

The fallibility of eyewitness testimony psychology essay



**ASSIGN
BUSTER**

Judicial systems, criminology and forensic psychology are linked altogether around specific subjects, especially the search of truth in all kinds of cases. A vast field of research is taking place among these areas, one of the common concerns that we are going to study in this essay is the process of eyewitness testimony and its fallibility. This theme raises numerous questions but before to look at them we are going to examine the meaning of the key words of subject. According to the Oxford Dictionaries an “eyewitness”[1]is “ a person who has personally seen something happen and so can give a first-hand description of it”. This description can be considered as a “ testimony”. According to the same dictionary a “ testimony”[2]is “ a formal written or spoken statement, especially one given in a court of law”, it can be used as “ evidence or proof”. An eyewitness testimony is the statement of what a person thinks to have seen happening, it includes what a person remembers and records of a certain event during a determined period of time, whether far in the past or relating to something which happened recently. As we have noticed, there is a notion of time included in the testimony which can drive us to consider the fallibility of the testimony. Considering the definition of the Oxford Dictionaries, something which is “ fallible”[3]is “ capable of making mistakes or being wrong”. It comes from the Latin fallere meaning “ deceive”.

Most legal systems in our Western societies rely on eyewitness testimony by necessity, understanding this process is extremely important. Frequent trials and judgements are made on the base of eyewitness testimonies, sometimes for the worse... Many examples show that eyewitness testimonies can bring juries to misjudge a defendant and drive to miscarriage of justice. The

development and use of forensic DNA analyses in judicial cases started in the 1990s, it creates a first step demonstrating how not reliable could the eyewitness testimonies be. If a subset of DNA is remaining preserved on the crime scene it can be collected and analysed. Then it can be compared with the DNA of the defendant or the person convicted earlier. In 1996, a report from the National Institute of Justice[4] established that in twenty-eight cases where defendants were convicted, mostly because of inaccurate eyewitness testimonies evidences, the results of DNA testing realised after their convictions proved that they had not committed the crimes for which they were incarcerated. Wells et al. (1998)[5] added twelve cases to study these situations where innocent people were accused and send to prison or to death row without deserving it. They listed the forty cases and found that thirty-six were involving eyewitness identification evidences in which the identification of the culprit had been mistaken. It means that in 90% of the cases studied the wrongful conviction of the defendant where linked with falsely eyewitness testimonies. Between the use of the DNA analysis and 2006 more than one-hundred-and-eighty persons who were wrongly accused have been released, among them more than 75% were victims of misidentifications from the eyewitnesses (Wells, Memon, & Penrod 2006[6]; Scheck et al. 2000[7]). Although it seems that eyewitness identification of culprit is frequently inaccurate it is still used and makes a persuasive impression on juries. In most of the previous cases the eyewitnesses were honest and believed that they had pick-up the “ good” culprit, this was obviously not the case.

How can we explain this phenomenon? What are the reasons of the eyewitness fallibility and is it possible to make sure that it becomes more reliable?

The testimony is what the person recalls of an incident, event, crime, which happened earlier in the past. In this essay we are first going to observe the cognitive processes of attention, perception and memory which are responsible of what is eventually recalled. We are going to explain how this cognitive treatment can affect the memory of the event remembered. While this mental treatment happens many biases can affect the process and we will to look at them more precisely. Even though the perception of the incident and the memory play a good role into the eyewitness processing, psychological factors such as the witness's role, the event duration and the number of perpetrators have to be taken into account in order to explain how the eyewitness's testimony can be affected. We are also going to interest ourselves in the interview of the witness and how it can influence the memories. We will examine the situation of false memories and line-up recognition. The method of Cognitive Interview will be investigated in this part. We will finally see that even if the fallibility of eyewitness testimony is important in some cases it is necessary to use this kind of testimony which can be accurate under some circumstance that we are going to explain. The eyewitness testimony can be used not to solve the case but to reduce the range of suspects.

Eyewitness testimonies are a complicated process where the perception, the attention and the memory influence our understanding of the world.

