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The Dark Side of Justice: Misidentification

An Honors Thesis Project by

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Abstract

The use of eyewitness testimony has been in place for hundreds of years. The “star witness” has swayed many juries into have beyond a reasonable doubt of the defendant’s guilt. However, very few of these cases can be considered fair trials, when it comes to the evidence of eyewitness testimony because of the unreliability of memory and the biases that bolster the confidence of the witness. I aim to show that eyewitness testimony is too unreliable to be used as evidence in most trials, while I understand it would be foolish to abolish it altogether. First, I will examine the psychological research on memory and show through a brief history, the changes in research for both adults and children. I will examine cases where eyewitness testimony has failed to bring justice to the defendant, but focuses on the need for a scapegoat. Lastly, I will show how the judicial system, from state courts to the Supreme Court, have attempted to fix the difficulties that fallible testimony has caused in the courtroom. Some of these ways include bringing an expert to testify on the reliability of memory, having the judge give explicit instructions, and bringing cases that deal with the rules of eyewitness testimony to the courts.

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Troy Davis was accused of murdering a police officer in 1989 and was convicted and sentenced to die at a trial in 1991. All the evidence against Troy Davis was circumstantial and the prosecution's case leaned on the eyewitness testimony of nine people who claimed to see him shoot Officer McPhail. They did not find his fingerprints on the gun, nor did the ballistics test match his gun. There was no DNA evidence tying him to the murder and yet, he was executed this past year after his last appeal failed. At the time of his last appeal, seven of the nine people who testified against him recanted their testimonies or said there was police or prosecution persuasion influencing their statements.

The use of eyewitness testimony has been present in cases since ancient times when people were brought before kings or other arbiters with complaints of stealing, killing, or raping. This evidence, given from people whom others knew and trusted, was believed unconditionally because there was simply no reason for them to lie. People could be persuaded to tell the truth. Also, many times, they brought forth no other evidence. In this time, there was no research on the fallibility of memory, the differences that certain situations attributed, or the relation between stress and recall. Yet, as the research of memory began in the discipline of psychology, and as our court system grew to encompass the innocent until proven guilty beyond a reasonable doubt mindset, we continued to keep eyewitness testimony at the forefront. Does it make sense that as our system grew, our methods for collecting evidence did not change as well?

In 1908, Hugo Munsterberg attempted and failed to incorporate the psychological research of memory into the discipline of law. As time went on, law finally allowed psychological experts to testify against eyewitnesses, though very sparingly. Still, hundreds of people were convicted innocently of index felonies, being accused of murder, rape, assault and abuse. As I continue, I will look into several of the cases where the law has failed individuals, as

well as their families and anyone who is looking for a fair trial. Though it would be impossible to exclude all eyewitness testimony from the judicial system, I aim to show that many cases should not be allowed to use it because of such high numbers of misidentification. Where cases offer testimony as their only evidence, for example some rape cases, DNA evidence should be used as corroboration, if available.

DNA testing has proven to be fallible before in cases such as Josiah Sutton, or at least explained incorrectly by the analysts. Fortunately, the scientific community has been able to make it more and more specific, allowing it to exonerate many of the falsely convicted. The progress made with DNA testing is slowly but surely giving the court system another foothold as eyewitness testimony grows obsolete in its unreliability.

In my paper, I will begin with an overview of the psychological research that has been highlighted in the exposure of flawed memory. I will show the differences between adults' memory as well as children's, and how this affects eyewitness testimony in some cases. I will examine the ways that memory can be compromised in certain situations, as well as over time. The second part of my paper will give examples of the actual cases and how the law has adapted to the psychological research and what it has ignored. When the law ignores the research, it does so for reasons such as the pressure on police to close open and violent cases or to prevent the justice system from admitting a mistake. My paper will conclude with an examination of what the court has done to mitigate the issues stemming from eyewitness testimony and how well it has worked.

I. Psychological Evidence

The brain a place to store memories has been the source of hundreds of thousands of psychological experiments over time, eventually getting to the point where the study of the brain

and attention has branched off into a group of sub-psychologies, such as cognitive, memory, and neuro-physiological. To attempt to sift through the vast amount of information available would be pointless, not to mention impossible, in relation to my thesis. I will go into the basic operations of encoding information from working memory to long term memory, recognition and recall, as well as interference theory.

In 1908, Hugo Munsterberg, an applied psychologist, wrote many books about how psychology can be applicable to the real world. This process of thought was vastly different from the popular view of psychology at the time, the purely philosophical, and therefore tended to be overlooked. One of his most important works was titled On The Witness Stand. This book discussed how psychology could be applied to the court process to find the whole truth behind cases and maintain the integrity of our justice system. Through the book, he comments on how the law refused to incorporate psychology, even as other disciplines began to accept it (Munsterberg 1909). In particular, testimony seemed to be one of the largest issues that psychology could study but the public seemed to know little about. The elemental understanding was that because the witness remembered the situation, he/she must remember accurately and therefore, accuracy was based on memory. But what at the time was known about memory? Certainly not as much as we know today, and we still cannot claim to have a concrete grasp on whether eyewitnesses are accurate or not.

Today we know of three types of memory, iconic or sensory, short term memory and long term memory. The sensory information goes into short term memory where there is a limited amount of area for storage. George Miller (1956) suggested that we could hold up to anywhere from five to nine items in short term memory if there is active rehearsal. If it is something we need to remember for a later date, our brain attempts to encode the information

into our long term memory. To maximize the amount that our brain is able to take in at a time, we attempt to connect the new information with what we already know. This results in a deep level of processing and stronger encoding of the new information in long term memory (Craik & Tuvling 1975).

But before the information is able to get to our long term memory storage, it must go through working memory where it is manipulated and rehearsed until it can be remembered. Alan Baddeley (1974) created a working memory model with three interrelated pieces, the phonological loop, the visuo-spatial sketchpad and the central executive. When information comes into our sensory memory, it is moved into short term memory for a time. As it is being rehearsed in the short term buffers, audibly in the phonological loop and visually in the visuo-spatial sketchpad, the central executive manipulates the information to keep it in order as it passes into long term memory. Once the encoding occurs and the information is stored in long term memory, only then is it able to be recalled in the future.

Loftus and Palmer (1974) say that as we recall a memory, we reconstruct it from the pieces of the original memory and the post-event information that we are given. At the time of recall we are presented with the one memory, though not which source we received information from. This shows that through our reconstruction, we are vulnerable to suggestive statements made by interviewers, pictures from photo lineups, and many other sources that may be unreliable. It is easier to make a decision regarding recognition, where the answer is said to be right in front of you, than it is to make a free recall of a memory. The justice system has to be careful with this because when a witness gives a free recall description to the police, they may change their story when they try to pick someone from the lineup who could be the suspect.

When witnesses are making a decision regarding a lineup, they often make what is called a relative judgment. The relative judgment theory states that a witness will often eliminate people from a lineup that look least like the suspect. As they continue to eliminate people, one will eventually be remaining and the witness will assume that must be the perpetrator. However, sometimes the suspect in the lineup is innocent but may look similar to the description given by the witness. Other times, the lineup won't even contain a suspect (Wells & Luus 1990). But when people use the relative judgment theory to make a choice, they will almost always choose the person who looks most like their description and often none actually stand out to them, risking misidentification.

There are many situations that have factors which make encoding difficult, anything from being asked a question while rehearsing a phone number to a violent crime unfolding where the witnesses must remember important details. Exposure to items that are uncommon is more difficult for an individual to remember, because they will have less familiarity with the object and therefore, a lower depth of processing for the uncommon item. This explains why children may have a more difficult time encoding certain things. More things may be uncommon because of their shorter amount of time to have all the experiences an adult has. One study clarified that it was not age that caused the difficulty in encoding, by having children, who were chess experts and adults, who were not memorize where chess pieces were on a board. Those who were more familiar with the patterns in chess, in this case the children, were better able to understand and encode the pattern as one or more groups of items rather than each piece as an individual item (Chi 1978).

In particular to eyewitness testimony, interference, both proactive and retroactive, can affect a memory as it is being processed. Proactive interference would cause information that has

already been stored in the long term memory to tamper with the new memory. Retroactive interference is when information that is new replaces the information that was previously encoded, though apparently not as strongly as working memory is trying to encode the new information (Anderson 1981). This is the more common interference seen in relation to eyewitness testimony. For example, when the witness is asked a leading question that tells a physical aspect about the suspect, retroactive interference would cause the previous information the witness knows to be replaced with the new information.

There are several other components to a situation that have an effect on reliability, called event factors. One factor is the amount of stress during the event. In 1908, Yerkes and Dodson created the Yerkes-Dodson Law, stating that “extreme stress and arousal interfere with a person’s ability to process information.” (Loftus 1979) There is an optimal level of arousal for each situation and the more difficult the event is to encode, the lower the optimal stress level is. However, in no case is the optimal stress level zero because that would be when one is asleep. More stress causes an inability to process all the targets and encode them correctly into long term memory (Easterbrook 1959). Related to proactive interference, unconscious transference is when there were multiple situations for the witness to see the suspect and gain a familiarity. This sense of familiarity causes the witness to choose the suspect as the perpetrator, most likely because the witness knows that they have seen him or her before (Loftus & Ketcham 1991).

