# Eyewitness Testimonies in North America: The Contributing Factors of Wrongful Convictions

Kyle D'Antonio

Bachelors of Law Enforcement Studies

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Gregory Keenan

Rod Gehl

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#### Abstract

The validity of eyewitness evidence is a controversial and problematic issue. This study focused on examining research that has been previous conducted and places it in a North American context. This study specifically focused on the credibility of eyewitness testimony and examined the relationship between inaccurate eyewitness testimony and wrongful conviction. A review of the existing literature was conducted and as a result four common themes were identified. The themes that were seen as the most problematic areas included memory, perception and bias, juror knowledge, and police practice. The information gathered was critically analyzed to ensure that it was both credible and relatable to the central topic of this paper. Once the literature was verified, the chosen themes were critically examined to gain a better understanding of eyewitness testimony and their impact on the totality of a criminal trial. This study will provide information to courts within North America that will help them better understand the credibility of eyewitness testimonies as well as put forward more accurate means of evidence. This research will also illustrate the need for judicial systems to take action in reforming their justice system to increase the credibility of eyewitness testimony and promote a high level of integrity within their court systems.

*Keywords*: eyewitness testimony, credibility, wrongful conviction, memory, juror knowledge, police procedure, perception and bias

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## **Background**

According to the Innocence Project, of their first 225 exonerations of wrongfully convicted individuals in the United States, 77% were based on mistaken or inaccurate eyewitness testimonies (Shermer, Rose, & Hoffman, 2011). In light of these findings, it is important that research is conducted to better understand eyewitness credibility and the root causes of wrongful convictions. There are many different aspects behind inaccurate eyewitness testimonies, yet they all have a detrimental impact on all parties involved. With the assistance of scientific research, the validity of eyewitness evidence has finally been questioned. This research has discovered great flaws in eyewitness testimony by bringing awareness to the implications of human error and their ability to have a catastrophic impact on the outcome of a case.

The mounting evidence behind the reliability issues with eyewitness testimonies provide a strong basis as to why this issue needs to be researched. The criminal justice system in North America places a large degree of trust and credibility in eyewitness testimonies (Leinfelt, 2004). The issue however is their expectation that witnesses provide accurate information that illustrates a precise representation of events. It has been shown through scientific research that a variety of factors can have an effect on the credibility of eyewitness evidence. More specifically, it has been argued that a witness's memory, their perceptions and biases, the knowledge of the jury, and the practices of law enforcement agencies, all have the ability to influence the accuracy of an eyewitness testimony. This study will present research into the credibility of eyewitness evidence to better understand the correlation between inaccurate eyewitness testimony and wrongful conviction. Further decision will include a summary of recommendations as well as a

discussion section that provides an in-depth analysis of the findings.

# **Project Rationale**

Eyewitness testimonies are an essential tool in our criminal court system to arrest and convict those guilty of an offence. The use of eyewitness testimonies in North America is relatively high due to the lack of hard evidence available to law enforcement agencies (Shermer, et al., 2011). Despite their frequent level of use, an overwhelming amount of wrongful convictions are the result of eyewitness misidentification (Shermer, et al., 2011). According to the Innocent Project, 75% of individuals that are exonerated are the victims of eyewitness misidentification. Despite the high number of innocent people being wrongfully convicted, eyewitness identification remains amongst the most commonly used and compelling evidence used in the prosecution of criminal defendants (Shermer, et al., 2011). Given this information, it is important to create awareness to the issue by informing criminal law practitioners. It is also vital that the individuals in charge of our court systems understand the risk of eyewitness identification and have an accurate representation of its credibility.

The objective of this paper is to increase the overall awareness among criminal law practitioners, regarding the issues relating to the use of eyewitness evidence. With an understanding of human error and its relationship with misidentification, the credibility of eyewitness evidence becomes clear. The scope of this research will focus on the credibility of eyewitness testimonies and their relationship to wrongful convictions. More specifically, this research will take a scientific approach to examine how and why eyewitness testimonies are not always accurate. This will include an examination into

memory, the role of jurors and judges, issues with police procedure, as well as perception and bias.

