

Eyewitness Testimony – How Reliable is It?

Md. Imran Wahab

IPS, Inspector General of Police, West Bengal

Abstract:

This paper examines the intricacies associated with eyewitness testimony in legal settings, emphasizing its crucial role as evidence while also addressing its fundamental limitations. An eyewitness is described as an individual who witnesses an event firsthand, and their description can greatly influence the court's decisions. Nevertheless, factors such as stress, racial bias, focus on firearms, and memory lapses can compromise the accuracy of these accounts. The article analyses the legal framework established by the Bharatiya Sakshya Adhiniyam, 2023, which pertains to the competency of witnesses and the reliability of their testimonies. An analysis of the prominent wrongful conviction case of Ronald Cotton, highlights the fallibility of human memory. Furthermore, a review of pertinent psychological studies indicates that eyewitness memory is reconstructive and susceptible to inaccuracies. The necessity for corroborative evidence, expert opinions, and enhanced identification processes is highlighted as a means to improve the reliability of eyewitness testimonies and reduce wrongful convictions, thereby upholding the integrity of the trial process. In summary, this study advocates for a thorough reassessment of eyewitness testimony within a wider legal context to ensure justice.

Keywords: Eyewitness, Testimony, Credibility, Memory, Wrongful Conviction, Trial.

1. Introduction:

An eyewitness is an individual who directly witnessed an event, usually a crime or accident, and offers an account of his or her observations. For example, if a traffic accident occurs at an intersection, a bystander on the sidewalk can observe the entire incident as one vehicle runs a red light and collides with another. This person qualifies as an eyewitness because they can provide a detailed account based on their direct experience. Their statements can be crucial in determining responsibility for the accident. An eyewitness can be anyone, including a stranger, a family member, a child, or any other individual. From a legal perspective, an eyewitness serves as crucial evidence in the investigation of a case. It is often said that nothing can deceive as reliably as the eyes.



(The image above represents an eyewitness deposing in the Court)

Eyewitness testimony plays a crucial role in legal cases, often regarded with a mix of admiration and doubt. The reliability of such accounts is vital in assessing the guilt or innocence of defendants, yet the intricacies of human memory can render it vulnerable to numerous influences that compromise accuracy. Recognizing the factors that shape eyewitness testimony is essential not only for the integrity of the judicial process but also for society at large. To guarantee that justice is administered effectively and equitably, it is essential to have a thorough understanding of these influences.

According to Section 124 of the Bhartiya Sakshya Adhiniyam, 2023, any individual is eligible to give testimony, unless the court determines that they are unable to understand the questions posed to them or to provide coherent answers. This inability can arise from various factors, including youth, old age, physical or mental disabilities, or other similar circumstances.

It is important to note that a person classified as having an unsound mind is not automatically barred from testifying. They are only considered unfit to provide testimony if their mental condition significantly impairs their ability to comprehend the questions being asked and to respond in a rational manner.

Although eyewitness testimonies are crucial to the legal system, many in-depth studies have highlighted their limitations. Factors such as stress, suggestive questioning, racial bias, and the decline of memory significantly affect the trustworthiness of these accounts. Legal systems globally are starting to acknowledge these issues, resulting in changes to how eyewitness evidence is managed. Nonetheless, it is imperative to persist in efforts to weigh the significance of eyewitness testimony against its possible drawbacks in order to reduce wrongful convictions and uphold justice.

2. Example of Wrongful Eyewitness Testimony:

The wrongful conviction of Ronald Cotton in the 1980s serves as a significant example of the unreliability of eyewitness testimony. In 1984, Jennifer Thompson, a college student in North Carolina, was raped and confidently identified Cotton as her attacker in both a photo and live lineup, leading to his conviction for rape and burglary. Despite Cotton's alibi, he was sentenced to life in prison based solely on Thompson's testimony, without any physical evidence. After 11 years in prison, DNA testing exonerated Cotton and identified the actual perpetrator as Bobby Poole. This case demonstrates how memory can be influenced and distorted by stress and external factors. Cotton and Thompson later co-authored a book, *Picking Cotton*, which highlights the fallibility of eyewitness memory and its implications for the justice system.