When there is a weapon present at the crime, the danger posed by that weapon usually takes over most of the witness’ attention. In conjunction with the high stress of a life-threatening situation, the ability to encode details about the perpetrator is very low. Details of the crime itself are hard to maintain when the crime is violent. Most people will have a hard time focusing on the smaller details while trying to cope with the violence either directed at them or the people around

them (Loftus 1979). The fourth event factor that can cause an unreliable testimony is the timing estimate of the crime, how long the person was seen. Loftus conducted a study where she showed a bank robbery simulation for 30 seconds. Later, when asked to estimate how much time the crime took, both males and females overestimated by an average of 8 minutes (Loftus 1987). Timing is extremely important in eyewitness testimony because it is up to the prosecution to fit the story together as the different eyewitnesses tell it. And no matter how much time the crime takes to be committed, rarely does the eyewitness have that long to examine the perpetrator.

The next three event factors, disguises, distinctive faces, and cross-racial bias identification, all have to do with the individual's ability to recognize the perpetrator without falling into the relative judgment trap. Disguises have been found to be extremely effective. Even if someone is just wearing sunglasses or covering their hair, people tend to make more errors than if the witness got just a glimpse of the perpetrator's full face (Cutler et al 1987, Hockley et al 1999). Distinctive faces go along in recognizing the perpetrator. When someone's face is highly attractive or more unattractive than the average face, it will more likely be accurately recognized (Light et al 1979). This could also mean that a face with distinct characteristics, such as moles or scars, will be recognized more easily than a face with no outstanding features.

Lastly, cross-racial bias identification makes it difficult for witnesses to identify someone of another race. It does not claim that someone of one race cannot identify someone of a different race, but merely that there is a bias towards being most accurate when identifying someone of one's own race. Racial minorities outnumber white suspects in cases such as murder or rape and are often times wrongly convicted. Most of the time, the witnesses that are called to testify against them are of another race, usually white or Asian, and there is a higher chance that they are making a relative judgment call (Garrett 2011). McClelland and Chappell (1998) have

suggested that the facial features for people of our own race are encoded in a certain way due to prior experience, familiarity from our family and friends, where other-race faces are not encoded in an efficient manner; fewer variables are taken into long term memory.

Unlike at the time of Munsterberg, the law is increasingly turning to psychological research that can help them understand how a witness' memory works and how it can be twisted. Some of the memories are incomplete when they are received into working memory, as we have seen by discussing how event factors reduce the chances of gaining an accurate memory description of the perpetrator. But even if the memory is complete, the process once a description is given to the police can have several problems in itself, causing an accurate memory to be different after being given post-event information.

Children as Eyewitnesses:

Testimony from children began in the late 17th century with the Salem witch craze where teenage girls, ranging in age from 9 to 17, accused several people of witchcraft. In those days, witchcraft was related to heresy, sparking controversy in the Church when the Papal Inquisition started. These young girls claimed, and exhibited, multiple signs of being tortured by witches, such as nails marks, teeth marks and falling into seizures. Truly, it was the ultimate show of acting as many of the accused adults could not argue against it, no matter how strong the evidence was to exonerate them (Starkey 1949). The judges could not believe that these young girls would be able to make such horrible stories up, and several of the men and women accused had confessed to receive a lesser punishment. Children are so innocent and ignorant of the wrong done to them, so what reason would they have to lie about these crimes? In this case, were they not the ultimate witnesses because they were also the victims of this so-called abuse? (Meyer 1997)

Common law has since created rules around children's testimony in relation to age and competency. In *Rex v. Brasier* (1779), English court stated that children under seven could testify if they were able to understand the obligations connected to an oath of law. Following their lead, the U.S. Supreme Court in *Wheeler v. United States* (1895), a child that was little older than five years old was accepted to testify in a murder trial. But they laid down rules such as "[c]hildren under ten years of age, who appear incapable of receiving just impressions of the facts, respecting which they are examined, or of relating them truly" were not able to testify. This upper limit was set but a lower limit had not been put down concretely. A few states would not permit children under the age of four to be credible witnesses in a court of law and almost all of the rest have followed suit since (Stafford 1962). The court had decided that the age at the time of trial was more important, again because of the need to understand the oath, rather than the age at the time of the crime. But if a child is testifying at age seven, and the crime occurred several years earlier, the issue of infantile amnesia comes into play.

Early research dealing with childhood memory handled all the topics we are still looking at today. Alfred Binet (1911), the psychologist who created the Intelligence Rating Scale, as well as the IQ test, examined how intelligence related to the ability to recall details in a picture immediately after two minutes of attention. He found that the differences in intelligence were more strongly related to accuracy than the amount of detail in the picture. Wilhelm Stern (1910) examined memory of detail in a picture several weeks after it was viewed. He found that time altered the memory, inputting ideas from the imagination and even when the subjects were extremely confident in their decisions, there were still one to two serious errors made. Lastly, there was experiments on suggestibility, whether through rumors, leading questions or other

situations (Varendonck 1911). All of these were examined in further detail as the discipline of psychology advanced.

Children do not often remember events that occurred between birth and 3-5 years of age (Kihlstrom & Harackiewicz 1982). Of course, people assume that traumatic experiences would stick out in a child's mind, and in certain cases that is true. There are three situations where a child's memory is relied on to convict the defendant; children with one-time traumatic experiences, children who were routinely abused and adults recalling past abuse. The children who only experienced one traumatic event do remember the core information of the event, and may even have recurring intrusive memories routinely found with post-traumatic stress disorder (PTSD). This does not mean there is never distortion in the memories. Children who were in a dangerous situation may tailor the story to show that their life was not in significant danger. Other reasons, than protecting the psyche, to distort the memory come from significant time delays between the event and testimony, the age of the child and even parents' help to cope with the situation (Golding et al 2009).

When a child is chronically mistreated, he or she tends to show the most accurate memories if the child is older and if the violence was recent (Greenhoot et al 2005). For some, most of the violent abuse occurred before the child was four, resulting in spotty memory likely to be from infantile amnesia. There is also likely to be trauma-specific fears, such as loud noises or claustrophobia, that occur without knowledge that they relate to a trauma (Terr 1988). Re-exposure to the abuse is one of the strongest reasons for why these children have less accurate memories of abuse. The types and occurrences of the abuse may all seem to run together (Golding et al 2009a).

Adults report memories of abuse as children that were supposedly lost until therapy drew them out. Many, but I stress not all, of these memories are false. False memories is a large branch of research in psychology and I do not claim to go into much detail here. One of the main problems with adults recalling abuse from their childhood is the accuracy that would be reasonable for such a long time delay. We've seen that children who were maltreated at young ages could barely put the occurrences together after four or five years, let alone twenty to thirty (Golding et al 2009). Elizabeth Loftus, a psychologist who deals with recalled memory and its drawbacks, analyzed multiple stories of alleged abuses, many large cases such as the McMartin Preschool case. She writes books about how false memories tear families apart, incorporate guilt on supposed victims especially when found to be mistaken, and cause inexplicable strain on the accused. As I said earlier, I do not deny that repression of traumatic memories occurs, and when memories choose to reveal themselves, they can cause extreme damage. Most adults who are abused remember the maltreatment quite well though some exhibit psychopathologies, usually PTSD. However, usage of hypnosis, amobarbital (also known as sodium amytal or a supposed truth serum) and other ways of coaxing memories of abuse out of hiding do more harm than good, by implanting the false memories.

One of the examples Loftus (1994) gives was the story of Doug Nagle (a pseudonym, which she gives to most of the actors in her stories to protect them) and his alleged abuse of his two daughters. He was accused of sexual abuse and not given any details from his wife, went through a barrage of psychologists for therapy and tests, all who thought he was guilty in fear of malpractice suits and backlash from the family, and was accused of also being sexually abused as a child. Detectives, friends and his family continually accused him of being guilty or suppressing thoughts he would not admit because he did not remember. Through the testimony at trial, all of

the statements from the prosecution's witnesses were circumstantial, using expressions like "I thought she learned [a sexually suggestive pose] from her father", and there was a lack of corroborating physical evidence as well as a lack of attempt to actually look into the historical background of his relationship with his daughters. He was acquitted but his family was broken apart. His sixteen year old daughter attempts suicide every so often and he does not trust his own memories, even those he remembers as being happy. All of this occurred because of false memories and people's fear to refute them. Still, people will assume that children could never lie about such a terrible event.

False memories are strongly related to the susceptibility of people's memory. Many studies show that as malleable as memory is for adults, children have a particularly difficult time avoiding the bias of susceptibility (Dale et al 1978, Cohen & Harnick 1980). Almost all of the studies done show that a child's testimony may not be less accurate than that of an adult but rather that there is less information offered to the interviewer, especially with free recall. Children are not able to recall some items without recognition cues (Saywitz 1987).