#### Literature Search

#### **Themes**

After reviewing the selected articles, four main themes were identified in the literature. The issues that connected these articles were flaws with the accuracy of eyewitness testimonies and the individual factors that influence their overall credibility. The first theme that was identified was memory. There was a strong indication from the majority of the research that memory may have the most significant impact on the outcome and validity of eyewitness evidence.

The second theme that emerged was perception and bias. Several academics including Shermer, Rose and Hoffman (2011) and Beety (2012) have discussed the ability for witnesses' visual perceptions to become tainted by a number of factors. These factors often include cultural lenses, personal beliefs, and upbringing.

The third theme was juror knowledge and their inability to understand the credibility behind eyewitness testimonies. One of the main issues with eyewitness evidence is that jurors and judges do not always understand the true science behind its accuracy and how memory works (Blair, 2018).

The final theme that emerged was police tactics and the ability for law enforcement to distort a witness's memory. These issues involved post-identification feedback from police investigators, repeated identification lineups, and confession based evidence. These issues are an imminent threat to defendants because they allow police officers to instill confidence in witnesses on information that may not even be accurate.

## **Memory**

There has been a considerable amount of research into memory and its correlation to the credibility of eyewitness testimony. While a variety of issues have been identified, time delay, stress, and human factors such as age and gender seem to be the most prominent. Events of crime can often occur in just a matter of seconds, making it difficult for the human brain to encode. When you pair this lack of time with other factors such as low lighting, loud noises or the presence of a weapon, it can become even more onerous for the witness. Valentine, Pickering, and Darling (2003) found that 36% of crimes committed in London from January to September 2000 involved eyewitnesses who viewed the perpetrator for less than one minute. Fradella (2006) explains, "as a rule, the longer the time period between acquisition, retention, and retrieval, the more difficulty we have retrieving the memory" (p. 10). This suggests that a witness may not always be accurate, depending on their exposure to the event and their brains ability to encode the information correctly.

While our brains have the ability to recall past experiences, research has shown that eyewitnesses may have difficulty in recalling details about events involving violence (Scrivner & Safer, 1988). In 1982, Loftus and Burns compared two groups of subjects to identify whether memory encoding is disrupted when acts of violence are viewed. Loftus and Burns compared the recall function of subjects who viewed a film of a bank robbery that involved a young boy being shot in the face. The control group viewed the robbery but was not shown the shooting. The results found that those who viewed the violent ending were much less likely to remember information regarding the film. Loftus and

Burns argued that witnessing violence might have an impact on ones ability to encode information (Scrivner & Safer, 1988).

Given this information, it becomes easy to understand how malleable memory truly is and how outside factors can influence its level of accuracy. Furthermore, individuals encode information differently based on a variety of factors. These factors include an individual's perception of events and any preconceived biases they may have. This suggests that memory is far from reliable as it may not depict the actual events that took place.

# **Perception and Bias**

Interpretations, evaluations, and judgments of an individual are usually dependent on the social or racial group to which an individual belongs (Lindholm & Christianson, 1998). While these perceptions and biases may have implications on an individual's personal life, they are even more serious within the judicial process (Lindholm & Christianson, 1998). According to the Innocence Project (2019), black men living in the United States receive the majority of eyewitness-influenced convictions. Further research into cross-race identification bias suggests that particular races may be more vulnerable to eyewitness misidentification.

"The cross-race effect (CRE) is the tendency to have better recognition accuracy for same-race than for other-race faces due to differential encoding strategies" (McDonnell, Bornstein, Laub, Mills, & Dodds, 2014, p. 478). The cross-race effect is a well-documented phenomenon that suggests that individuals are better at recognizing members within their own racial group. For witnesses to correctly identify individuals of other races, they must encode information differently than they would with their own race

(McDonnell et al., 2014). To do this, individuals must focus on the characteristics of a person and distinguish a difference between them and other members of that racial group. Given that many eyewitness identifications are cross-racial, it is not hard to understand why those of minority are at a higher risk of misidentification. However, courts must be aware of these issues to ensure that individuals accused of crime do not become subject to unethical court proceedings.