3. Role of Eyewitness Testimony:

Eyewitness testimony is frequently viewed as undeniable evidence due to its basis in personal experience. In legal contexts, courts and juries often rely on witnesses who assert they observed the crime in real-time, providing intricate descriptions of the events. These direct accounts can greatly influence a case's outcome by adding context and clarity. Nonetheless, the reliability of these testimonies can fluctuate, prompting discussions about their role in achieving justice. Still, firsthand observations are essential to the judicial process, significantly impacting perceptions and decisions during court proceedings.

4. Factors Affecting Eyewitness Accuracy:

Several factors can influence the reliability of witness statements:

1. **Stress and anxiety:** Elevated levels of stress or anxiety during an event can impair an individual's capacity to accurately recall details. Experiencing traumatic events often intensifies stress and emotional reactions, which can adversely affect the precision of memory. This heightened state of arousal may lead witnesses to focus narrowly on certain aspects of the event, neglecting others. According to the Yerkes-Dodson law, moderate stress can enhance performance, particularly in memory retrieval, while excessive stress significantly diminishes accuracy. Research by Deffenbacher et al. (2004) indicates that increased stress and fear during criminal incidents, especially violent ones, typically result in less accurate eyewitness testimonies.
2. **Interracial identification:** The "cross-race effect," also known as "own-race bias," describes the inclination of individuals to more easily recognize faces from their own racial group compared to those from different races. Research has shown that people frequently find it challenging to accurately identify individuals belonging to different racial or ethnic backgrounds. This difficulty can give rise to cross-racial identification bias, whereby witnesses may misidentify someone based on racial or ethnic differences. A comprehensive study by Meissner and Brigham in 2001 found that eyewitnesses were 1.56 times more prone to errors when identifying individuals of a different race.
3. **Focusing on the weapon:** The weapon focus effect describes the inclination of a witness to concentrate on a weapon, which may impair their ability to remember other critical details, like the appearance of the perpetrator. A study by Steblay (1992) demonstrated that the presence of a weapon can redirect a witness's focus and reduce their ability to recall other elements of the event.
4. **Time delay:** Memory typically degrades over time, and studies have shown that longer intervals between the occurrence of an event and the recall of that event can lead to significant distortions in memory. Research by Wixted and Ebbesen (1991) has demonstrated that even if a person initially recalls information accurately, an increase in time lag is associated with a rise in errors and a greater susceptibility to suggestive information.
5. **Memory Formation:** Memories are dynamic rather than fixed, constantly evolving. The processes of encoding, storing, and retrieving memories rely on various cognitive functions, all of which can be susceptible to errors, potentially altering the accuracy of what one remembers over time.
6. **Opening Questions and Interrogation Techniques:** The way questions are framed during interrogations can shape witness responses. Leading questions or suggestive techniques may unintentionally implant false information or distort existing memories, impacting the reliability of their accounts.
7. **Post-Event Information:** Witness memories can be influenced by exposure to additional details or discussions with other witnesses after an event occurs. This assimilation of new information can alter the initial recollection of the event, potentially compromising the accuracy of their memories.
8. **Age and Cognitive Development:** Children and the elderly are particularly vulnerable to memory errors, which can compromise their reliability as witnesses. The differences in their cognitive capacities greatly affect the dependability of their accounts, frequently resulting in inaccuracies when they try to remember specific details.
9. **Confidence and Accuracy:** A witness's confidence in their recollection does not guarantee accuracy. They may assert high certainty about incorrect memories. Additionally, external influences can shape their confidence levels, further complicating the reliability of their testimonies.
10. **Suggestibility:** Witnesses may unknowingly be swayed by others' suggestions during interviews or identification procedures. This susceptibility to suggestibility can introduce false information into

their narratives, negatively affecting the authenticity of their accounts.