One of the main ways children are susceptible to misidentifications as eyewitnesses is through the use of leading questions. One of the first psychologists to study the use of leading questions on young children was Wilhelm Stern (1910). Taking both children and adults as random subjects, he presented them with a set of pictures and later a set of simulated crimes. They were tested by both free recall and suggestive questioning and the outcome showed that the youngest children had the most errors due to the suggestions. Adults committed errors as well when the questions were leading but not nearly as often as children, the youngest making the most grievous errors. Many children want to please the adults by giving the right answer. When a question is worded to produce a certain answer, the child assumes he or she must have been

mistaken if they thought to go against that answer and will change his/her entire memory. Because children may get scared or nervous in a formal trial setting, as well as an interrogation setting, detectives and lawyers want to help the children along with their story, most of the time unaware that their questions are suggestive. But the more often the young witnesses are guided to make these statements, the more often there is a false identification and testimony about the event.

Interviewer bias also causes a suggestibility factor. When the interviewer asks specific questions related to who he/she thinks is the suspect, the tone used is usually very accusatory. When children are confused about the story, they easily pick up the tone in the interviewer's voice, looking to answer with the correct choice (Thompson et al 1997). They also pick up cues such as repeated misinformation in repetitive questions or being asked to "pretend" if they do not give the story expected of them. This not only affects the story they give, in this case an their testimony, but it also affects their original memory of the event. They actually believe their story as it changes over the event of questioning. The children cannot be accused of lying when they truly believe the story they are telling (Bruck & Ceci 1999).

Two things that are not often considered are the changing abilities to recognize faces and voices. Carey et al (1980) conducted a study on the facial recognition of unfamiliar faces between the ages of 6 and 16. As a cross-sectional study, the children were all examined at the same time, rather than a group being studied over time, so individual differences had to be accounted for. A pattern for facial recognition emerged showing an increase in accuracy from 6-10 years of age, a slight decrease in ages 11 and 12 and then a continued steady increase up to age 16, where a child could reasonable identify an unfamiliar face as well as an adult. They believed that it followed a maturational change in the right hemisphere which was fully mature at

age 16 and the dip in accuracy may have been due to hormonal changes in puberty. Voice identification also has the same pattern for accuracy in recognition when it comes to children (Wells & Loftus 1984).

There are individual differences in suggestibility influence, for example the age of the child. Another is the language ability and understanding of the child. When a child has a better grasp on the usage of some confusing words, they are more resistant to the formal language of the questions. Of course, interviewers attempt to make the questions easily understood according to the age of the witness but some children become confused with the question and then fall back to looking for suggestive clues as to what the right answer would be (Blandón-Giltin & Pezdek 2009).

With all these issues regarding children's testimony, can we trust jurors, interviewers and lawyers to be able to tell the difference between the truth and the lies? When not told that the children were given suggestive questioning, professionals were unable to differentiate between those who were accurate in their testimony and those who were lying. Bruck et al (2002) conducted a study and found several characteristics that differentiated true and false narratives. Some ran counter to the original assumptions. The first was that false narratives exhibited more detail and spontaneous utterances, as well as more cohesiveness and temporal markers. Another characteristic was that fantastic or improbable details occurred more often in false stories and they most likely appeared from suggestive interview questions. Children were more likely to present new information in subsequent retellings of false stories, where they were more likely to repeat old information in retelling a true story. As we will see later, jury members do not always know these differences. In fact, many are shown to expect the opposite and judge children's testimony to an incorrect standard.

To become a child witness, the first step is disclosure of the abuse, or witnessed event. However, with such a threatening experience, the fear of repercussion causes disclosure of the event to be one of the most difficult steps. Even if the child admits to being a victim or witness, the whole story rarely comes out because of fear. If a child delays exposing the abuse, unfortunately, adults tend to think the child made the story up. As the process continues with a pretrial interview, the child can feel more and more out of place in such formal proceedings, heightening discomfort and fear (Bussey 2009). The child will often be asked to look at a lineup, which is a problem in itself discussed later in the paper. Dent (1977) conducted a study showing that children failed to make identifications half the time they were given a physical lineup. His reasoning was that the live lineup would be stressful for children who feared retribution for confessing. Through these fears and actual cases where punishment was taken out on children who reported their parents previously, there have been attempts to make it easier on the child during the trial. Some of these ventures led to more suggestive questioning during interviews where others led to efforts we continue to use today.

Hearsay is when a witness references or outright tells another person's experience.¹ In almost all cases, hearsay is not allowed to be submitted as evidence or heard in someone's testimony because of the inability to cross-examine the information. It also violates the Confrontation Clause of the 6th Amendment to the Constitution, which states that a defendant has the right to confront, face to face, those who accuse him. In the case *Idaho v. Wright* (1990), the Supreme Court decided that there may be an exception to that rule for children's testimony if they are afraid to appear in court, too young or unable to participate in cross-examination in the

¹ Federal Rules of Evidence 801 (c) - Hearsay is defined as "a statement, other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter asserted."

trial.² Jurors surprisingly believe the adults that bring a child's testimony into court more often than they believe a child's first hand account, even though a child's words and meanings can be distorted by an adult's intonation when reading (Warren et al 2009).

Another way the court has attempted to make testimony easier for children is the use of closed circuit television sets (CCTV). This allows the child to be directly examined and cross-examined in another room where the defendant is not present, and at the time of the testimony, a CCTV would show the interaction to the defendant and the rest of the court. This technique was objected to because, like hearsay in *Idaho v. Wright*, it would violate the Confrontation Clause. Lawyers argue that it will hinder the jury from being able to assess how truthful the young witness is being as well as making the defendant look guilty (Troxel et al 2009). Myers et al (1999) conducted a study that showed how important demeanor was to the jury and that the correlation between a guilty verdict and a child's nervousness and lack of eye contact was significantly positive. In *Maryland v. Craig* (1990), the Supreme Court decided that CCTV was allowed under the Confrontation Clause because the defense still had the opportunity to cross examine the witness and the defendant and jury were able to view the proceedings.

The elderly as eyewitnesses:

There is a much smaller body of research on the elderly as eyewitnesses. The studies that were conducted showed that jurors tend to treat the a senior's testimony as they would a child's. Stereotypes seem to run rampant about the declining competence of our older generation, especially that their intelligence runs the risk of deserting them with the increase in degenerative brain diseases and fading memory. One of the problems is that the elderly doubt their memories

² *Idaho v. Wright*, 497 U.S. 805 (1990) - The Supreme Court in this case did affirm the reversal of the conviction finding it was not beyond a reasonable doubt, but they still noted that hearsay is appropriate in certain circumstances.

more often than adults and children. Being less confident in their decisions also has a strong affect on their testimony to the jury. Confidence will be expanded on in the next section.

A study done by Yarmey and Rashid (1981) was conducted to see if elderly witnesses were more likely to misidentify the suspect if he was “criminal looking” or if it would be the same as the “inoffensive” looking misidentifications. The findings showed that when the bystander was “criminal looking”, he was twice as often misidentified by seniors as the perpetrator (Wells & Loftus 1984). Though the court system should be wary of an elderly eyewitness, there cannot be an upper age cap on the ability to be a witness.

II. Why Testimony Causes a Problem

The reason so many people have been falsely convicted for crimes that others have committed hinges almost exclusively on how reliable a jury believes eyewitness testimony to be. This is not the juror’s mistake, nor is it the mistake of the eyewitness but it is a mistake where the suspect pays the price. The judicial system expects the jury members to be unbiased observers and to a point they can be, but they also have feelings, make observations even if the court restricts them and form stereotyped opinions that are based off their personalities. Since 1972, there have been two cases that categorized five factors of reliability, *Neil v. Biggers* (1972) and *Manson v. Brathwaite* (1977). These factors are confidence, the opportunity of view of the perpetrator, degree of attention, accuracy of the description and the time between the crime and the witness’ identification. But these factors do not correlate to high reliability and assuming they do causes more uncertainty in the trial for the jury members.

There have been many empirical studies done to show that jurors are insensitive to the errors in eyewitness testimony. One of the most complete was conducted by Cutler et al (1990). Jury members were shown a video of a trial with an eyewitness testifying that she saw a robbery

and fingering the defendant as the robber. There were different sets of factors that were included such as whether the robber had a weapon, whether he wore a mask or any sort of disguise, different sets of instructions for the lineup and others. Taking the factors from the two cases mentioned above into account as well, the mock jurors and undergraduates in the study showed a sensitivity to confidence and yet an insensitivity to all four other topics. The confidence was put at 80% or 100% positive and the jury members voted guilty more often in the trial where the witness was 100% positive her identification was correct. There are a few ways that a court tries to fix these errors, for instance through cross-examination instructions given to the jury by the judge. But this just emphasizes that the most important inaccuracy is that high confidence in the witness' testimony at trial correlates to a more accurate identification.³

What is so dangerous about dependency on confidence in a trial is how malleable it is as time goes on (Garrett 2011). It is not uncommon for a person's confidence level to change after the original identification. Firstly, they have now seen the suspect and are able to pick him or her out again whether during another lineup or during the trial. This allows them to become more confident in their decision that they must've picked the correct person. Other studies show that repeated questioning as well as confirming feedback, especially in cases with child witnesses, can help fill in details they may not have originally 'remembered' (Shaw 1996, Shaw & McClure 1996). Witnesses who were briefed before cross-examination also absorbed, perhaps unconsciously, more details to the testimony allowing themselves to have a more complete picture (Wells et al 1981). Still others show that co-witnesses who have identified the same person will boost one's confidence because there is corroboration and it is more likely that one person is wrong rather than two (Luus & Wells 1994).

