

Course work Psychology AS-level

Introduction

Memory is a hard topic to investigate upon, as there are many factors that effect memory and forgetting. It does not of course greatly matter whether for example we can remember where we were when we heard of the death of princess Diana. There is however one situation where our recollection of certain events/faces/objects can be of crucial importance, namely in the case of a witness testifying in a court of law.

Eye-witness testimony has often been criticised for being unreliable and extremely persuasive and therefore many studies have been done do investigate upon it. Some show that even objects or events we see very frequently are often poorly remembered (J. Mckeen Cattell 1895). One of the leading psychologists in the area of Eye-witness testimony is Elizabeth Loftus. To show, for example, the influence an Eye-witness can have upon a jury she set up dummy trials and found out that 9 convicted on the evidence alone, 36 convicted when an Eye-witness gave his account and still 34 convicted when the Eye-witness who gave his account was later said to be unreliable since he was short sighted and not wearing his glasses at the time and therefore couldn't possibly have seen the face of the defendant. This is just one of the experiments that shows just how influential Eye-witness testimony can be in a trial, which if not given accurately can lead to many incorrect convictions. Another study done by Loftus and Palmer (1975) was to investigate the effect of leading questions on the accuracy of Eye-witness testimony. The participants were shown a short film of a car crash. Afterwards they were asked to estimate the "speed the car was going when it bumped/hit/smashed into the other car". The results showed that as the word was altered i.e. suggested a higher speed, the estimated speed increased as well.

Aim

This experiment will be investigating the of leading questions on Eye-witness testimony It will replicate the study done by Loftus and Palmer (1975) see above. The experiment will of course vary from the one done by Loftus and Palmer, this is down to technical, time, knowledge and scale issues. Instead of a short film, the participants will be shown a photograph and will be asked the leading question while looking at the picture instead of afterwards, there will be no time limit (as long as time is within reason). The photograph will be of two/three people and the participants in condition A will be asked "how far are the people on the picture standing apart from each other?" and those in condition B will be asked "how close are the people on the picture standing to each other?" As previous research showed, I am expecting to find that participants in group A will estimate a greater distance, therefore the hypothesis is 2-tailed.

Hypothesis (experimental)

Participants in condition A, which has the leading word "far" will estimate a greater distance than those in condition B, which has the leading word "close".

(null)

There will be no difference in the distance estimated by participants in condition A, which has the leading word “far”, to the distance estimated by those in condition B, which has the leading word “close”.

Method:

This experiment will be a field experiment and the experimental design will be independent. The choice of method i.e. field experiment was made as it does not provoke any ethical issues (like observation), isn't all that time consuming (like marking questionnaires) and can be done in any suitable environment (not like laboratory experiments). It was found to be the best choice for the experiment. The independent group design was chosen the most suitable for this experiment.

The independent variable will be the question with either the word “far” or “close” and the dependant variable will be the estimated distance given by the participants. Confounding variables might be the natural ability of the participants to estimate, especially distances, the age, the state of the participants (e.g. tiredness). The first can't be avoided, the second will be limited as there is an age range and the last will hopefully be avoided.

One of the ethical issues will be the well being of the participants. If a participant doesn't want to take part they don't have to, if they want to withdraw they have to know that they have the right to do so and they have to know that everything will be kept confidential. This will all be taken care of by a consent form, which will have all the above information on it, and the participants will sign to give consent and state that they have read and know their rights.

The experiment will be conducted by a 16 year old AS-level student. The participants will be between the age of 16-30, either male or female (no preferences) and all will be students at either A-level or university level. Location and time will vary. The method of sampling will be opportunity sampling. This was chosen in order to get the maximum number of participants. A more structured sampling method would have complicated the choice of participants and therefore limited the number. As there was a limited time this could not be allowed. The participants are equally of either A-level or university education. Nearly all participants were under 25 and still over half were under 20.

The participants were assigned to conditions randomly. At first they were assigned to the conditions by the participant number, even numbers got the questions with the word “close” uneven numbers got the question with the word “far”. Half way through when two participants were tested at the same time and had to be asked the same question. After this the participants were assigned to their conditions purely at random, it just had to be watched out for having an even number of both conditions.

The materials used were mainly the brief, consent form, instructions, debrief and the test picture. Each participant was also given a small (A5) piece of paper and a pen. The participants were approached and briefly briefed. Once they agreed to take part they were then handed the consent form and told to read it thoroughly before signing. Afterwards they were given the instructions. Any questions were answered at this stage. Now they were shown the picture and asked the question. They were told to write their group (condition), participant number and answer onto the piece of paper, handed to them after the instructions. After this they were handed the debrief. The picture was chosen as the white snow and the uneven surface make it more difficult to estimate the distance. The debrief was done to give the participants an idea of what the experiment was about and how their results contributed to this.

Discussion

Altogether, when looking at the results you can see that even though only by a little, the participants in condition A had estimated a slightly greater distance than those in condition B. This result supports both my aim and hypothesis.

I also found that the A-level students were affected more by the leading questions than the university students. Also after the experiment many participants said that instead of just guessing they tried to measure the distance by assuming that the boy was 1m or the man was 2m .

As in the piece of research done by Loftus and Palmer the results show that there is an effect on the answers. My results support the findings of Loftus and Palmer.

When asked to estimate a distance and for example asked how “far” people on a picture are standing from each other, it suggests to people that the people on the picture are actually standing far apart. Mostly people don’t notice this leading effect of the question but unconsciously it does affect them. The effect this actually has on people depends on the kind of people they are, for example very suggestible people or those who are generally bad at estimating might rely more on the wording of the question.

That leading questions have such an unconscious effect on us is dangerous in many ways. For example in eye-witness testimony a lawyer, when asking a witness to give his account, could use leading questions to make the witness believe things that went there (Loftus 1997?) or accelerate certain facts. Loftus and Palmers experiment with the car crash is an excellent example of this. When a witness is asked about how fast the car was going when it smashed into the other car will affect the witnesses recall of the event and might make him answer differently.

The media is also dangerous when using leading words or questions, when in an article the word “the” is used instead of “a” this might suggest that something that wasn’t, actually is there (Loftus and Zanni) which could change our perception of the world around us.

As this experiment was just that of an A-level student there were many limitations to it. Firstly 12 participants aren’t really a large sample and the way the experiment was done could be improved as well. For example done in a laboratory, to exclude any disturbances might make a difference. The fact that only students were asked and all were between the ages of 16-30 makes the sample unrepresentative. In eye-witness testimony the witness, after having see the event, might be stressed or other emotions could effect their recall.

Also the leading question will be asked after the event, sometimes even month later, not while witnessing it. All these factors make the experiment ecologically invalid.

Conclusion

The experiment supports the aim and hypothesis. It shows that even while looking at something and being asked a leading question this could influence us. If this is while looking at something just imagine how great the effect will be in a real life situation, where the witness giving his account of the situation a month later. Altogether it just shows how unreliable and influential eye-witness testimony is.