- 11. Individual Differences:** The reliability of eyewitness testimony can be impacted by individual differences among witnesses, such as personality traits, cognitive abilities, and past experiences. These factors can significantly influence how accurately they recall and report events.
- 12. Assembly Procedures:** Careless execution of identification procedures can lead to errors. Witness reliability can be compromised by biased lineup construction or the incentives provided to the administrators conducting the assemblies, affecting the outcomes of eyewitness identification.
- 13. Forensic Evidence:** Technological advancements in forensic science, including DNA testing, can either support or contradict eyewitness accounts. This helps to establish a more nuanced assessment of credibility, providing a crucial layer of verification for testimonies presented in court.
- 14. Legal Protections:** Legal frameworks seek to address concerns related to the reliability of memory through a range of measures, such as expert testimonies that clarify memory precision, tailored instructions for juries, and established guidelines for the acceptance of evidence in legal proceedings.
- 15. Testimony of Eyewitnesses:** By integrating expert insights on the fallibility of human memory, judges and juries can gain a clearer perspective on the possible inaccuracies and constraints linked to eyewitness testimonies, thereby improving the quality of their judgments.
- 16. Recorded Evidence:** Utilizing recorded evidence serves to maintain an original documentation of events, mitigating the effects of memory deterioration or distortion that can occur over time, thereby improving the integrity of information presented in legal proceedings.
- 17. The Reconstructive Nature of Memory:** Memory functions as a reconstructive process, leading witnesses to unconsciously fill in gaps or fabricate coherent narratives, which can result in the reporting of events that did not actually occur.
- 18. Psychological Studies:** Ongoing psychological research plays a vital role in deepening our understanding of memory functions, helping to identify common biases and inaccuracies in eyewitness testimonies, ultimately informing legal practices and procedures.
- 19. Ongoing Challenges:** Despite initiatives aimed at improving reliability, eyewitness testimony remains a multifaceted and flawed component of the legal system. This complexity fuels continuous research and discussions focused on achieving an effective balance between the utility of such testimony and the imperative for accuracy and fairness.

5. Credibility of an Eyewitness:

Several factors can impact the credibility of an eyewitness. Key elements influencing the reliability of their statements include the witness's emotional state, memory retention, observational conditions, potential biases, and the passage of time. Understanding these aspects as given below is essential for evaluating the accuracy of eyewitness accounts in any situation.

Stability and consistency: The trustworthiness of an eyewitness can be affected by various factors. Important aspects that determine the reliability of their testimony are the stability and consistency of their statements over time. If there are contradictions or significant shifts in the details they provide, it may raise concerns about their accuracy and reliability, ultimately questioning the validity of the eyewitness account.

Accuracy of details: The specificity and accuracy of an eyewitness's details are crucial for establishing credibility. Eyewitnesses who provide clear, vivid, and well-defined memories are typically seen as more trustworthy than those who offer unclear or inconsistent narratives. A detailed recollection enhances the

reliability of the testimony, while vague accounts can lead to scepticism regarding the witness's observations and overall truthfulness.

Level of confidence: An eyewitness's level of confidence can influence how credible their testimony is perceived; however, it does not automatically ensure correctness. Individuals may express strong confidence in their memories yet still be mistaken. Therefore, while confidence can enhance the persuasive power of a witness's statements, it is essential to scrutinize the accuracy independently of their assurance in what they are recounting.

Cross-examination: Evaluating a witness's credibility heavily hinges on their capacity to withstand cross-examination. A trustworthy eyewitness should be able to provide consistent testimony even when challenged through rigorous questioning. Successfully navigating the pressures of cross-examination can validate their reliability, showcasing their ability to uphold their statements under scrutiny from opposing parties and legal representatives.

Previous relationship with the accused: A prior relationship between the eyewitness and the accused may present potential bias or motive that raises concerns about the testimony's impartiality. For instance, an eyewitness who is a close friend or adversary of the accused may have a skewed perspective that could shape their account. Understanding these dynamics is essential in determining the overall credibility of the witness and their statements.

Mental State of the Witness: A witness's mental state significantly affects their ability to provide reliable testimony. Factors like trauma, stress, fear, or intoxication can impair judgment and memory, leading to inaccuracies in what they report. Evaluating a witness's psychological state during the incident is essential for grasping any constraints in their testimony and can significantly influence how their credibility is perceived.

Corroboration: Eyewitness testimony gains strength when it is backed by other forms of evidence, like surveillance footage or forensic data, creating a more reliable overall narrative. Corroborative evidence enhances the authenticity of the eyewitness account, as multiple sources can validate the same event, thereby reinforcing the credibility of the statements made by the witness and promoting a more persuasive case.