The perception is often considered as an adaptative state, in that perspective the perception serves the action and the interaction; to be adapted to one's environment it is also necessary to have a good perception of oneself. Most of the perceptual cues that we use are unconscious such as the non verbal behaviour. It is rather hard to definite the perception as there are many different definitions. According to Luyat (2009), the perception is the complex activity permitting to the organism to know its environment by the detection of useful information collected by its perceptive systems[8]. For Bernstein (2011, 2008) the perception is a range of processes that allow the brain to understand a piece of information.[9]Most of the perceptual works transforming the sensory information into meaningful experiences is an automatic process. The processing of recognition involves what is called a top-down processing, it means that high-level knowledge-based information will guide the recognition, our past knowledge will help to interpret what we perceive; expectations are an example of a top-down processing. Using a top-down processing allow people to rely on their knowledge in order to make inferences to help them to recognise what is around them. The first sensation is ambiguous, incomplete and needs to be enriched. The top-down processing is one of the explanations of the creating of schemas which are mental representations of what we think we know and expect about the surrounding world. As we will see schemas can bias our perception by creating a readiness to perceive a stimulus in one way instead of another. All these processes are happening in an unconscious, automatic manner. Another phenomenon is important, it is the bottom-up processing: an unknown stimulus will be analysed into basic features before to be recombined to form the perceptual experience of the witness. The <https://assignbuster.com/the-fallibility-of-eyewitness-testimony-psychology-essay/>

perception depends of the relationship between the exterior of the organism and the interior of the organism, there is a direct link between the objet of the perception and the percept. The perception allows us to draw a mental representation of the world without any necessary contact with the object which is given a meaning. The perception through our perceptual organs is the first filter that the information encounters. This aspect is really important to understand how influential the perception is in the field of research around the eyewitness testimony. The brain makes inferences about the external world and its events which are then interpreted. At the sight of the top-down processing it is easier to recognise familiar faces or people on blurry security-camera videos instead of unknown persons. This experience was realised by Burton et al. in 1999 with a population of police officers with forensic experience whose recognition performance was much better when the individuals filmed were familiar to them rather than people with whom the observers had not a lot of interaction. What is the most used for the recognition in this experience is the facial information.[10]The context can influence the expectancy, when something which has not been expected happens the observer is less likely to interpret it properly. When we hear shots in our street we might think about a car backfiring or a cracker sound but not directly as gunfire except if this sound is repeated several times.

The attentional focus, according to Camus (1996) has a particular place in the cognitive psychology because it is a process contributing to the regulation, the modelling of the functioning of other psychological processes such as memory, perception and language.[11]The attention can be observed through diverse manifestations and is always expressed in terms of

cost or benefits. At the same time as we focus on one particular piece of information, the non-selected information is moved away, entirely or partially, of the other treatment stages. The benefits are characterised by a faster perceptual, conceptual and motor treatment of the expected information and by a more precise response. The attention improves the selection of pertinent information. By resisting at the distraction it contributes to durably maintain the coherence of the activity. Through the effects of selection, preparation and expectation, the attention improves considerably the efficacy of the behaviour and the mental life. The use of attentional processes suggests that the attention is not constituted by only one simple unique mechanism but by a diversity of different processes such as the selection of the information, the control of the activity and the organisation of the memory. According to Raftapoulos, A. (2009) the attention is a process which permits to select inputs from the environment. Some inputs are processed faster than others and will lead to a better behavioural response. The attention limits the processing of external information to the relevant items. It is necessary to use this mechanism because we cannot process all the information present in our environment. This explains why sometimes we are " inattentionally blind". The attention is often considered as a filter between the objective world around us and our subjective world. It is the attention which will select salient information of our environment compared to less relevant information. During a crime situation the only witness might have focus unexpectedly on something less relevant than the cues which could help to identify someone. After being perceived and selected by the attention the information are going through different level of treatment in the memory.