³ Expert testimony on the fallibility of memory claims to make juries more sensitive to all the events and factors surrounding the witness' identification.

Another study shows that when dealing with cross racial identification and question wording, there is a stronger correlation between accuracy and higher confidence. But then, issues of weapon focus, violence and stress showed higher confidence to be on an incorrect answer (Loftus 1979). Why would this be the case? Wells and Murray (1984) described the four explanations why eyewitness confidence would be so poorly correlated with accuracy. The first is the experience of almost completely positive feedback in everyday occurrences of recognizing someone, for example on the street. If you are unsure that you actually recognize the person, when they wave back, you are better able to confirm that you did. However, they may just be responding to prevent an awkward introduction, or possibly reintroduction. The second is optimality, stating that the lower the accuracy rate in studies, the lower the correlation between accuracy and confidence. The third explanation has to do with self-attributions. This claims that accuracy has nothing to do with the situation, in particular the lineup, but rather the internal cues of accuracy within the individual. Because the witness was not forced to choose anyone in the lineup, he or she may or may not be confident that they have chosen the correct person. Lastly, there is a theory for selective cognitive search, where the mind takes in all the clues but selects the ones that correspond to the memory, allowing the rest to fall into the blank spots.

All this evidence points to the idea that confidence is not a reliable indicator of accuracy, especially in the case of eyewitness testimony at trial. But our justice system continues to focus on how confident a witness is when identifying the defendant, leading the jury to believe it is a valid source of accuracy. After allowing the jury to believe that they understand the relationship between confidence and accuracy, the judge usually refuses expert testimony on the actual correlation. But the other factors that the *Biggers* case mentioned were important to accuracy in an eyewitness' testimony, and though Cutler et al (1990) showed juries were not very sensitive to

these factors, I think their flaws make them just as dangerous to accuracy as does confidence level.

The second factor, the opportunity to view the perpetrator, is a solid way to account for the accuracy and even the confidence level of the eyewitness. However, most criminals do not allow the witnesses to have much of an opportunity at all. Though the chance to see the criminal is usually slim in most cases, judges still permit the testimony and identifications made by the witness, causing the accuracy factor to be skewed. Obstacles to viewing the perpetrator may include masks, the cover of darkness or poor lighting, and threats to the victims to avert their eyes. So though they were given a window to see the suspect, the view may have not been conducive to an accurate identification.

Closely related to the opportunity to view is the degree of attention. Most of the time in a violent crime, there would either be a weapon that would draw the witness' focus or it would be a highly stressful situation, leaving the witness to estimate (almost always overestimate) the amount of time they saw the suspect. However, they claim to have been drawn to certain features of the perpetrator, usually allowing them to bypass the claims of masks, poor lighting or weapon focus but still causing an incorrect identification (Garrett 2011).

Discrepancies in descriptions would seem like a good way to find fault in an eyewitness' identification, but surprisingly, juries seem to continue to take the witness at their word. Garrett (2011) gives several examples of witnesses who take back certain statements made in their original description because it does not match the suspect. Prominent identifiers, such as tattoos, scars, gold teeth, go unnoticed during the crime and then when it comes time to identify in court, juries still tend to convict. What makes the jurors forgive such grave mistakes when it comes down to guilty or not guilty? Though some studies were conducted, there was found to be no

direct connection between accuracy in conviction and accuracy in description, but the amount of discrepancies definitely points to suggestive procedures, or in some cases, the inability to accept a wrong choice during the original identification.

Lastly, the passage of time between the first identification and the crime takes a toll on the reliability of the eyewitness. A study done by Wells and Quinlivan (2009) shows that even within hours of the event, accuracy begins to decrease, let alone weeks or months after the occurrence of the actual crime. Some trials occurring years after the event turn on a witness' identification and claims to have the same accuracy as the day the event occurred (Garrett 2011).

This, of course, is not to say that all eyewitnesses who claim to be completely confident in their decisions are inaccurate. However, between the malleability of confidence, the reliance on eyewitnesses by juries and the lack of information that is given to the jurors before a decision is made, we have seen many people be wrongly convicted. Because personal renditions of the crime are seen as relatable by jurors, the suggestibility of the technique laid down from *Neil v. Biggers* and *Manson v. Brathwaite* is not adequate to predict the reliability of a witness' testimony.

In children's testimony, there are several factors that convince the jury about the reliability and accuracy of the witness' or victim's account. The first factor is the gender of the juror as well as the gender of the victim and defendant. Women jurors are more likely to be pro-victim and believe children when they are testifying in an abuse case. Studies speculate that this could be due to gender roles where women are expected to be more empathic and caring, or even protective of those who cannot protect themselves. Another reason could be that women are more often victims of abuse and tend to sympathize with those who have been hurt. Studies show that mock jurors realize the prevalence of male perpetrator/female child victim pairings, when

dealing with sexual abuse, over any other type of pairing. Because this is statistically the case, there tends to be higher conviction ratings for males than females when given the same testimony from the child. The same outcome is exhibited when the victim is a female child.

Studies done by Goodman et al (1984) reveal that the victim's age also can have an effect on the jury's perception of the case. When a child testifies in a case of child abuse, the younger the child is, the more likely the child is naïve to sexual knowledge. This translates to the juror that the child could not possibly be making the situation up because how else would they have this sort of carnal information? Also when a child reveals extreme emotion, such as breaking down and crying, it is more likely a conviction will occur. However, children who have been repeatedly abused may not come out with these over the top displays of emotion.

Lastly, in regards to the jury's reliability of children's testimony, the amount of time that the abuse report was delayed had a strong effect. However, the outcome of the studies done on time delays and accuracy in detail, show the opposite effect than what the jurors believe. When given two interviews, children who were victims of sexual abuse gave either complete detail in both interviews or more detail in the second interview in addition to their previous story. The latter is more consistent with a child's actual memory process but jurors see this as an opportunity for the child to make up more complete detail of the event. More convictions are handed out when the child's testimony matches the first circumstance (Golding et al 2009b).

Police's Biased Procedures:

When cases are brought to the police, whether through a 911 call or a victim's in-person complaint, there are some standard practices that occur. The police go to the scene, collect evidence, canvas the surrounding areas to find potential witnesses and create a suspect list. When police are able to weed out a suspect, they move on to finding enough evidence to charge the

person with the crime. Unfortunately, the extreme pressure to close the so-called “pressure cooker cases” (Germond 1996), especially violent ones, can lead police actions to be less than impartial, whether done consciously or unconsciously. Two of the practices fraught with the most biases are lineups and confessions.

The U.S. Supreme Court revealed in *Simmons v. United States* (1968) that they believe there are biases that can cause error in identification present in lineup situations. Justice Harlan who delivered the opinion of the Court even goes as far to give an example of one such procedure:

“This danger will be increased if the police display to the witness only the picture of a single individual who generally resembles the person he saw, or if they show him the pictures of several persons among which the photograph of a single individual recurs or is in some way emphasized”

Four years later, *Neil v. Biggers* (1972) came before the Supreme Court where they took away any chance of identification procedures being able to violate due process. This was followed by *Manson v. Brathwaite* (1977) that used *Neil v. Biggers* as precedent, claiming that under the 14th Amendment Due Process Clause, exclusion of pretrial identification evidence is not necessary. In both *Biggers* and *Brathwaite*, the Justices laid out five components that would determine admissibility of evidence, what is known as the “totality of circumstances”. These were “the opportunity of the witness to view the criminal at the time of the crime, the witness' degree of attention, the accuracy of his prior description of the criminal, the level of certainty demonstrated at the confrontation, and the time between the crime and the confrontation”. Unfortunately, these court cases made other recommendations for lineups difficult to enforce because the law does not back them up. They remain merely recommendations.

The main issue here is suggestion. As discussed before, Lindsay and Wells (1985) give a description of what is called relative-judgment theory, the claim that witnesses, in order to make a decision, will choose the suspect that looks *most* like their description or will eliminate those that can't be the suspect and choose the one that is left. Unfortunately, when a lineup is biased, this often results in a misidentification.

One thing that can be done about the relative judgment theory is having the administrator issue a warning to the witnesses that the culprit may not be in the lineup. In an experiment done by Malpass and Devine (1981), a staged crime was committed and then during the pretrial identification stage, the witnesses were either told that the culprit may not be in the lineup or were led to believe that he was. The accurate identifications when given the instructions were still very high (87%) whereas the false identifications dropped to 33%. A false identification when given no instruction in the lineup occurred 78% of the time. This instruction clarifies that if the witness does not have an absolute decision, he or she need not make a choice. After all, the decision is stressful for the witness as well. They do not want to call out an innocent man and have him convicted because of their uncertainty.

Another suggestion given by Lindsay and Wells (1985) is a sequential procedure rather than a simultaneous lineup. In a simultaneous lineup, a witness can compare one suspect to the others, allowing a relative-judgment. If a sequential procedure is used, there is more of a chance that the witness will make an absolute judgment because the original memory will trigger if he/she recognizes one of the suspects. Many other studies clarified this information and added that the witness was significantly more conscious of the culprit's presence or absence in a sequential lineup rather than a simultaneous lineup (Cutler & Penrod 1988). Other studies found that the prevention rate for misidentifications was significantly higher in sequential lineup

experiments. When controlled for real world factors, the correct identification rating was the same for both lineups (Steblay et al 2001).