Expert Testimony: In certain instances, expert testimony regarding the constraints of human memory and perception may be introduced to aid the judge and jury in understanding the possible errors within eyewitness accounts. Such expertise can clarify the inherent limitations of recalling events, helping the legal system make more informed assessments regarding the validity of the eyewitness testimony presented in court.

For lawyers, investigators, and jurors, it is essential to critically examine eyewitness accounts, considering the various factors mentioned above. This assessment is vital for ensuring fair and accurate conclusions about the evidence during trial proceedings. A thorough evaluation promotes justice and the integrity of the judicial process, ultimately leading to more reliable verdicts.

6. Literature Review:

During the early 20th century, courts tended to view eyewitness testimony as extremely trustworthy, considering it direct evidence that could significantly influence case outcomes. Initial studies, like those conducted by Hugo Münsterberg in 1908 - who was among the first to integrate psychology into legal practices - brought forth concerns regarding the reliability of human memory. Münsterberg's research paved the way for more comprehensive investigations into the dependability of eyewitness accounts in

legal contexts.

Psychological studies indicate that both memory and perception are fundamentally reconstructive processes, which makes them susceptible to errors, distortions, and external influences. Loftus and Palmer (1974) demonstrated that the wording used during witness interviews can significantly impact how these individuals remember events. Their experimental findings illustrated that leading questions can cause eyewitnesses to recall inaccurate details, a phenomenon referred to as the "misinformation effect."

Furthermore, research conducted by Wells et al. (1998) reveals that even highly confident eyewitnesses can make mistakes. Their study concluded that the level of confidence expressed by an eyewitness is not necessarily a trustworthy measure of accuracy, and jurors often place excessive trust in the reliability of confident witnesses.

Elevated stress or anxiety during an event can hinder a person's capacity to remember details accurately. According to the Yerkes-Dodson law, moderate stress can enhance performance, such as memory recall, whereas excessive stress greatly undermines precision. Research by Deffenbacher and colleagues (2004) found that increased levels of stress and fear associated with criminal events, especially violent ones, can significantly reduce the accuracy of eyewitness accounts.

Memory fades as time passes, and research indicates that substantial gaps between observing an event and remembering it can result in considerable distortions. Wixted and Ebbesen (1991) discovered that even if memory is initially recalled accurately, the frequency of errors and the likelihood of suggestion also rise as the time delay grows.

Eyewitness testimony has traditionally been regarded as one of the most compelling types of evidence in criminal trials. However, its dependability is debatable, as witnesses may occasionally deliver incorrect accounts, which could lead to wrongful convictions (Loftus, 1996). Consequently, although this kind of evidence carries significant weight, it is essential to recognize the potential risks involved to ensure that justice is properly administered.

Although some research indicates that eyewitness reports can be dependable, their accuracy is still under scrutiny due to various influencing factors that may impair a witness's recollection of an event (Loftus, 1996). The reliability of these accounts is complex, highlighting the need to carefully examine the conditions under which they are obtained to mitigate errors in the investigative process.

The feedback given to witnesses can significantly impact their confidence in identifying suspects. Studies reveal that when law enforcement confirms a choice in a lineup, a witness's certainty often increases (Wells et al., 1998). Conversely, if the feedback suggests the selection was incorrect, it can erode confidence, which may adversely affect testimony in court.

Studies show that the likelihood of misidentifying someone increases, especially when a witness is required to recognize a person from a different racial background. This rate of misidentification can exceed 50% (Flevaris & Chapman, 2015). Such findings highlight the critical need for law enforcement and the legal system to recognize and address the challenges associated with race in eyewitness identification to prevent wrongful convictions.

Studies show that individuals struggle to recognize faces of different racial or ethnic backgrounds, particularly when they belong to the majority group, leading to greater difficulty distinguishing unfamiliar faces (Hourihan et al., 2012). This cross-race effect complicates eyewitness identification and may result in inaccuracies that could have serious repercussions in legal settings.

The stress and trauma experienced by victims or witnesses of crime can hinder their ability to accurately

remember event details (Marr et al., 2021). When subjected to threatening situations, individuals may find it challenging to recall critical information, necessitating an understanding of how emotional states influence memory accuracy and the implications for legal proceedings.

