

Reconstruction of Automobile Destruction.

Journal of Verbal Learning and Verbal Behaviour, 13, 585–589.

Loftus, E. F. & Palmer, J. C. (1974)



Introduction / Background

Memory is not like a camera and Elizabeth Loftus has conducted numerous studies investigating the accuracy of eyewitness testimony. She has been asked on many occasions to testify in court about the factors that affect eyewitness testimony, the intention being to make jurors question the accuracy of an eyewitness account.

This aim of these **two experiments** was to investigate the effect of **leading questions** on eyewitness accounts and also the effect that leading questions might have on later memory for what happened. One leading question asked was 'How fast were the cars going when they smashed into each other?' The reason this is a leading question is because the verb 'smashed' suggests that the cars were travelling quite fast, whereas the verb 'contacted' suggests a slower speed.

Research Question:

Do leading questions distort (change) an eyewitness memory of an event?

Hypothesis: That the strength of the verb used in the leading question (contacted, hit, bumped, collided, smashed) will have a significant effect on participant reports of the speed of the crash.

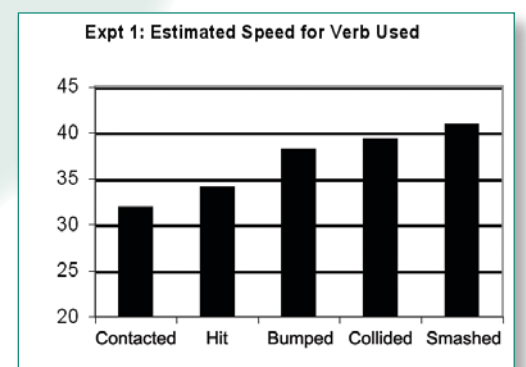


Experiment 1

Method: A laboratory experiment.

Procedure: 45 student participants watched a video of a car accident (the video was part of a driver safety film). Afterwards the participants were asked to write an account of what they had seen, and then given a questionnaire which included *the critical leading question*.

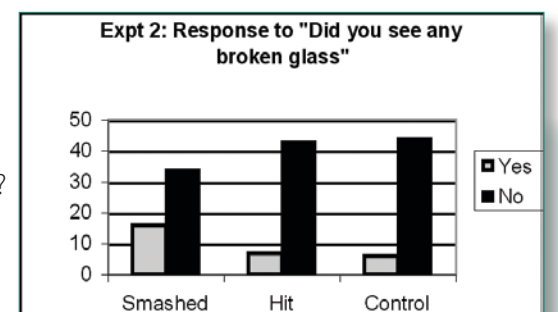
The participants were divided into 5 groups and each group received a slightly different version of the critical question, either containing the verb 'smashed', 'collided', 'bumped', 'hit' or 'contacted'.



Findings: As shown in the bar chart, the leading question did affect participants' perception of speed.

Experiment 2

The first experiment found that leading questions do affect eyewitness reports, but do they also affect the way the information is stored in memory and later retrieved? In another **laboratory experiment**, 150 student participants, in three groups of 50, were shown a film of car accident and were given a questionnaire. Group 1 were asked the leading question containing the word 'hit', group 2 were asked it with the word 'smashed' and group 3 (the control group) were not asked a leading question. A week later the participants returned and were asked some further questions, including the critical question 'Did you see any broken glass?' (there had been no broken glass in the film).



Findings: Those participants who thought the car was travelling faster (the 'smashed' group) were more likely than the others to produce a false memory of seeing broken glass. This suggests that their memory of what they had seen was changed by the way they had been questioned.

Conclusion

Loftus & Palmer concluded that the meaning of the verb used in the leading question (the semantics of the question) had become integrated with the memory of the event, thus changing the memory and causing a false memory to be constructed. We can also conclude that what happens after we have witnessed an event can alter our memory of the event.