There are two types of properties that can be controlled to prevent bias and they are the structural, which include the appearances of the members and the procedural, which are the administrator's duties (Wells et al 1998). The first grouping, the structural properties, also known as estimator variables by Lindsay and Wells, can go from very broad items to very narrow characteristics. For example, in a physical lineup, differences in skin tone, hair color, height, weight and dress must be accounted for, whereas in photo lineups, issues such as size, color and contrast as well as physical characteristics of the suspects must be accounted for as well. Buckhout et al (1975) created two reliability checklists to be used by police or detective administrators to rate the impartiality of the lineup. But unfortunately, these as well as many other attempts to produce guidelines went unused because the courts did not see them as necessary.

Eyewitness testimony is malleable and when police are given the original description of the perpetrator, they are able to put together a lineup, hopefully following some of the guidelines to make it fair. However, this is where procedural bias becomes a problem. Police may not necessarily assume they are using questionable techniques but many have used suggestive identification approaches. Some of these approaches that I will explain in detail further are confirmation bias, repeated comments or questions about a specific person, photo biased identification, showups, and stacked lineups. These procedures conducted by the administrator of the lineups convict many innocent people. But the whole time, the witness' memory adapts to the story so their view of the truth is distorted.

Confirmation bias occurs when the administrator makes comments after the selection of the culprit is made, either praising or questioning the choice of the witness. Statements like, “Are you sure, take a look at number 3 again” or “Good job, others identified the same man” cause a witness to grow either more or less confident in his/her decision. The administrators, when they know who the suspect is tend to practice a self-fulfilling prophecy, pushing the witness towards the outcome they want and expect to hear (Wells et al 1998). Witnesses are nervous, and when pressured to make a decision, they try to make the “correct” choice by looking to the administrator for clues. Some of these comments may even include prior records of the selected suspect.

There are occasions when questioning may affect the identification. Before the first identification of the suspect, statements referring to the suspect may be made to give the witness a nudge in the right direction or pressure is put on them to make a choice. If the witness chooses a distracter, the supervisor of the lineup may suggest a different type of lineup such as a physical or photo lineup. For example, Habib Abdal was accused of rape and the victim participated in several types of identification procedures, each time denying that Abdal was the rapist. When she saw a picture from five years previous, she claimed that she knew one hundred percent that Abdal was her rapist (Garrett 2011). A series of experiments has also shown that postevent questioning can lead to inflated confidence with regard to details of the suspect or details of the crime (Shaw 1996). This, in turn, leads to stronger conviction from the jury.

Photo biased identifications occurs in several ways. When a suspect is seen first in a photo lineup and is the only person from the photo lineup to appear in a physical lineup, there may be an error judgment in the original memory. This is known as a stacked lineup (Garrett 2011). The same may occur when the police arrange a showup and then ask the witness to pick

the culprit from a photo lineup after. The person looks familiar because he was seen before, only instead of at the crime, the suspect was seen in the photo lineup. The more often someone was previously identified, the greater chance that he can be “recalled” at the crime scene. Both occurred in the case of Howard Haupt, an innocent man accused of kidnapping and murder. When he was picked up as a suspect, other guests at the hotel he had been staying at were asked to identify the man they saw with the murdered boy. None were positively sure that it was Haupt but most identified him as the culprit anyway. The photo lineups they were shown consisted of five distractors and Mr. Haupt but in the physical lineups afterwards, Haupt was the only one to reappear (Loftus & Ketcham 1991). In the Supreme Court case of *U.S. v. Ash* (1973), the Supreme Court denies the right to counsel at photo lineups because they were not convinced that the events were able to be biased to a point of conviction. However, most post-event identifications are photo lineups. So in the place of a physical lineup, a suspect is allowed to have counsel present yet, in a photo lineup they are not.

Another occasion for bias with photos is how well the photo of the suspect matches the other photos, whether it's the direction the suspect is facing, the type of clothes he is wearing, or even the vividness of the photograph. In the case of Tyrone Briggs, he was accused of raping several women. When putting together a photo lineup, the detective drew moles on all the photos so Briggs would not stand out from the others. However, all this did was clarify that the suspect had a mole. All the women identified him from a physical lineup because he was the only one with a mole (Loftus & Ketcham 1991).

Lastly, I want to touch upon the suggestive nature of showups. A showup is when only one photo or one person is brought to the witness and they are asked to make an identification. Many times, a showup is used in necessary situations, such as five minutes after the crime is

committed to make sure the fresh memory of the witness is maintained or to take a dangerous suspect out of commission (Garrett 2011). Sometimes it is unrealistic to bring a lineup to the witness because he or she may be injured, in the hospital or in another difficult situation (Loftus 1979). Until *Stovall v. Denno* (1967), showups were used quite commonly to lead a witness to choose the police's suspect. *Stovall v. Denno* asserts that showups, when *unnecessary*, are extremely suggestive and unconstitutional because of the lack of counsel promised to all defendants under the 6th and 14th amendment. However, in these cases, the totality of circumstances must be taken into account and because there was no other way to present the suspect to the witness, the Court affirmed the decision that the showup was allowed as evidence. In this case, Justice Black makes a dissenting opinion concluding with the check of "harmless error" with dismissing a constitutional right. In *Chapman v. California* (1967), which Justice Black also delivered the majority opinion, this state law of harmless error was reversed on account of the constitutional right to a trial without the pressure of incriminating him or herself.

Of course there are many other ways that police activity could be biased that happen just as often. For example, police often tell women not to be upset because they are going to see the man who attacked them in rape cases. This sets the witnesses up with a definite assumption that they have the attacker in custody and it is one of the suspects in the lineup. They fool around with photos to give additional hints about what the perpetrator may look like, though perhaps not intentionally trying to gain focus to the suspect. But all these unfortunate happenings are well researched and known to police, and yet they continue to occur. Accusing an innocent man is a common occurrence because of these discriminatory practices, but it also can allow a guilty party to appeal for an error in the judicial system.

III. What The Judicial System Has Done

There have been many cases that try to help the misidentification problem. As we've seen, it not only hurts the defendant but the eyewitnesses, who do not believe their testimony is a lie, feel exceedingly guilty when suggestibility leads to the wrong person. As the number of defendants seems to grow, a fair trial does not grow with it and we find more and more victims of eyewitness mistakes. As the Innocence Project, discussed later, moves forward with justified appeals numbering in the three hundreds, the courts became aware just how badly eyewitness testimony needed to be reformed. There are several ways that the court system tries to remedy this problem. A few I will go through are expert testimonies, court rulings, judge's instructions to the jury and cross-examination. The justice system varied between efforts to make the testimony more reliable and the juries more skeptical.

A Wade hearing is a preliminary hearing to see if the testimony's reliability is reduced by the suggestive circumstances it was garnered in and therefore, if it is permissible as evidence. Many times, defendants will appeal their convictions because of the suggestive techniques used by law enforcement officers to get witnesses' testimonies. By asking for a Wade hearing and not receiving one, they usually have significant grounds for appeal. Of course, trials are expensive and many defendants cannot afford to appeal their decisions so many times when a Wade hearing is not received, the false conviction stands.

The first case I want to examine is *State v. Chen* (2008) decided by the New Jersey Appellate Court. The facts of the case show that Cecilia Chen was accused of attacking Mrs. Kim, who at the time was pregnant, and the defendant was found guilty of attempted murder. She brought the case to the appellate court saying that the testimony of Mrs. Kim was tainted by suggestive procedures, such as Mr. Kim's accusation of Ms. Chen, doctoring previous pictures

with eyeglasses to make an identification, etc. The appellate court decided to remand the case back to the trial court so they would be able to hold a Wade hearing. The appellate judges also acknowledge that this case is uncommon because the police were not involved in the leading procedures. According to Federal Rule of Evidence 403, if the testimony was substantially reduced in reliability so that the evidence became more prejudicial than probative, it could be excluded. Judging by the additional evidence the prosecution had, it seemed likely that the jury would find Ms. Chen guilty again but the eyewitness testimony of a victim is usually what the jury finds the easiest to connect with.

Another case, this time decided by the New Jersey Supreme Court, dealt with Wade hearings and the permissibility of testimonial evidence. *State v. Henderson* (2011) is the most recent case dealing with the large amount of misidentifications. The facts of this case are that Mr. Harper was shot to death on New Years Eve while in his apartment with Mr. Womble. Womble, who identified the defendant through a photo array, contacted the police as a witness ten days after the occurrence. The photo lineup was considered suggestive because of the comments made to the witness by law enforcement agents, "Detective Weber was 'nudging' him to choose the defendant's photo, and 'that there was pressure' to make a choice". There were multiple other reasons that the testimony could not be considered reliable, such as weapon focus, the witness' state of mind (he had smoked crack cocaine before the shooting), and he admits to using a relative judgment by just eliminating photos.

Through the case, they examine a large amount of psychological evidence on the malleability of memory and the situations where memory fails. Also, several experts were called including psychologists and professors of law from the Innocence Project. The judges explained in their decision, how the *Manson v. Brathwaite* decision is not an adequate test for the reliability

of testimony. They add two new steps, a mandatory hearing when the proceedings can be shown to be suggestive and a more extensive covering on the problems affecting reliability to be told in the judge's instructions to the jury. The judges recognize that the psychological evidence on eyewitness testimony is still evolving and therefore, the rules in court must evolve with them.³ This case has made a leap into the present by truly examining the extent of the problem of misidentifications, psychological evidence and allowing experts to testify on the situations affecting reliability.