#### **Police Procedures**

A woman who was recently sexually assaulted in a park is looking through a variety of photos that she has been given at her local police station. The officer asks the woman if anyone in the photos resembles the man that assaulted her. The woman takes another look through the photos but says nothing. The administrator then asks the woman "How about number two, does he look familiar to you?" The woman looks at the photo and says that the eyes and nose of the person in photo two remind her of the attacker. She eventually identifies the person in the second photograph as the person who assaulted her; she has now identified a suspect. The question however, is if the officer influenced her decision in the identification. If the administrator had known that the individual in the second photo was the suspect, could that information have caused him to ask the follow-up question that reinforced the witness's attention to the second photo? Is it then possible to assume that police officers have the power to influence the decision process of witnesses?

Recent research suggests that a lineup administrator's knowledge of a suspect's identity may influence the witness and persuade them to choose the suspect (Zimmerman, Chorn, Rhead, Evelo, & Kovera, 2017). This potential influence is a serious problem as it

can result in an innocent person being labeled as the perpetrator. Once a witness of a crime identifies an individual as the offender, the suspect is usually arrested and it becomes their responsibility to defend their innocence in a court of law.

When a police officer confirms a witness's choice towards a suspect or aids in the decision, the overall confidence of the witness in their choice increases (Shermer et al., 2011). This can be problematic for a number of reasons. Firstly, when a witness becomes confident in the identification of a suspect, their mind tends to reconstruct the events that took place. This could lead to a witness now seeing the crime being carried out by the individual they previously chose. This creates a new recollection of events that may not be accurate. Secondly, when a jury observes an overly confident witness, they begin to assume that the witness must be telling the truth. This level of confidence tells the jury that the witness is certain in their identification, which ultimately leads to the jury believing it too (Shermer et al., 2011). This information begs the question of whether or not photo line up administrators should have knowledge in the identity of the perpetrator.

A study conducted by Shapiro in 2006, examined the effects of question format on the accuracy and quantity of testimony. The study assessed the memory of forty college students by showing them a videotaped theft. The students were then assessed through open-ended or multiple-choice questionnaires. The results found a high accuracy for central information elicited with an open-ended questionnaire and for peripheral information elicited with a multiple-choice questionnaire. Quantity was found to be higher for central than for peripheral features and was higher with multiple-choice than open ended. Other research findings have typically indicated that overall recall is more accurate with open-ended, unbiased questions as opposed to closed-ended questions

(Shapiro, 2006). Shapiro argues that closed-ended questions impact witness' cognitive sets by limiting their range of responses to one of the given choices in multiple-choice questions or by restraining the answer to yes/no responses in correct/incorrect leading questions (as cited in Lipton, 1977). Given this information, police should consider using open-ended questions to avoid limiting the feedback they receive from witnesses.

# Juror Knowledge

In 1984, Kirk Bloodsworth, a former marine, was the first person to be sentenced to death and then exonerated. At the age of twenty-two, Bloodsworth was arrested after five witnesses testified that they had seen him with a nine-year-old girl who was later found dead in a wooded area. While only three of these witnesses were able to identify Bloodsworth in a line up and there was no physical evidence, two different Maryland juries and one judge sentenced him to death. It was not until Bloodsworth's DNA was tested in 1992, that he was found to be innocent and later released (Innocence Project, 2019).

In criminal cases, decisions such as guilt and innocence lay on the responsibility of jurors. These jurors usually have little knowledge regarding how memory works and how particular factors affect the accuracy of eyewitness testimony (Blair, 2013). When it comes to jurors, there is almost nothing more persuasive than hearing an eyewitness testify that he or she saw the defendant commit a crime (Shermer et al., 2011). As a result, jurors tend to give more weight to eyewitnesses testimonies than any other form of evidence (Blair, 2013). This can become problematic to the outcome of a trial by leading jurors to believe in information that is not always accurate.

Research shows that jurors and even judges lack the knowledge necessary in

evaluating the different factors that impact the credibility of eyewitness evidence (Blair, 2013). As a result, there has been much debate about whether or not jurors require expert testimony or specialized jury instruction to understand this information (Simmonsen, 2011). Although it may come as a surprise, a large number of people, including jurors, tend to believe that human memory works like a tape recorder or video camera (Blair, 2013). Memory, however, is far more complex than the average person may believe. It is because of this that researchers believe jurors require experts to inform them of flaws in eyewitness evidence such as memory.