<https://assignbuster.com/the-fallibility-of-eyewitness-testimony-psychology-essay/>

Compared to a video-camera recording, the human memory seems rather weak, filtering the information through the attention and distorting it through the perception's organs. Usually it is considered that the human memory has three different stages of processing. The first one is the acquisition, then comes the storage and finally the retrieval. Any deformation occurring at one of these stages can lead to inaccurate eyewitness testimony. The term "acquisition" signifies the moment when the information is encoded into the memory, during this process eyewitnesses pay attention to a subset of the information available around them. As we have seen all the information cannot be treated at the same time, that is why only a sample can be encoded. The word "storage" illustrates the process used by people to store information they have acquired from the environment into memory. The word "retention" is also used to definite this process. The last process involved in memory is the "retrieval" by which people recall the information that they have stored in their memory, it refers to the ability to access the memory retained. When a crime occurs the eyewitnesses cannot record every details of it, they form a general impression and interpretation of the event. We are going to see more precisely the diverse biases which can happen at the different stages of the memory treatment.

At the level of the acquisition people are dependant of what they notice and perceive. In a crime situation many factors can shape the way witnesses will encode what happened. The criminal event can last for seconds or hours, it can happen once or be repeated, be violent or not. Many factors can limit the reports of crimes by the eyewitnesses. In this part of the essay we are going to focus on the temporal factors, the perception of the core event confronted

with the peripheral details related to the level of stress, the expectation of the witnesses, the influence of familiarity and the level of violence's role in the acquisition of memory.

The temporal factors can control the witness's ability to encode the information relevant to a crime situation. The event duration is one of them. The studies interested in face recognition suggest that, most of the time, the longer the event lasts and the longer the witness is exposed to it, able to observe it, the more accurate the testimony will be with more information encoded and recalled. In their study Memon, Hope, & Bull (2003) examined the relationship between the length of exposure to a face in an eyewitness situation and the accuracy and confidence of the identification. A culprit's face was exposed for a short or a long length of time and participants were tested with a line-up containing the culprit or not. Under the long exposure situation the accuracy rates for the identification were significantly higher than in the short exposure situation. About the confidence level, it was more important for the witnesses who had made a correct identification of the target in the short exposure condition than for the one who had made a wrong identification. In the situation where the witnesses had more time the confidence level did not differ whether the witnesses were accurate or not[12]. Fahsing, Ask, and Granhag (2004) compared a recorded event with the testimony of the memory of the event by eyewitnesses. These researchers used 250 offender descriptions by eyewitnesses of armed bank robberies and compared them with the video records of the events. According to what they found the durations of the different events were positively related to the overall accuracy of the eyewitnesses. They also

found that a longer length of time appears to improve details' memory but not basic features' memory.[13]The frequency of an event is also likely to affect the reports of eyewitnesses. Ebbinghaus (1885/1964) showed that the more frequently someone is confronted with an item, the better it is hold in memory.[14]When it is about people the same relationship was found by Sanders & Warnick in 1979, the more often an individual is seen, the easier this person will be identify.[15]Nevertheless, it is important to notice that if in the laboratory two stimuli can be the identical, usually in everyday's life there are always differences between two events. It is possible to illustrate this situation with an example where victim of repeated marital rapes carrying on for years might not be able to remember each time the act occurred or at which one of the assaults a particular event happened. This was about the temporal aspects of the acquisition of memories; we are now going to look at the perception of the core event confronted with the peripheral details. What is named the " core event" is what the eyewitness experiences; it can be a rape, a robbery, a mistreatment and so on. In 1959, Easterbrook argued that emotional arousal could act to reduce the range of cues that an organism uses. In other words, the emotional arousal might limit the range of attention and by this mechanism reduce the number of cues used to perform a task, in consequence this could inhibit the performance. When attentional resources are limited under a moderate level of stress the emotional aspects of an incident might drive the attention in the direction of the central information of the even, ignoring the peripheral aspects. As the level of stress increases, the range of attention becomes narrower and more peripheral cues are ignored as well as some core cues.