The Supreme Court of the United States followed the decision in *State v. Henderson*, by examining the rules of eyewitness testimony thirty four years after their last decision in *Manson v. Brathwaite* (1977). In the case *Perry v. New Hampshire* (2011), the Supreme Court denies a need to add another reliability protection to the five they mention that they already have, the presence of counsel at post-indictment lineups which we have seen does not include photo-lineups (*U.S. v. Ash* 1973), vigorous cross-examination, protective rules of evidence which is to the discretion of the judge, jury instructions on the reliability of identification, also to the discretion of the judge, and lastly, jury instructions on the requirement that guilt be proved beyond a reasonable doubt. The justices did not believe another rule was needed under the Due Process Clause, even though the rate of misidentification has been growing.

In *Perry v. New Hampshire*, the facts show that an African American man had been breaking into cars and Perry was later arrested after an eyewitness pointed him out to a police officer. The defendant believed that the identification was suggestive and asked for a hearing to have it removed. According to the decision of the case, an inquiry into the reliability of the testimony was not a necessary step because it would open all eyewitness testimony to scrutiny.

At this point, I don't think it would be unreasonable to scrutinize all testimony since the rate of misidentification is so high.

Unfortunately, with the decision of *Perry v New Hampshire*, the justice system took a step back from their attempt to fix the misidentification problem. Discussed previously, *Neil v. Biggers* (1972) and *Manson v. Brathwaite* (1977) both gave a list of what was considered the "totality of circumstances" test, listing five factors that needed to be observed to test reliability. But even with the two steps added from the *State v. Henderson* case, the reliability of eyewitness testimony is rarely perfect, even when suggestion was not used in the proceedings. So how do we judge the situations when reliability is compromised but a preliminary Wade hearing is not necessary? I believe expert testimony is needed in cases where eyewitness testimony is not exceptional but may be some of the only evidence available. When there can be corroborating forensic evidence, I think it necessary that it be included to demonstrate the reliability of the witness' story.

Jury Instructions:

Another way that the justice system attempts to counter these egregious errors that occur from eyewitness misidentifications is by having a judge give a list of instructions to the jury. The giving of instructions usually occurs in the beginning of the trial before the opening statements so that the jury is able to understand the rules before witnesses have been called to testify. However, the instructions do not give any information about how to know if a witness' testimony is reliable (Loftus 1979). Most of the time the judge's instructions are also convoluted and difficult to follow for very long (Loftus & Ketcham 1991). A study done by Charrow and Charrow (1978) showed that often a judge's instruction list was burdensome to make sense of. Not only are the instructions difficult, the list is long and the rule relating to eyewitness

testimony may fall somewhere in the middle of the list. Each judge can give the instructions as he sees fit to, giving enough detail as to why eyewitnesses may not be reliable or not going into detail at all. However, because of the fluctuation with what the jury actually hears, judge's instructions do little to counteract misidentifications.

Cross-Examination:

Most judges will not allow expert testimony because they believe the jury knows an adequate amount to make a reasonable decision on testimony accuracy. They think the jurors should be able to judge a witness by the answers given through direct and cross-examination. The direct examination is when the prosecution questions their own witness. At times, especially with children, the prosecution will ask leading questions, implanting ideas into the mind of the jury before the defense can object. On the other hand, the cross-examination is usually designed to discredit all the witnesses and many feel as though it is a slight on their character, casting a negative light on the defense if the witness is also a victim (Stafford 1962).

Though cross-examination is not extremely useful to jurors when it comes to situations that affect reliability, it does sometimes lower a witness' confidence, giving the jury a reason to doubt the witness themselves. However, some of the time when a witness feels threatened by the defense lawyer through cross-examination, he or she becomes stronger in the testimony, resulting in the opposite effect. As discussed before, confidence is one of the only factors a jury member looks for when evaluating a witness' testimony and often, the confidence level of the witness overcomes the defense's examination (Cutler et al 1990). To use cross-examination as a replacement for an expert's testimony is foolish, in my opinion, because the lawyer cannot ask questions regarding situational errors in testimony without receiving objections for being out of scope.

Expert Testimony:

One of the most controversial attempts to reduce misidentification is through making the jury more sensitive towards the eyewitness testimony they hear throughout the trial. When able to afford it, the defense will attempt to discredit the testimony, not the witness, with the help of a psychological expert in the field of memory. One such expert, Elizabeth Loftus who is previously discussed for her psychological research, has wrote several books and articles explaining why it is so important to have this expert testimony to refute the biases of the witness system, and gives examples of when her testimony has helped those who are innocent. Experts are not always welcome in the court room. Many judges refuse to allow experts on eyewitness testimony for the defense because they believe that it is more prejudicial than probative. Federal Rule 403 allows judges to dismiss evidence that falls in a prejudicial category.⁴ They also assume that cross-examination will allow the jury to see a deceitful witness, but the witnesses do not believe they are lying. They believe what they say to be the truth (Wells et al 1998).

Of course, not all defendants are innocent and when the defense requests an expert to testify against the victims and witnesses, the experts tend to also gain a bad reputation. Why are they working for murderers, rapists and kidnappers? I believe that through this bad reputation, expert testimony is played down. The scientific information on the fallibility of memory is not something many laypersons know, however, judges and lawyers sometimes make the assumption that they can look at the witness neutrally (Martire & Kemp 2011). We already know from several experiments that the confidence of the witness is the sole justification a jury person needs

⁴ Federal Evidentiary Rule 403 (“Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.”)

to convict. So how can the jurists claim that a jury can make a reasonable decision without having all the facts?

The research done on expert testimony effects has been conflicting but Martire and Kemp (2011) explain why in regards to the research methods used. The direct method uses actual eyewitness and expert testimonies as well as the actual verdicts of cases. This is the only way to receive completely accurate information when dealing with expert testimony effects on juries but unfortunately, it has only been in two studies which have been peer reviewed. The real difficulty in expert testimony is how to not only convince the jury of how eyewitness testimony is open to error but also that some may correctly be identifying the accused.

The research has won out in some areas, though these are little victories. In *U.S. v. Downing* (1985), the 3rd circuit court of appeals ruled that it can be decided an error of court to disallow potential expert testimony on eyewitnesses. This is if the sole crucial evidence is eyewitness testimony, and no strong forensic or material evidence is offered. Fortunately for the innocent, it is better than nothing.

As stated before, there is a way that courts are able to prevent expert testimony on eyewitnesses. This is through the Federal Evidentiary Rule 403, on the basis that this testimony is allowing the expert to take the place of the jury. There was a circuit split, meaning the court of appeals were torn between deciding if psychological expert testimony on eyewitnesses falls under Rule 403. Two circuits, 3rd and 6th, allow expert testimony under rule 403, while the nine others do not (Tallent 2011). This is seen in cases such as *U.S. v. Mathis* (3rd Cir. 2001) and *U.S. v. Smith* (6th Cir. 1984) But many researchers say that expert testimony has probative value, and that the alternatives given by judges, such as cross-examination, jury instructions or restrictions on testimony are not enough to counter the biases of memory error (Yarmey 2001).

IV. Conclusion

DNA and other Forensic Testing:

As I have proven over and over again throughout my paper, eyewitness testimony is not able to truly give us the answers we need in cases where at times, people's lives hang in the balance. Then the question comes, how can we fix that? As mentioned in the previous section, the United States judicial system has subjected testimony to all sorts of regulations. Judges give instructions to the jury about how accurate eyewitness testimony is and at times, expert testimony for the defense on the fallibility of memory is allowed. For the U.S. judiciary to stay just, it needs the personal accounts of victims, witnesses and even the defendants. But we need to be able to start backing up these stories with more verifiable facts.

One way that this has become a reality is with DNA testing. Started in 1992, by Barry Scheck and Peter Neufeld, an organization called the Innocence Project dedicates their resources and services to people who have been falsely convicted (The Innocence Project 2012a). Now, there are Innocence Projects all over the United States and several in other countries as well, such as the United Kingdom, New Zealand and Canada (The Innocence Project 2012b). In the Innocence Projects, DNA testing is a critical tool to help exonerate the innocent defendants. In about 80% of the cases, the prosecution allows for past DNA testing after the fact. The rest of the cases required court orders to use DNA labs. But the outcome is worth the trouble. A little under half of the cases that get results from the lab allow an innocent man (or woman) to go free. The rest either affirm the conviction or the data is inconclusive (The Innocence Project 2012c).

Under 50% of the cases resulting in exoneration may seem underwhelming but to put it in different numbers, 289 people, 17 of whom were on death row, were exonerated in the United States since 1989 (The Innocence Project 2012d). 250 of these people were exonerated through

newly revealed DNA evidence. This evidence proving innocence is available but few people choose to find it, for various reasons. Around 75% of the cases examined had eyewitness misidentifications. Not only that, in 50% of the cases, the testimony was the sole factor in conviction (Mid-Atlantic Innocence 2012). If we have hard evidence that allows the jury to exclude the faulty eyewitness testimonies, fewer innocents will have to serve time for someone else's crime.