Recent studies have examined the idea of facial trustworthiness and its impact on the decision making of others. This research found that based on facial appearance, individuals tend to make assumptions about a person's character prior to any interaction (Korva, Porter, O'Connor, Shaw, & Brinke, 2013). These character traits included trustworthiness, dominance, kindness, and warmth. Korva et al. (2013) argues that these evaluations of character play a crucial part in subsequent decisions about others. This information is troublesome, as it suggests jurors may be influenced solely by a defendants appearance.

#### **Research Design and Methodology**

This research paper used a qualitative research approach to explore and help understand the meaning of the problem being studied. Qualitative research allowed for the ability to test the theory that eyewitness testimonies are not always accurate and that they play a significant role in wrongful convictions. Due to the nature of the study, a qualitative approach permitted for the ability to group common themes and interpret the meaning of the information. A qualitative approach also aided in understanding how

particular factors such as memory and juror knowledge could contribute to wrongful conviction. Further advantages to using this method included the ability to use research that was based on human experiences and observations and opportunity to express individual creativity.

#### **Data Collection**

The literature that was chosen for this research paper was found by conducting a thorough search of the Justice Institute of British Columbia's (JIBC) online library database. In order to keep the information relevant to the topic, primary and secondary key terms were used. The primary term included the area of study and can also be referred to as the subject term. The two primary terms that were used in the search were 'Eyewitness Testimony' and or 'Eyewitness Evidence'. This helped ensure that the information was relevant and that all articles would be related specifically to eyewitness testimony or evidence. The secondary terms were used to help narrow the study into specific areas that would later help answer the research question. The secondary terms included: 'credibility', 'accuracy', 'validity', 'wrongful convictions', 'misidentification', and 'memory'. It was intended that by using these keywords, the literature retrieved would provide reasoning behind wrongful convictions and the factors that affect credibility.

The initial search through the JIBC's library system obtained approximately two thousand articles. Based on the high volume of articles retrieved, the search was refined by limiting the results to peer reviewed scholarly articles, articles that included full text, and articles published between the year 1999 to present. The searches then became even

more specific by using secondary terms that allowed the researcher to categorize the literature into different folders based on common themes.

# **Data Analysis**

For the purpose of this research, a literature review was conducted where 18 articles were critically analyzed. The examination of these articles presented four reoccurring themes as possible contributing factors for wrongful convictions. While the majority of the research was based within a legal context, articles relating to the field of psychology were also used to provide a scientific point of view. Through the analysis of these 18 articles, issues with eyewitness credibility were discovered along with both recommendations and limitations. While the literature did not say whether or not the chosen themes contribute directly to wrongful conviction, an interpretation of the information suggests it does.

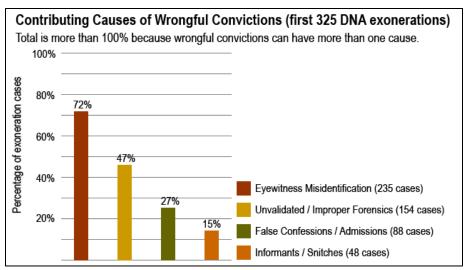
#### **Discussion and Findings**

The focus of this research was to better understand the credibility of eyewitness testimony and identify the contributing factors for wrongful convictions. After a careful analysis and interpretation of information, there are a number of contributing factors that can contribute to eyewitness misidentification and inaccurate eyewitness testimony. The following section of this paper will attempt to synthesize these themes as well as reflect, differ, and extend current knowledge within the area of study. This section will also explore the approaches that organizations are currently implementing to decrease wrongful convictions and increase the credibility of eyewitness testimony. The findings presented throughout this paper suggest that memory, police procedure, juror knowledge as well as perception and bias are among the most influential factors for inaccurate

eyewitness testimony. These findings also indicate that reliance on eyewitness evidence can be both dangerous and onerous.

# **Use of Eyewitness Testimony**

The results of this research suggest that the issue of eyewitness credibility is prevalent within courts across North America. In the United States alone, the Innocence Project found that approximately 75 percent of their first 325 exonerations were caused by eyewitness identification (Innocence Project, 2019). While some may argue that eyewitness misidentification is a problem of the past, given the utilization of forensic evidence, eyewitness testimonies still remain among the most commonly used forms of evidence in criminal cases (Shermer et al., 2011).