[16]In 1992, Christianson argued that physiological arousal experienced <https://assignbuster.com/the-fallibility-of-eyewitness-testimony-psychology-essay/>

during a disturbing event could cause an attentional narrowing. The stress would improve the encoding of the central stressors, with a hyperattention for the central details and would deteriorate the treatment of the peripheral information. Hence, the memory for central details would be good under an emotional situation and the memory for peripheral details would be poor under the same circumstances[17]. Wessel and Merchelback (1997) used spider phobic patients in order to see if this theory would apply. The patients were confronted to a large alive spider. During a cued recall test, compared to low-fear control participants, the phobic group was less able to remember the peripheral details of the experimental situation. No difference was observed in the amount of central information provided by the two groups[18]. Migueles and Garcia-Bajos examine the recall and recognition of actions and details about the central and peripheral information of a kidnapping in 1999. They found that the obtained witness's scores were higher in actions than in central details and that there were almost no differences between peripheral actions and details. This way they showed that the attentional resources were differently distributed for actions and details in central core.[19]As we have seen previously the attention is selective and witnesses will be more likely to encode the more salient details of any incident. In a study Wells and Leippe (1981) showed that participants who were able to identify a thief were less able to remember well the peripheral details of the room where the offence happened.[20]

The expectation of the witness can influence what they perceive. Studies have shown that people are bad at seeing something which is not expected. Simons & Chabris in 1999 showed a video on which members of two teams

(one black and one white) were throwing balls to each other. The viewers were asked to count the number of ball's exchanges among the white team players. After a few seconds a weird event happens: a black gorilla walked through the ball game. During this time the players continued their game. Only half of the viewers were conscious of the strange event.[21]Most of the time, crimes are not expected, it is then not surprising to see witnesses failing to notice important details. Familiarity is an important determinant of the eyewitness ability for identification. It has been shown that people are better at recognition of faces that are the same race than theirs.[22]This is called own-race bias and was stressed by Brigham, Bennett, Meissner, & Mitchell in 2007. The own-race bias tends to be explained by the fact that people have more contact with members of their own race, which allow them to learn how to distinguish one individual from another (Meissner & Brigham, 2001b).[23]Moreover, when people look at same-race faces, they tend to pay more attention to individuating characteristics that distinguish faces from others. When people look at different-race faces it seems that they tend to see more what distinguish this face from their own race's faces (Lewin, 2000).[24]

Concerning the level of stress, as we have already seen in the part about the perception of the core event confronted with the peripheral details, when the level of stress increases, the range of attention becomes narrower concerning the peripheral details but becomes wider for the central details. It has been shown that when people are under an increasing level of stress, their memory about people involved in the crime and the peripheral details of the crime recorded will be decreasing (Deffenbacher, Bornstein, & Penrod,

2004). In the part dedicated to the psychological factors we will give more information about the role played by the eyewitness who can be whether bystander or victim – in both circumstances the level of stress felt by the person is not going to be the same. One major source of stress during a criminal event is the presence of a weapon. A phenomenon called “ weapon-focus” expresses the fact that eyewitnesses of crimes tend to concentrate more their attention on the potential weapon of the assaulter than on his physical features, especially if the weapon is unexpected. In 1987, Loftus, Lofus, & Messo settle a laboratory study in which they presented to participant-witnesses a series of slides depicting an event in a restaurant. Half of the subjects saw a customer pointing a gun at the cashier and the other half saw the same person give a check to the cashier. They first recorded the eye movements of the participants as they were looking at the slides and saw that the participants made more eye fixations on the gun than on the check and that the time of fixations on the weapon last for longer than the one on the check. The, they measure the participants’ memory about the two conditions. They noticed that memory in the gun condition was poorer than in the check condition.[25]

As we have seen the acquisition process can be disturbed by a lot of factors such as temporal factors, influence of stress on the perception of the different types of details in an unstable situation, expectations of the witnesses, the familiarity of the situation and the level of violence which can impair memories for peripheral information even though the core information can be still accurate. There are already many influences which can lead the eyewitness to make a mistake at the moment of the identification; to

complete this picture of the fallibility of the eyewitness testimony we are now going to look at the process of storage or also called retention.

At the stage of the storage the information encoded can be affected by factors such as the length of time between the event and its retrieval, the influence of the additional information during the storage process with the reconstructing memory process, the role of the misleading question and the source monitoring errors.

