eyewitness.

Keywords: Eyewitnesses, Eyewitness testimony, Eyewitness memory, Reconstructive memory, Weapon focus

Introduction

Eyewitnesses are called to give evidence of occurrences that took place in a crime scene as well as identify the suspects that are culpable of committing the offense in a court of law. Thus jurors base their judgment of the case based on the evidence that eyewitnesses give. Initially, the legal system considered the evidence provided by eyewitnesses as inviolable. However, cognitive psychologists have gradually proven that eyewitness memory is affected by a variety of factors that must be considered before the testimonies can be treated as valid. Some of the factors are the stress levels at the time of the incident and intoxication levels of the eyewitness can make the witnesses to make inaccurate observations on the features of the suspect. Also, the eyewitnesses may be lured to give false confessions

against the defendant. This arises from a collaboration between the eyewitnesses and other parties.

Thus, the evidence provided by eyewitnesses can be critically defective leading to wrongful convictions. Warden, Armbrust, & Linzer (2001) indicated that erroneous eyewitness testimonies was a leading cause of wrongful court verdicts in the U.S. Their report documented 46 cases of innocent Americans that had been wrongfully convicted due to erroneous and fabricated eyewitness identification testimony. In all the cases, it was only through the proof of innocence beyond reasonable doubt that the victims were exonerated. By 2017, the U.S. criminal justice system had 1,728 exonerations from wrongful convictions with 552 originating from wrong eyewitness identifications. In England, the number of exonerations due to mistaken identity was 38 since 1945 (Begakis, 2017). These cases encompass the only exonerated cases, which raises alarm on the probable innocence of others that have been convicted or executed on the evidence from wrong eyewitness testimonies.

Jones, Bergold, Dillon & Penrod (2017) examined the safeguards that improved jurors' assessment of the evidence presented by eyewitnesses. They found out that there was a higher likelihood for the jurors to convict when the conditions for identification were good, while it was low when the conditions were poor. The sensitivity of the jurors to the superiority of the eyewitness identification is also influenced by the judicial instructions regarding the eyewitness variable. Further, it is directed by the jurors' prior examination of the testimonies before rendering a judgment (Berman, 2015). This is done through eyewitness ratings that guide the jury in making the final verdict (Jones, Bergold, Dillon, & Penrod, 2017). While Garrett (2017) proposed the use of videotapes (sequencing the eyewitness testimonies and the questioning before and after the testimony), this has been defied by Beaudry et al. (2013). They postulated that video recordings have no impact in enabling the observers to distinguish between the accurate and the inaccurate eyewitness testimonies. This indicates the possible flaws in the verification processes to determine the reliability of the testimonies given by the eyewitnesses.

Over time, the complacency of the jury and overdependence on their own intuitions has been challenged. Developments in forensic science such as the eyewitness testimony identification through DNA analyses and the application of the vision and memory sciences have enabled the improvement of the verification process (Albright, 2017). Albeit important, the processes have been undertaken for purposes of exonerating wrongly convicted victims (Garrett, 2017; Jones, Bergold, Dillon, & Penrod, 2017; Warden, Armbrust, & Linzer, 2001). This has elongated the period of their unwarranted punishment while it would have been avoided if the jury had the capacity to demystify wrong eyewitness evidence. Thus, it is critical for the legal system be furnished with diverse mechanisms of uncovering wrong eyewitness evidence. This can be achieved through the identification of the different factors that make eyewitness evidence to be incredible and assessing the possible ways through which this validity can be improved. This was the basis of conducting the study whose goal was to assess the different mechanisms of improving the reliability of eyewitness testimonies.

History of Research on Eyewitness Evidence

Psychological research in the legal system began in 1908 when Alfred Binet proved that responses given by a person are affected by the way an interrogator phrases the questions. At the time, this research did not profoundly impact the legal system. However, Binet's research laid the groundwork for further empirical research on witness testimony.