The influence of stress on the memory of eyewitnesses is particularly significant in violent situations that involve weapons, as individuals frequently concentrate more on the weapon itself rather than the perpetrator (Fawcett et al., 2016). This phenomenon underscores the importance of recognizing how elements of a crime can distract a witness from more critical aspects of an incident that need to be recalled accurately.

Memory deterioration poses another significant challenge in eyewitness testimony, as recollections can fade over time, often resulting in gaps or inaccuracies (Lacy & Stark, 2013). With cases frequently taking months or years to go to trial, understanding the neuroscience of memory, particularly in court contexts, is vital to evaluating eyewitness accounts more effectively and minimizing the risk of wrongful convictions.

7. International Court Judgments:

Neil v. Biggers (1972) – United States:

In the matter of *Neil v. Biggers*, the U.S. Supreme Court established guidelines for evaluating the reliability of eyewitness identifications. The case centred on a rape conviction that was predominantly based on the victim's identification of the alleged assailant. The Court ruled that judges must consider five essential factors when determining the credibility of a witness's identification: the witness's capacity to observe the suspect, their concentration level during the event, the accuracy of their previous descriptions, their certainty in the identification, and the time elapsed between the crime and the identification. This decision created an important legal framework for assessing the credibility of witness testimonies in the American legal system.

R v. Turnbull (1977) – United Kingdom:

The landmark case of *R v. Turnbull* at the UK Court of Appeal focused on the problems of eyewitness identification. The court introduced a set of principles, known as the Turnbull Guidelines, to guide judges in cases where identification evidence is crucial to the prosecution's case. These principles require judges to inform juries of the potential unreliability of witness statements, particularly in circumstances where visibility is poor or otherwise problematic conditions. This decision was intended to mitigate the risk of wrongful convictions arising from dubious witness statements by encouraging more rigorous scrutiny of identification procedures.

R v. Hibbert (2002) – Canada:

The Supreme Court of Canada addressed the matter of eyewitness reliability regarding interracial identification in *R v. Hibbert*. The court emphasized that eyewitness identification can be particularly prone to error when the witness and the accused come from different racial backgrounds. It underscored the necessity for trial judges to alert juries to the potential for misidentification attributed to the "cross-race effect," in which witnesses struggle to accurately recognize individuals of a different race. This ruling marked a significant acknowledgment by the Canadian judiciary of the racial considerations surrounding eyewitness accounts.

Navarro v. Ecuador (2011) – Inter-American Court of Human Rights:

In *Navarro v. Ecuador*, the Inter-American Court of Human Rights examined the reliability of witness statements in relation to false convictions. The court found that the state violated the defendant's rights

by securing a conviction based primarily on implausible and unsubstantiated witness statements. This decision emphasized the need for eyewitness testimony to be supported by other kinds of evidence to avoid injustice. The outcome of the case underscored the importance of caution in considering eyewitness accounts alone, as they can lead to wrongful convictions stemming from inaccurate memories.

Perry v. New Hampshire (2012) - United States:

In *Perry v. New Hampshire*, the US Supreme Court considered whether the reliability of a witness statement should be evaluated when the identification was made spontaneously and not under police direction. The Court ruled that the Due Process Clause does not obligate judges to assess the reliability of all witness statements unless law enforcement was involved in shaping the situation leading to the identification. This decision restricted the extent of judicial review concerning eyewitness identification, concentrating on instances where police practices influenced the identification.

8. Supreme Court of India Judgments:

Ramanand Yadav v. Prabhu Nath Jha [(2003) 12 SCC 606]:

In the case of *Ramanand Yadav v. Prabhu Nath Jha [(2003) 12 SCC 606]* the Supreme Court emphasized that true and credible testimony of eyewitnesses can serve as sufficient ground for conviction. The ruling established that minor discrepancies in the accounts provided by eyewitnesses should not lead to the dismissal of their evidence, as long as the fundamental aspects of their testimonies remain consistent.