It has been shown many times, memory decreases with time and forgetting increases with time. Ebbinghaus (1964) draw a “ forgetting curve” based on the rate of forgetting syllables without meaning at different times after the learning. Memory can decline more or less slowly according to the emotions or the familiarity associated with the information encoded. Bahrick has shown in 1984 that the initial level of learning and exposure might be an important factor. Shepherd in 1983 showed that for face recognition it is the amount of attention paid to the target during the encoding process which might be more important than the delay of retention, he also demonstrate that when adult participants were exposed to a stranger for 45 seconds their ability to pick him up out of a line-up decreases a lot over time (65% of the participants gave a correct recognition after one week time and 10% of the participants gave a correct recognition after 11 months).[26]The length of time between the event and the retrieval can affect the content of the memory and make them less reliable. The influence of the additional information during the retention process can be examine in the case of the use of retrieval cues provided at the time of the eyewitness’s interview. It seems that repeated interviews help the memory to be kept longer alive and <https://assignbuster.com/the-fallibility-of-eyewitness-testimony-psychology-essay/>

not to forget it. Nevertheless, according to Warren and Lane (1995) it can increase the level of inaccuracies which could lead to eyewitnesses' inaccurate testimonies.[27]

As we are going to see the memory is rather malleable and can be influenced by misleading postevent information. This consists in all the information which can be introduced during the storage process. Loftus has shown that when misleading questions are used the witnesses can be made to report things that were not part of the crime scene. Those type of questions are more effective in altering witness testimony when the question are complex and draw the eyewitness' attention away from the misleading point. Misleading postevent information are linked with the reconstruction of memories which is a specific process relating to the fact that a memory will become distorted by information encountered after the occurrence of the event. Loftus and Palmer (1974) in one famous study showed that the vocabulary used to question the eyewitness could alter the memory of the event. The strength of the word used to describe a car accident previously witnessed by the participant in a simple question led the answer of the eyewitnesses. Participants were asked to estimate the speed of cars before the accident but the verbs used in the questions were different. The question was the following: " About how fast were the cars going when they (hit/smashed/collided/bumped/contacted) each other?". The estimated speed was affected by the verb used, the stronger was the verb, the faster was the speed estimated. When people were asked one week after if they had seen any glass on the scene (they was none), the persons in the " smashed group" tend to answer more often yes. Memory seems to be easily distorted

by misleading questions and postevent information.[28]It seems that the influence of misleading postevent information involve more peripheral details than central information. The source monitoring (Johnson, Hashtroudi, & Lindsay, 1993) is the process used to try to identify the source of one's memory, where, when and how this memory was acquired. The misleading questions can create a situation of distortion with the initial memory, people don't remember from where their memory come from and get confused. When people make errors regarding to the provenance of their memory, they might be the victims of other kind of memory's distortions. Jacoby, Kelley, Brown and Jasechko (1989) exposed participants to an unknown name, if the participants could not recall where they had learn this name from they would call it famous if they encounter it again after a long delay. This result emphasizes the fact that people make inferences and attributions concerning the source of their knowledge; this process can be prone to mistakes. Latter in this essay we will see how it is possible to resist to the misleading information.

The retention period of the memory is particularly fragile as we have just seen; memories can be forgotten or contaminated by postevent information. We are now going to see what can happen to the memory during the retrieval process. Throughout the retrieval, the information encoded and stored reappears into the consciousness. The situations in which the retrieval occurs in the case of the eyewitness testimonies are generally when the facts are reported to the police, the line-up are viewed and when the witness testifies. We are going to examine the link between accuracy and interviewing techniques and the importance of the organisation of the line-

up. Even though we have seen that globally eyewitness testimony seems to be far from being reliable, some techniques are set to decrease the risk of fallibility.

What are the conditions which can make the memories more resistant to change?

Important to take into consideration the fact that if the witness or the victim is familiar with the perpetrator of the crime then the identification process does not use the same treatment.

Even though the police and the court need objective information recording what happens during the original incident we can underline that eyewitness testimony is more subjective than anything else, although the effort of the witness to remember as precisely as possible what happened.