**Figure 1**: Total number of the first 325 exonerated cases by the innocence project. (Innocence Project, 2019)

Given the results found by the Innocence Project, it becomes a question of why eyewitness testimonies are still one of most commonly used forms of evidence. The answer to this question however is relatively simple. In criminal cases, there is often a greater accessibility to eyewitness evidence as opposed to forensic or physical evidence,

such as a murder weapon. For this reason, police agencies often rely on the accounts of eyewitnesses to convince juries that their suspect is guilty.

# **Implication of Findings**

The findings presented in this research clearly suggest that there are certain factors that contribute to the accuracy of eyewitness testimonies. While there are many possible factors, memory, juror knowledge, police practice, and perception and bias, were identified as having the most influence towards wrongful convictions. Within the theme of memory, the results suggest that false or inaccurate memories can be created by a variety of factors. These factors include post-encoding factors and factors that are present during the initial witnessing of a crime (Holmes & Weaver, 2010). Post-encoding factors include mechanisms that influence memory after the event has taken place. Examples of post-encoding factors include time delay and misleading information. Present factors include stress, presence of a weapon, perception, and bias.

With respect to juror knowledge, the research suggests that there is almost no other evidence more convincing to a jury than eyewitness testimony. The issue however is that researchers have found that jurors generally have little to no knowledge in regards to the credibility of eyewitness evidence. This can become extremely dangerous for the accused as research shows that the majority of wrongful conviction stem from eyewitness misidentification. In regards to police procedures, research suggests that the actions of police officers during the investigation process have the ability to influence the accuracy of eyewitness testimonies. Examples of this include photo lineups and the way in which police question witnesses of crime. The final factor that was identified was perception and bias and how our cultural lenses and upbringing can contribute to how we view a

situation. An example of this could be a Caucasian individual who grew up in a predominately white community where those of minority were depicted as criminals. Having been conditioned to think this way, the individual may go on to believe that those of colour are criminals and should not be trusted.

In the end it appears that memory, police procedure, juror knowledge and perception and bias, hold sufficient weight in the credibility of eyewitness evidence and the outcome of criminal trials. Given this information, the criminal justice must seek reform within the system to ensure that those accused of crimes are provided with a fair trial.

#### **Canadian Context**

In Canada, issues regarding the credibility of eyewitness testimony seem to be recognized by law enforcement and those involved within the judicial process. While the majority of the United States operates on a state-to-state basis, Canada appears to have a more unified system. Research suggests that both judges and police officers in Canada tend to be more educated regarding eyewitness evidence. In Canada, police officers are provided education about eyewitness evidence during their recruitment training. During this training they are made aware of how their actions as police officers can influence the credibility of eyewitness evidence. Two examples of this training include general principles for interviewing witnesses and proper procedures for constructing and administrating photo lineups. Similar to training provided to police officers, judges and defense lawyers in Canada also receive training in eyewitness testimony.

One of the greatest noticeable differences between Canada and the United States is Canada's initiative in trying to increase the credibility of eyewitness testimonies. In

Canada, the Department of Justice (2015) has provided a list of recommendations involving eyewitness identification and testimony. The first recommendation includes police protocols designed to enhance the reliability for interviewing. The second recommendation involves providing effective training to investigators involved in the interview process. The inquiry suggests that investigators be provided with certain techniques that increase the reliability of witness statements. The third recommendation is to prevent the contamination of witnesses through information conveyed. This recommendation proposes that police officers should be made aware of the dangers that come with unnecessary communication with witnesses. The fourth recommendation is Crown education regarding interview practices. According to the inquiry, the Ministry of the Attorney General should establish educational programming to better train Crown counsel regarding interview techniques. The final recommendation is to improve the overall conduct of Crown interviews. In this recommendation, the inquiry suggests that counsel takes initiative by ensuring interviews are ethical and in the best interest of witnesses.