William Stern demonstrated that eyewitnesses can make errors when describing what they had witnessed and that some factors such as emotional state at the time of the event can affect the accuracy of eyewitness evidence. Hugo Munsterberg also demonstrated that jurors at the time did not accurately determine the accuracy of eyewitness testimonies because they did not investigate the accuracy of eyewitness memories. During the 1970s, Elizabeth Loftus demonstrated, using live and videotaped events as realistic stimuli that words asked during the interrogation process had an effect on the memory of an eyewitness. Loftus was enabled by her research tools to collect data that assessed the validity of eyewitness memory and the quality of recalled information. Robert Buckhout also revealed the errors that eyewitnesses make when they are relaying information concerning an incident. However, there was skepticism and the United States legal system considered eyewitness evidence to be valid. This research gained support from the legal field when Gary Wells differentiated system variables and estimator variables. By showing this difference, Wells enabled the legal system to understand psychological research on eyewitness memory. Hence, it enabled the legal system to differentiate between valid and invalid eyewitness memory.

Eyewitness Testimony

Eyewitness testimony refers to the account a victim or bystander gives in a court of law describing the specific event under court scrutiny. This eyewitness is only required to state what they had seen, heard, tasted, smelt, and felt. Their personal opinions and convictions concerning the matter are not important. Research indicates that these opinions and convictions affect the way a witness recalls information.

Types of Eyewitness Testimonies

There are two types of eyewitness testimonies; eyewitness identification and eyewitness recall. Eyewitness recall corresponds to recalling while eyewitness identification corresponds to recognition in the recall-and-recognition dichotomy of cognitive psychology. Eyewitness recall enables police officers to collect data concerning the perpetrator of a crime and the description of the crime itself. For instance, the eyewitness may be asked to describe the height, clothes, voice, and any other features that might help in the identification of culpable suspects in a case. Similarly, the eyewitness may be asked to describe the sequence of events in a crime that will help legal officers piece together all activities that happened in a criminal episode. Eyewitnesses are interrogated a number of times to determine whether they can accurately recall the information. Also, the repetition is used to test whether the eyewitness had been coached and thus attest to the validity of this evidence. However, research indicates that there are various factors that affect the quality of eyewitness memory.

Factors Affecting Eyewitness Memory

Some of the factors that affect eyewitness memory include weapon focus, stress, reconstructive memory, misleading information, alcohol, time, age, and gender. 70% of wrongful convictions result from errors in eyewitness identification, and hence, it is important to identify how these factors affect the quality of eyewitness evidence.

Weapon Focus

Research indicates that citing a weapon during the course of a crime absorbs the focus of an eyewitness because it is an unexpected and frightening occurrence. Observing the weapon has two effects on the identification process. First, eyewitnesses accurately describe

the weapon used in the crime. However, they are not able to accurately describe the suspects because their attention was focused on the weapon. This is illustrated in a study by Johnson & Scott. Johnson & Scott had two teams of participants wait in a room adjacent to a mock crime scene. The first group heard an argument in the next room that was followed by a man holding a pen in his left arm run out of the room. The second group heard an argument in the next room and saw a man carrying a blood-stained knife run out of the room. The aim of exposing the two groups to different stimuli was to invoke fear in the latter group because a bloody knife indicates that a murder may have been committed. Both groups were then asked to describe the details of the person who had run out of the room after the argument. Group one described the person with 49% accuracy while group two described the person with 33% accuracy. This supports weapon focus theory; weapons distract the focus of the witness and thus reduce the ability of the witness to describe the suspect accurately. This arises because the brain has to draw data actively from the environment and has to process all this data at the same time. Hence during a crime episode, the brain focuses on the aspect that has the highest probability of harming the body, i.e., the weapon. Research indicates that shy people have better memories of suspects because most of their attention is focused on the suspect than on the murder weapon. Henry et al (2017), found that shy eyewitnesses gave better descriptions of suspects than bolder witnesses. This is still explained by the weapons theory because a shy person perceives an unknown person as a threat and thus their attention is focused on the suspect. Hence, interrogators should use shy witnesses to gather accurate eyewitness evidence on the identification of suspects and in describing the movement of people in a crime scene. These scholars also established that autistic people tend to focus more on the suspect than on the murder weapon because most of them are naturally shy and are afraid of people because of their poor social skills. Hence, legal officers should use autistic people that were present in a crime scene as eyewitnesses concerning the description of suspects because most of the other eyewitnesses will have their attention focused on the weapon.

