

EYEWITNESS TESTIMONY (1) - THE EFFECTS OF MISLEADING INFORMATION ON THE ACCURACY OF EYEWITNESS TESTIMONY

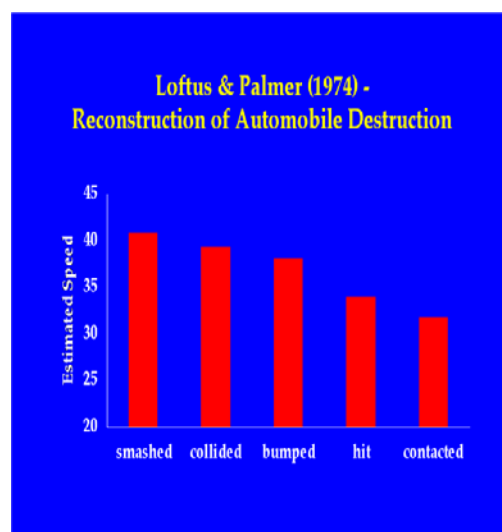
Introduction

EWT is an area of memory research that investigates the accuracy of memory following an accident, crime, or other significant event, and the types of errors that are commonly made in such situations. Psychologists have long known that people are not always accurate eyewitnesses to an event they have seen. One of the most important researchers in this area is **Elizabeth Loftus**. Amongst other things, she has done extensive research into how our memory of an event can be distorted by **misleading information**.

How does misleading information affect the accuracy of EWT?

One kind of misleading information is what is called a **leading question**. This is a question designed to produce a particular answer from a person. **Loftus & Palmer (1974)** showed that changing just a **single word** in a question about an event can influence people's memory of that event.

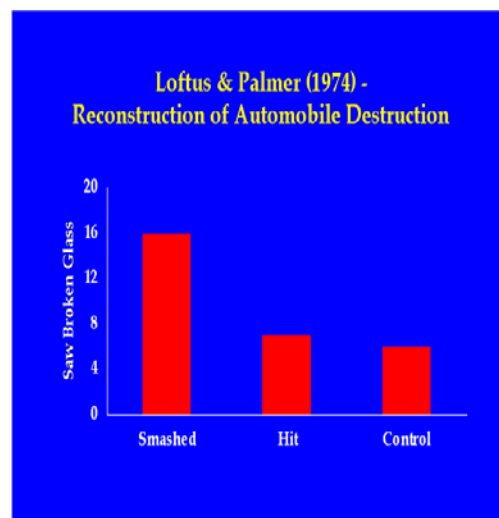
Participants were shown a 30 second video of an event involving two cars. They were then given a questionnaire about the event. The 'critical' question related to the **speed** the cars were travelling at. One group was asked: "About how fast were the cars going when they **hit** one another?". For participants in the other groups, the word "hit" was replaced by **smashed, collided, bumped, or contacted**.



The word **hit** produced an average estimate of 34.0 mph. The other averages were **smashed** (40.8 mph), **collided** (39.3 mph), **bumped** (38.1 mph), and **contacted** (31.8 mph). The difference of 9 mph between the estimates given for "smashed" and "contacted" was **statistically significant**, indicating that a leading question can influence people's recall of an event they have witnessed.

In a follow-up experiment, Loftus and Palmer investigated the possibility that remembering an accident as being more serious than it was might lead people to 'remember' things that did *not* happen, but which are *consistent* with what is in memory. A week after the original experiment, participants from the 'smashed' and 'hit' conditions were asked further questions about the event they had witnessed, *but without seeing it again*. One question asked if they *remembered seeing any broken glass*, even though there was no broken glass in the video.

If the word 'smashed' really had influenced participants' memory of the video as being more serious than it was, then they might also 'remember' events they did not actually see, but which are consistent with an accident occurring at a higher speed (e.g. broken glass). This is exactly what Loftus and Palmer found: of the 50 'smashed' participants, 16 (32%) remembered seeing broken glass. Only 7 of the 50 'hit' participants (14%) remembered seeing broken glass.



Loftus and Palmer's study indicates how **expectations** can affect the accuracy of EWT. **Bartlett (1932)** coined the term '**reconstructive memory**' to refer to memories that are distorted by our prior knowledge and expectations. Bartlett says that we try to **reconstruct** the past, by trying to fit it into our existing understanding of the world. In other

words, memory is an '**imaginative reconstruction**' of what happened rather than a 'video playback'. Our existing understanding of the world is in the form **schemas**.

When trying to remember an event, we often 'fill in the gaps' about it based on our expectations (or **preconceptions**) about what 'should' have happened ('**memory blending**'). A good recent example of this is **Tuckey & Brewer's (2003)** study of the 'bank robber' schema. Another kind of error is called **source confusion** (or **source misattribution**). For example, witnesses sometimes place something at a crime scene because it is commonly found at a crime scene, and identify someone in an ID parade because they are familiar for some reason.

In another study showing how leading questions can affect our memory of an event, **Loftus & Zanni (1975)** showed participants a short film of an incident involving two cars. One group were asked if they remembered seeing **a** broken headlight. The other group were asked if they remembered seeing **the** broken headlight. Even though there was no broken headlight, 17% of participants asked about "the" broken headlight remembered seeing it, compared with only 7% of participants asked about "a" broken headlight. Participants in the latter group were much more likely than those in the former group to remember seeing one.

EVALUATION: Strengths and weaknesses of research into the effects of misleading information on eyewitness testimony

Although this research indicates that leading questions can affect memory, **Loftus (1979)** showed that this is not always the case. She showed participants slides of a man stealing a **red** purse from a woman's bag. Later, they read a description of the crime in which the purse was referred to as being **brown**. Most participants pointed out this error, showing that our memory for obviously important information accurately perceived at the time is not easily distorted, and so we are not always influenced by leading questions.

This area of research can be evaluated in other ways as well:

- **Positive evaluation** (Strengths) can take many forms, including elements of PEECH + E. For example, the research is good because it is conducted under highly controlled conditions (i.e. in the laboratory) and has high experimental validity. The research findings are also very

reliable (Loftus' studies have been replicated many times). Some of the research has used 'ordinary' people, so it is high in population validity.

- **Negative evaluation** (Limitations) can also take many forms, again including elements of PEECH + E. For example, laboratory studies can lack ecological validity. Some of the research has used student samples only (population validity), and there are ethical issues that this kind of research raises.