Of course, DNA testimony is not one hundred percent accurate either. Because it is based on statistics, it is incorrect to claim that it would only come from one defendant. However, you cannot claim that the collected DNA evidence may be someone's DNA if they are not a match. Therefore, it is a much better exculpatory tool than it is as a certain conviction tool. Many times, the defense would bring as evidence test results that excluded the defendant, but if the defendant had already confessed or there was an eyewitness, the jury or judge would still convict. Some people were convicted after the prosecution brought forth invalid DNA evidence (Garrett 2011).

An example of faulty DNA testimony was in the case of Josiah Sutton. A young woman was raped by two men and Sutton was a suspect. At trial, the prosecution brought DNA evidence with which the analyst incorrectly explained to the jury that the evidence explicitly pointed out Sutton as the rapist. He claimed no two people could have the same DNA, yet failed to point out at any time during the trial how many people can be expected to match a DNA sample statistic. Not only did she fail to explain herself correctly but it turned out that he was excluded as a suspect from the DNA evidence (Garrett 2011).

In 2009, the District Attorney's Office in the 3rd district brought a case to the Supreme Court of the United States against William Osborne asking that the previous decisions be reversed, disallowing Osborne to use DNA evidence held by the prosecutor to exonerate him as a

rapist and murderer. His counsel makes the claim that it is Osborne's constitutional right to test the DNA sample that was available at the first trial and that in not allowing the test, the state is violating the Due Process Clause of the 5th amendment. The Justices issued a 5-4 decision reversing the lower courts decision and stated that "[r]ecognition of such a right would allow defendants to play games with the criminal justice system". But if the evidence had shown he was innocent, would holding him without cause not violate his constitutional rights? And if it had proven his guilt, they could deny the right to go back to trial for lack of new evidence. Why does the criminal justice system hide from these challenges?

There are many other types of forensic evidence, all with similar accuracy issues. For example, fingerprint comparison is commonly used when full or partial fingerprints are available. Though this is an easy trail to conceal, for instance by wearing gloves, when fingerprints are accessible, they can make or break a suspect's case. People may have similar fingerprints but experts are able to make separations that can exclude the defendant if he is truly innocent (Garrett 2011). However, fingerprints, and less often DNA, is considered circumstantial evidence saying that the person who is the match had touched something at one time or another. This does not, and should not, incriminate the defendant (Wells et al 1998).

One main reason a lot of this scientific evidence either does not come to light at the trial or helps to falsely convict someone is because of the analysts. In 22 cases known to date, the analysts, with or without instruction from the prosecution, doctored evidence that exculpated the defendant. If not doctored, the evidence is either hidden or destroyed. There are also errors made in the lab or tests that were not done because the analysts claimed "a lack of evidence" (Garrett 2011). These unfortunate biases are the human problems of the judicial system. The science is

getting better and more advanced as time goes on but the human error costs innocent people years in prison.

Recommendations for Lineups and Photo Spreads:

Now that I have addressed making the jury and jurists more skeptical of eyewitness testimony by introducing new scientific evidence, I turn to making eyewitness testimonies more reliable through the controllable police actions in lineups. Cases from state courts to the Supreme Court of the United States have attempted to fit regulations on eyewitness testimony. As I examined above, these cases touch on everything from time intervals between identification and the crime to judge's instructions. Some have a focus on the police activity before the trial in lineups and photo spreads, interview processes and the ways these can be misconstrued to reveal a false accusation. As I said before, these false accusations are rarely out of spite towards the defendant, nor are they considered perjury because the witness truly believes that they are pointing out the right person.

Several non-formal recommendations for eliminating the biases in lineups and photo spreads have been put out by criminologists, eyewitness psychologists and various other sources. These sources gave written guidelines for police to follow, one going as far as recommending 131 specific procedures (Wells 1988). However, police and detectives are not likely to follow so many strict procedures when they can just continue to issue lineups and photo spreads the way they originally have. Wells et al (1998) gave four suggestions that would benefit the system greatly without costing the judiciary any additional funds towards the initial identification process, as videotaping would. Before I address the four proposals, I would like to explain Wells' look at lineups-as-experiments analogy.

This analogy likens a lineup (not distinguishing here between a lineup and photo spread) to the scientific method. Because the police are able to control the variables of the lineup, the types of pictures used or how many people are seen at one time in a lineup, there are several ways that these biases can be accounted for. As the “experiment” is run, the confound variables are the confirmation biases, demand characteristics, response biases, selective interpretations of the data, and many others. Wells et al suggest that these variables are able to be completely controlled for. I personally disagree with some of the explanations for this analogy because there is no controlling factor for the trustworthiness of the original memory. So to be likened to a scientific experiment, or even scientific evidence such as DNA and fingerprinting, is slightly off target. Whereas partial fingerprints and DNA testing can produce partial matches, partial memories result in relative judgments.

Despite the shortcomings in the lineups-as-experiments analogy, the procedures that Wells et al had encouraged are a good way to prevent biases in lineups. The first rule is who conducts the lineups. He relates this to what is called a double blind experiment where the administrator has no idea who the suspect is and therefore cannot display any telling signs when the witness makes a decision. Because confidence in eyewitness testimony is the number one factor that leads juries to believe the witness, the subtle behaviors of the administrator during the lineup may lead to a more confident witness at trial. There would also be no “facts” revealed about the case that could become embedded in the original memory. The second rule says that eyewitnesses should be given instructions that the suspect may not be in the lineup. This allows the witness to credibly say that they recognize or do not recognize someone in the lineup as a suspect. It also helps to prevent relative judgments rather than absolute judgments. The witness

should know the administrator is blind as well so they do not look for confirmation clues (Wells et al 1998).

The third rule relies on a fairly based lineup. When selecting the distractors, there should be no factors that would draw attention to the suspect that the others don't have. They should all be based on the witness' description and not the description of the suspect, unless the suspect's appearance is a misfit with the description. If that is the case, then most of the factors should be based on the suspect's appearance with modifications towards the witness' description. When the witness gives a unique characteristic of the suspect, lineups are not necessary. The fourth rule is when to obtain confidence statements. When the witness makes an identification, a confidence statement should be taken immediately, allowing no feedback to taint the level of confidence. Feedback is an influence on the witness that is only apparent through an increased confidence level or a differing description than the original. If a statement is taken after the initial identification, then the differences may imply sources other than the original memory are at work.

These recommendations, as I mentioned before, have little to no cost for the judicial system and would certainly help, if not dismiss, biases in police lineups. The more people who are innocently accused and then exonerated because of the lack of change causes people to lose faith in our criminal justice system. These rules are not an exhaustive list of what can be done, but they can start police practices that will be more just towards our defendants.

The main problem with these rules are that they are not required by law and therefore, police and detectives tend to stick with their biased procedures because they are already established. And as it happens, the United States Supreme Court does not believe it necessary to create new eyewitness testimony rules, shown in the decision of *Perry v. New Hampshire* (2012).

Without backing by law, many of these recommendations go unheeded, furthering our drop to the standard of guilty until proven innocent.

References

- Anderson, J.R. (1981). Interference: the relationship between response latency and response accuracy. *Journal of Experimental Psychology: Human learning and memory*, 7, 311-325.
- Baddeley, A.D., & Hitch, G. (1974). Working memory. In G.A. Bower (Ed.), *Recent advances in learning and motivation* (vol.8, pp. 47-90). New York: Academic Press.
- Binet, A., (1911). Le bilan de la psychologie en 1910. *Année psychologie*, 17, 5-11
- Blandón-Giltin, I., & Pezdek, K., (2009). Children's Memory in Forensic Contexts. *Children as victims, witnesses, and offenders: psychological science and the law* (pp. 70-73). New York: Guilford Press.
- Bruck, M., & Ceci, S. (1999). The Suggestibility of children's memory. *Annual Review of Psychology*, 50, 419-439.
- Bruck, M., Ceci, S., & Hembrooke, H. (2002). The nature of children's true and false narratives. *Developmental Review*, 22, 520-554.
- Buckhout, R. & Friere, V. (1975). *Suggestivity in lineups and photospreads: A casebook for lawyers*. New York, Center for Responsive Psychology. Brooklyn College, Brooklyn, CUNY.
- Bussey, K., (2009). "An International Perspective on Child Witnesses." *Children as victims, witnesses, and offenders: psychological science and the law*. New York: Guilford Press, 212-214.
- Carey, S., Diamond, R., & Woods, B. (1980). Development in Facial Recognition: a Maturational Component?. *Developmental Psychology*, 16(4), 257-269.
- Chapman v. California*, 386 U.S. 18 (1967)
- Chi, M., (1978). Knowledge structures and memory development. In R. Siegler (Ed.), *Children's thinking: what develops?*, Hillsdale, NJ: Lawrence Erlbaum
- Cohen, R. L., & Harnick, M.A., (1980). The susceptibility of child witnesses to suggestion. *Law and Human Behavior*, 4, 201-210.
- Craik, F.I.M., & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology: General*, 104, 268-294.
- Cutler, B.L. & Penrod, S.D. (1988). Improving the reliability of eyewitness identification: Lineup construction and presentation. *Journal of Applied Psychology*, 73, 281-290
- Cutler, B.L., Penrod, S.D., & Martens, T.K. (1987). The reliability of eyewitness identification: the role of system and estimator variables. *Law and Human Behavior*, 11, 233-258

Cutler, B. R., Penrod, S. & Dexter, H. R. (1990). Juror sensitivity to eyewitness identification evidence. *Law and Human Behavior*, 14, 185-191

Dale, P.S., Loftus, E.F., & Rathbun, L. (1978). The influences of the form of the question on the eyewitness testimony of preschool children. *Journal of Psycholinguistic Research*, 7, 269-277.