Stress

Different stress levels have varied effects on the ability of eyewitnesses to recall details from a crime scene and identify the suspect. Moderate levels of stress enable an individual to remember more details about an event that they have witnessed. Research indicates that provided the stress levels do not invoke fear in the eyewitness, the eyewitness will describe an event and persons present during the event better than when the eyewitness is not in a heightened mental state. However, if the eyewitness is exposed to higher levels of stress, their ability to recall information is adversely affected and thus they cannot accurately describe events during the episode. For instance, if a gun is pointed at an eyewitness, this eyewitness will have a poorer memory of the events compared to an eyewitness that did not have a gun pointed at them. Sauerland et al., (2016), conducted a study on the effects of anxiety levels on two teams at London Dungeon. The actor frightened both groups by surprising them in a dungeon. The actor scared members of group one by simply chasing them while he scared members of group two by chasing them holding a club in his hand. 45 minutes after the episodes, members of both groups were asked to describe the actor. Members of the group one had a 75% accuracy while members of group two had 17% accuracy in describing the actor. Group two offered less accurate descriptions because their stress levels were higher than normal because the actor was holding a club. Members of this group agreed that they were terrified by the actor holding a club and were scared for their lives because

the actor had been paid to surprise the two teams without prior knowledge on what to expect in the dungeon. Sauerland et al., argue that cortisol levels affect the perception of eyewitnesses and that very high cortisol levels negatively affect the perception of eyewitnesses because their fight-or-flight responses take away their ability to see or hear occurrences. Hence, when determining the validity of eyewitness evidence, the legal system should consider the stress levels that these witnesses experienced at the time when the crime was committed.

Reconstructive Memory

Reconstructive memory refers to the tendency of individuals to fill in gaps in their memory by making possible guesses. These guesses are drawn from biases and norms that a subject acquires from their cultural background and upbringing. This can be illustrated by an eyewitness testifying that he or she saw a woman running away from a crime scene when in real fact they had not seen the face of the suspect. These eyewitnesses may have thought that they have seen a woman because the suspect had long blonde hair or had worn female clothes. Hence, they draw these conclusions based on what they saw when in real fact, the suspect may have been away for longer spans of time between the crime and the interrogation process. This makes the eyewitness forget some details about the crime and these details are normally filled in by using reconstructive memory.

Misleading Information

Cognitive research indicates that the brain creates false memories. This is demonstrated in the experiments carried out in the 1990s that proved that patients under psychotherapy could be made to remember false events such as participating in satanic black masses. There are some women who agreed that they were pregnant when in the real sense they were not. Hence, false memories can be implanted into the brain by using misleading information. Words can be used by the interrogator to shape the responses that a witness relays. For instance, a group of observers was asked to estimate the speed of two cars which had gotten into an accident through a head-on-collision. The first group of observers was asked to estimate the speed at which the cars hit each other while the second group was asked to estimate the speed at which the cars smashed into each other. The first group guessed lower values compared to the second group showing that witnesses make inferences from the words that an interrogator uses. In this case, smashed implied a higher speed and more forceful collision compared to the word hit. McPhee, Paterson, & Kemp (2014), propose that police interrogation of eyewitnesses should use appropriate words to avoid misleading the eyewitnesses by altering their memories of the event in question. Hence, there is a need for research on how words can be used to help the eyewitness remember details about the suspect and the crime scene in general. This arises from the fact that even though their attention had been drawn towards the weapon, they still had glances of the actual criminal(s) and these details can only be recalled if the right words are used by the interrogator. However, the only extant research deals with the effect of misleading information and hence the need for research on words that can be used to probe for accurate eyewitness accounts.

Research also indicates that post-event discussions affect the ability of the witness to accurately remember a criminal episode. Witness conversations after an event, viewing the opinions highlighted in the social, print, and electronic media and a conversation between the interrogator and interviewee have all been proven to alter the quality of eyewitness evidence. Hence, eyewitnesses should be separated as soon as the interrogation process so that

witnesses do not discuss and thus corroborate their stories to match because this will distort the quality of evidence that subsequent witnesses will give in the investigation process.

Alcohol

There is no consensus on the effects of alcohol on the validity of eyewitness with some researchers asserting that alcohol reduces the capability of eyewitnesses to recall an event while some scholars assert that there are minimal differences between evidence from intoxicated and sober eyewitnesses. Soraci et al., base their conclusion from the fact that intoxicated people have poor brain coordination and thus propose that it is unlikely that a drunken person can accurately observe events and describe these events at a later time. On the other hand, Hagsand et al., assert that the quality of intoxicated eyewitness testimony can be validated by making the witness to narrate their experiences over a number of times to check for consistency. Because there is no congruence between these two schools of scholars, evidence from intoxicated witnesses should not be believed unless it is validated by eyewitness accounts of other individuals in the crime scene that was not drunk at the time of the incident.