Despite Canada taking initiative and addressing the issues of eyewitness credibility, courts across North America must continue to research the credibility of eyewitness testimony as well as the contributing factors of wrongful convictions. More specifically, the United States must address these problems at a national level, as a state-by-state approach seems to be ineffective. Despite years of research suggesting that eyewitness testimony is not always the most credible, the United States jurisdictions continue to admit eyewitness evidence at trial (Blair, 2018). In the United States, prosecutors can charge suspects even if no other evidence has been presented that

corroborates the eyewitness identification (Blair, 2018). In regards to the use of eyewitness evidence, The United States Supreme Court stated that eyewitness evidence is sufficient for identifying the suspect of a crime (Blair, 2018). Given the existing research as well as the evidence presented in this study, the United States Supreme Court needs to reevaluate their perspective towards the use of eyewitness evidence in criminal cases.

#### Recommendations

The results of this research show that the issue of eyewitness credibility is alive and well in courts across North America. In order to improve the credibility of eyewitness evidence and reduce the likelihood of wrongful convictions, government bodies must take initiative in providing judicial reform. In addition, the implementation of mandatory training protocols must be imposed for those who play a vital role within the criminal justice system.

The following recommendations have been suggested by the Innocence Project (2019) to increase the accuracy of eyewitness testimonies and reduce wrongful convictions:

- 1. The "Double-blind" Procedure/Use of a Blind Administrator: A "double-blind" lineup is one in which neither the administrator nor the eyewitness knows who the suspect is. This prevents the administrator of the lineup from providing inadvertent or intentional verbal or nonverbal cues to influence the eyewitness to pick the suspect.
- 2. Instructions: "Instructions" are a series of statements issued by the lineup administrator to the eyewitness that deter the eyewitness from feeling compelled to make a selection. They also prevent the eyewitness from looking to the lineup

administrator for feedback during the identification procedure. One of the recommended instructions includes the directive that the suspect may or may not be present in the lineup.

- 3. Composing the Lineup: Suspect photographs should be selected that do not bring unreasonable attention to the suspect. Non-suspect photographs and/or live lineup members (fillers) should be selected based on their resemblance to the description provided by the eyewitness as opposed to their resemblance to the police suspect...
- 4. Confidence Statements: Immediately following the lineup procedure, the eyewitness should provide a statement, in his own words, that articulates the level of confidence he or she has in the identification made.
- 5. The Lineup Procedure Should Be Documented: Ideally, the lineup procedure should be electronically recorded. If this is impracticable, an audio or written record should be made.

The Innocence Project has suggested these recommendations as a means of improving the credibility of eyewitness evidence. Given the Innocence Project's history in dealing with wrongful convictions, these recommendations should be taken into account to ensure that those involved in the criminal court process are given a fair trial that is free from any malpractice.

In addition to the recommendations proposed by the Innocence Project, Canada.

Department of Justice (2015) has their own set of suggested practices and recommendations for the police as well as prosecutors. These suggestions include the following:

#### Police Officers:

- When possible, police officers that are independent from an investigation and have no knowledge surrounding the details of the case, should be in charge of administering photo lineups.
- During a photo line up, the police officer should inform the witness that the perpetrator might not be present in the lineup.
- iii. The suspect should not stand out in a way that would coerce the witness into choosing that particular individual.

#### Prosecutors:

- i. Provide the witness with the opportunity to review their previously given statements to confirm that the information they gave was accurate.
- ii. Never tell a witness that their identification of a suspect is right or wrong.
- iii. If a witness changes their original statement or recollection of events, ensure that the defense counsel is made aware.

These recommendations provided by the Government of Canada suggest that the issue of eyewitness credibility is of significant concern within the criminal justice system. Therefore, adhering to these recommendations could promote a fair and just judicial system that encourages fair trials free from unethical practice.

#### Conclusion

The purpose of this research was to better understand the credibility of eyewitness testimony and identify the contributing factors of wrongful convictions. A review of the existing literature suggested four common themes: memory, juror knowledge, police procedures, as well as perception and bias. These themes were identified as having the

most influence on the credibility of both eyewitness testimonies and the outcome of court decisions. While this study does not suggest that eyewitness testimony should not be used as evidence, it does promote the need for judicial reform. Given the large degree of trust that our justice system places on eyewitness evidence, it is crucial that more research is conducted to explore the relationship between eyewitness evidence and wrongful conviction.

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