Dent, H.R., (1977). Stress as a factor influencing person recognition in identification parades. *Bulletin of the British Psychological Society*, 30, 339-340.

Easterbrook, J.A. (1959) The effect of emotion on cue utilization and the organization of behavior. *Psychological Review*, 66, 183-201

Garrett, B. (2011). *Convicting the innocent: where criminal prosecutions go wrong* (pp. 45-74). Cambridge, Mass.: Harvard University Press.

Germond, K. (1996). The Reasons for "Wrong Man" Cases. *Convicting the innocent: the story of a murder, a false confession, and the struggle to free a "wrong man"* (pp. 114-117). Cambridge, MA: Brookline Books.

Golding, J. M., Dunlap, E. E. & Hodell, E.C., (2009a). "Trauma and Memory." *Children as victims, witnesses, and offenders: psychological science and the law*. New York: Guilford Press, 37-49.

Golding, J. M., Dunlap, E. E., & Hodell, E. C. (2009b). Jurors' Perceptions of Children's Testimony. *Children as victims, witnesses, and offenders: psychological science and the law* (pp. 192-198). New York: Guilford Press.

Greenhoot, A.F., McCloskey, L., & Glisky, E. (2005). A longitudinal study of adolescents' recollections of family violence. *Applied Cognitive Psychology*, 19, 716-743

Hockley, W.E., Hemsforth, D.H., & Consoli, A. (1999). Shades of the mirror effect: recognition of faces with and without sunglasses. *Memory and Cognition*, 27(1), 128-138

Kihlstrom, J. & Harackiewicz, J. (1982). The earliest recollection: a new survey. *Journal of Personality*, 50, 134-148

Light, L.L., Kayra-Stuart, F., & Hollander, S. (1979). Recognition memory for typical and usual faces. *Journal of Experimental Psychology and Human Learning*, 5, 212-228

Lindsay, R.C.L. & Wells, G.L. (1985). Improving eyewitness identification from lineups: Simultaneous versus sequential lineup presentations. *Journal of Applied Psychology*, 70, 556-564.

Loftus, E.F. & Palmer, J.C. (1974) Reconstruction of auto-mobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning and Verbal Behaviour*, 13, 585 -589

Loftus, E. F. (1979). Common Beliefs about Eyewitness Accounts. *Eyewitness testimony* (pp. 172-190). Cambridge, Mass.: Harvard University Press.

Loftus, E. F. (1987). Time went by so slowly: Overestimation of event duration by males and females. *Applied Cognitive Psychology*, 1(1), 3-13

Loftus, E. F., & Ketcham, K. (1991). *Witness for the defense: the accused, the eyewitness, and the expert who puts memory on trial*. New York: St. Martin's Press.

Loftus, E. F., & Ketcham, K. (1994). A family destroyed. *The myth of repressed memory: false memories and allegations of sexual abuse* (pp. 102-139). New York: St. Martin's Press.

Luus, C.A.E., & Wells, G.L. (1994). The malleability of eyewitness confidence: Co-witness and perseverance effects. *Journal of Applied Psychology*, 79, 714-724

Malpass, R.S. & Devine, P.G. (1981). Eyewitness identification: Lineup instructions and the absence of the offender. *Journal of Applied Psychology*, 66, 482-489.

Manson v. Brathwaite, 432 U.S. 98 (1977)

Martire, K. A. & Kemp. R. I. (2011). Can experts help jurors to evaluate eyewitness evidence? A review of eyewitness expert effects. *Legal and Criminological Psychology*, 16(1), 25-34.

Maryland v. Craig, 497 U.S. 836 (1990)

McClelland, J. L. & Chappell, M. (1998). Familiarity breeds differentiation: A subjective likelihood approach to the effects of experience in recognition memory. *Psychological Review*, 105, 724-760.

Meyer, J. (1997). Children's Memory in the Courtroom. *Inaccuracies in children's testimony: memory, suggestibility, or obedience to authority?* (pp. 7-9). New York: Haworth Press.

Miller, G.A., (1956). The magical number seven, plus or minus two: some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.

Münsterberg, H. (1909). *On the witness stand essays on psychology and crime*. New York: Doubleday, Page.

Myers, J.E.B., Redlich, A.D., Goodman, G.S., Prizmich, L.P., & Imwinkelried, E. (1999). Jurors' perceptions on hearsay in child sexual abuse cases. *Psychology, Public Policy and Law*. 5, 388-419

Neil v. Biggers, 409 U.S. 188 (1972)

Perry v. New Hampshire, 132 S. Ct. 716 (2012)

Rex v. Brasier 1 Leach 199, 168 Eng. Rep. 202 (1779).

Saywitz, K. J. (1987). 'Children's testimony age-related patterns of memory errors', in *Children's Eyewitness Memory*, eds S. J. Ceci, M. P. Toglia, & D. F. Ross, Springer-Verlag, New York.

Shaw, J.S., III. (1996). Increases in eyewitness confidence resulting from postevent questioning. *Journal of experimental Psychology: Applied* 12, 126-146.

Shaw, J.S., III & McClure, K.A. (1996). Repeated postevent questioning can lead to elevated levels of eyewitness confidence. *Law and Human Behavior*, 20, 629-654.

Simmons v. U.S. 390 U.S. 377 (1968)

Stafford, Hon. C. F. (1962). The Child as a Witness. *Washington Law Review*, 37, 304-306.

Starkey, M. L. (1949). *The devil in Massachusetts: a modern inquiry into the Salem witch trials* (1st ed.). New York: A.A. Knopf.

State v. Chen, 952 A. 2d 1094 (2008)

State v. Henderson, 27 A. 3d. 872 (2011)

Stebly N.M., Dysart J., Fulero S., Lindsay R.C.L., (2001). Eyewitness accuracy rates in sequential and simultaneous lineup presentations: a meta-analytic comparison. *Law and Human Behavior* 25, 459-474

Stern, L.W., (1910). Abstracts of lectures on the psychology of testimony on the study of individuality. *American Journal of Psychology*, 21, 270-282

Stovall v. Denno, 388 U.S. 293 (1967)

Tallent, L. (2011). Through the Lens of Federal Evidence Rule 403: An Examination of Eyewitness Identification Expert Testimony Admissibility in the Federal Circuit Courts. *Washington and Lee Law Review*, 68, 765 - 784.

Terr, L.C., (1988). What happens to early memories of trauma? A study of twenty children under age five at the time of documented traumatic events. *Journal of the American Academy of Child and Adolescent Psychiatry*, 27, 96-104.

Thompson W.C., Clarke-Stewart K.A., & Lepore S. (1997). What did the janitor do? Suggestive interviewing and the accuracy of children's accounts. *Law and Human Behavior* 21, 405-426

Troxel, N.R., Ogle, C.M., Cordon, I.M., Lawler, M.J., & Goodman, G.S. (2009). Child Witnesses in Criminal Court. *Children as victims, witnesses, and offenders: psychological science and the law* (pp. 160-161). New York: Guilford Press

United States v. Ash, 413 U.S. 300 (1973)

United States v. Downing, 753 F. 2d 1224 (1985)

Varendonck, J., (1911). Les temoignages d'enfants dans un procès retentissant. *Archives de Psychologie*, 11, 129-171

Warren, A.R., Nunez, N., Keeney, J.M., Buck, J.A., & Smith, B. (2002). The believability of children and their interviewers' hearsay testimony: When less is more. *Journal of Applied Psychology*, 87, 846-857.

Wells, G.L., Ferguson, T.J. & Lindsay, R.C.L. (1981). The tractability of eyewitness confidence and its implication for triers of fact. *Journal of Applied Psychology*, 66, 688-696.

Wells, G. L., & Loftus, E. F. (1984). *Eyewitness testimony: psychological perspectives* (pp. 149-170). Cambridge: Cambridge University Press.

Wells, G.L., & Luus, E. (1990). Police lineups as experiments: Social methodology as a framework for properly-conducted lineups. *Personality and Social Psychology Bulletin*, 16, 106-117

Wells, G. L., Small, M., Penrod, S., Malpass, R. S., Fulero, S. M., & Brimacombe, C. (1998). Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads. *Law and Human Behavior*, 22(6), 2 - 21

Wells, G. L., & Quinlivan, D. S. (2009). Suggestive Eyewitness Identification Procedures and the Supreme Court's Reliability Test in Light of Eyewitness Science: 30 Years Later. *Law and Human Behavior*, 33, 1-24.

Wheeler v. United States, 159 U.S. 523, 524 (1895)

Yarmey, A. D. (2001). Expert Testimony: Does Eyewitness Memory Research Have Probative Value for the Courts?. *Canadian Psychology*, 42(2), 92-98.