Time

Another factor that affects the credibility of eyewitness evidence is time because the ability of the witness to recall events and persons in a crime scene decreases with time. As a result, some of the details that an eyewitness may have concerning the crime are forgotten with time. This trend is normally outlined in forgetting curves. Therefore, eyewitnesses should be interrogated as soon as possible concerning the crime so that they can give accurate descriptions. Time also affects the quality of eyewitness evidence in that the witnesses that were exposed to criminal proceedings and suspects have a better grasp of the crime than witnesses that were exposed to the same stimuli for a shorter period.

Age

Age also affects the quality of eyewitness evidence because younger and older witnesses are poorer at describing the facial features of the suspect compared to youthful and middle-aged witnesses. This results from the tendency of people being adept at recognizing the faces of their peers because most of their interactions are done to people of about the same age. Because most of the suspects are either youths or middle-aged individuals, it is their age-mates that will have the best propensity to identify them, leaving out children and the elderly as poor identifiers of suspects. However, this phenomenon is only limited to the recognition of suspects and does not affect the ability of children and the elderly to explain the sequence of events in a crime scene. Old people are also susceptible to other aging factors that affect their ability to recall events and suspects, such as Alzheimer's disease. Hence, the witness of elderly people should be sifted and compared with statements from other individuals before they are treated as

Gender

Women and men have different capabilities in describing the occurrences in a crime scene because research indicates that men are more likely to remember the events in the crime scene and miss out the facial features of the suspect. On the other hand, women have a better ability to remember the face of suspects. Thus, interrogators should rely on the information relayed by women when identifying suspects and information recalled by men

when reconstructing the events in the crime scene. Research also indicates that both sexes are better at identifying suspects of their own gender. Therefore, women witnesses are better at identifying female suspects while male witnesses are better at identifying male suspects.

Conclusion

The study derived its conclusions based on empirical studies on the different factors that affect the validity of eyewitness statements. Concerning weapon focus, the study found out that most of the witnesses, except the shy and autistic people, will be distracted by a weapon. Consequently, the shy and the autistic people tend to remember the perpetrators with weapons with ease. Based on the gender of the eyewitnesses, the male gender was found to easily remember the sequence of events while the female gender was found to easily remember faces. Further, the findings indicated that both genders tend to have an inclination towards remembering the suspects of the same gender. Regarding the age, the study indicated that children and the aged are vulnerable to forgetting key details. The last finding was that intoxication influences the memory of the eyewitness due to the influence of alcohol on the eyewitnesses' memory.

Recommendations

Given the study findings, it is imperative to construct a method through which both the events and suspects in a crime can be identified with a minimal margin of error. The study recommended four approaches that would enhance the verifiability and the reliability of the eyewitness testimonies. First, the description of the suspect carrying a weapon should be sought from shy and autistic people. This is because they have a better concentration towards strangers (the weapon holders) as they perceive them as threats. Secondly, the male suspects ought to be identified by the male witnesses while female witnesses should be identified by female witnesses as each gender tends to recall suspects of the like gender more easily. Also, the male eyewitnesses should be probed for the sequence of events during the crime because they are better at identifying such occurrences while the females ought to be probed on the face of the suspects. This is based on the gender inclination of the eyewitnesses towards remembering faces and events at a crime scene (the men easily remember events while women easily recall faces). Thirdly, the evidence of children and the elderly should be verified from the evidence provided by youth and middle-aged individuals because these groups are susceptible to errors when giving evidence. Finally, the level of intoxication of witnesses during the event should be validated. In case the witnesses were intoxicated, they should be asked to give their statement a number of times to countercheck for errors.

The study findings and the recommendations provide a plausible basis that is applicable in criminal investigations for the verification of the eyewitness evidence. This is beneficial in minimizing the errors involved in validating the testimonies. Thus, applying the recommendations of the study is expected to improve the accuracy in the application of eyewitness evidence. As a result, the number of wrong verdicts based on the erroneous evidence will decline. Hence, it will lead to an overall improvement of the global criminal justice systems.

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