Bhagwan Singh v. State of Madhya Pradesh [(2002) 4 SCC 85]:

In the matter of *Bhagwan Singh v. State of Madhya Pradesh [(2002) 4 SCC 85]*, the Supreme Court ruled that the accounts provided by eyewitnesses should not be dismissed solely on the grounds that they originate from individuals with a vested interest or familial ties to the case. The court underscored that such testimony is valid unless there is clear evidence demonstrating its unreliability or personal bias. Particularly, the statements made by close relatives can be deemed credible, provided there are no significant discrepancies or valid concerns regarding their impartiality.

State of Uttar Pradesh v. Anil Singh [(1988) Supp SCC 686]:

In the case of *State of Uttar Pradesh v. Anil Singh [(1988) Supp SCC 686]*, the Supreme Court ruled that expecting complete truthfulness from witnesses is an impractical demand. The court highlighted that testimonies should not be dismissed solely due to minor inconsistencies, as these discrepancies often stem from the inherent imperfections of human perception. Instead, it emphasized that if the core aspects of the testimony are credible, it should be accepted in court, acknowledging that some variations in accounts are both natural and unavoidable.

Hari Obula Reddy v. State of Andhra Pradesh [(1981) 3 SCC 675]:

In the Supreme Court case of *Hari Obula Reddy v. State of Andhra Pradesh [(1981) 3 SCC 675]*, the court highlighted the significant principle that witness testimony should not be dismissed solely because it originates from interested individuals or family members. The court recognized that, especially in rural areas, it is typical for relatives to be present at incidents. The central concern should therefore be the credibility of the testimony and its consistency, rather than the relationship of the witnesses to the victim or the accused.

State of Punjab v. Jagir Singh [(1974) 3 SCC 277]:

In the case of *State of Punjab v. Jagir Singh [(1974) 3 SCC 277]*, the Supreme Court highlighted the crucial role of eyewitness testimony in establishing a case, asserting that such evidence is indispensable

for ensuring reliability. It further clarified that while medical evidence can serve to support or challenge the credibility of eyewitness accounts when appropriate, it should not be the sole reason for dismissing the trustworthy testimonies provided by witnesses.

9. Conclusion:

Eyewitness testimony plays a vital role in numerous legal cases, yet its reliability is frequently called into question. Although these accounts can serve as powerful evidence, research indicates that various factors, including stress, lighting conditions, racial differences, and the presence of a weapon, can greatly alter perceptions. Furthermore, the flexible nature of memory can lead eyewitnesses to unintentionally integrate false information, resulting in inaccurate recollections.

Studies have demonstrated that even highly confident witnesses can misidentify individuals, which raises serious doubts about the reliability of such testimony in the courtroom. Elements like the duration of the witness's observation, their familiarity with the accused, and the elapsed time since the incident can all further compromise accuracy. Despite these shortcomings, eyewitness testimony continues to be commonly used in criminal cases. Therefore, it is essential for courts to critically assess its value alongside the potential for error and to stress the importance of supplementary evidence to uphold the quality of judicial decisions.

References:

1. <https://www.verywellmind.com/can-you-trust-eyewitness-testimony-4579757#citation-18>
2. <https://nobaproject.com/modules/eyewitness-testimony-and-memory-biases>
3. Loftus, E. F., & Palmer, J. C. (1974). The reconstruction of automobile collisions: A case study of how language interacts with memory. *Journal of Verbal Learning and Verbal Behaviour*, 13(5), 585-589.
4. Wells, G. L., Memon, A., & Penrod, S. D. (2006). Enhancing the probative value of eyewitness evidence. *Psychological Science in the Public Interest*, 7(2), 45-75.
5. Deffenbacher, K. A., Bornstein, B. H., Penrod, S. D., & McGorty, K. (2004). A meta-analysis on the impact of high stress on eyewitness recall. *Law and Human Behaviour*, 28(6), 687-706.
6. Meissner, C. A., & Brigham, J. C. (2001). A three-decade examination of own-race bias in facial recognition: A meta-analytic review. *Psychology, Public Policy, and Law*, 7(1), 3-35.
7. *Ramanand Yadav v. Prabhu Nath Jha*, (2003) 12 SCC 606.
8. *State of U.P. v. Anil Singh*, (1988) Supp SCC 686.
9. Innocence Project Eyewitness Misidentification. <https://www.innocenceproject.org>.