



Example First Year Research Report

The Manipulation of Visual Perception Through the Use of Language

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Check on your assignment sheet or with your tutor as to whether this additional information is required on your title page

Check the marking criteria or speak to your tutor regarding what is included in your word count

Abstract

The aim of this study was to examine whether manipulating the structure of questions in a questionnaire can generate false memories. Two groups of undergraduate psychology students (225 cisgender females and 88 cisgender males) all watched a video of a car accident and answered questionnaires based on their observations. It was hypothesised that by stating the car as blue for group B and orange for group A, in one of the questions in a questionnaire, participants in those groups would then falsely recall the car as being that colour a week later. This hypothesis was supported, and so it was concluded that memory can be biased via suggestion.

Note: that the abstract is not indented

Remember: Continue page numbers on the right for the rest of the report.

The Abstract must include a sentence about each of the following:

- the aim of the study,
- the participants and procedure,
- the findings and
- some final conclusion about the area

Check with your tutor to find out whether an Abstract is required and if so, if it is included the final word count.

Define 'false memories'

The Manipulation of Visual Perception Through the Use of Language

When the first citation occurs *in brackets*, you must cite the year in ALL further citations in that paragraph.

Title of your report goes here – not 'Introduction'

The fabrication of false memories by suggestion is well documented, though the methods and levels of suggestion differentiate considerably (Loftus, 2004). Zaragoza and Mitchell (1996) examined the effect of repeated exposure to suggestion on false memories. They predicted that frequent exposure to suggestions based on a video of a burglary, where the false presence of items such as gloves and a gun were reinforced, would induce high incidences of participants recollecting the items actual presence. Their results supported their claim that the more participants were exposed to misleading suggestions, the more convoluted their recollections became. According to Loftus (2004), this notion of a false memory being real is attributed in some cases to the extent of the sensory detail involved. Zaragoza and Mitchell interpret these results further as being the product of participants integrating the suggestive elements with their own perception of events that

When the first citation occurs as part of the *narrative*, only include the year in the first citation and not in subsequent non-bracketed references to this source within the paragraph.

For citations with three or more authors, write the first author surname followed by et al.

Lindsay et al. (2004) further explored false memories by performing an experiment based on the manipulation of childhood memories via the inclusion of a photograph. Participants were told three stories from their early childhood, two of which were factual, and a third which was not. Supplementing the suggestive information with the visual attribute of relative class photographs, was found to double the instances of participant's false memories. Lindsay et al. credited their findings to people's faith in the validity of pictorial evidence creating an authoritative influence on their confidence of the occurrence of events.

Single exposure to suggestion is also indicated to create considerable false recollections (Zaragoza & Mitchell, 1996). This method of suggestion is demonstrated in the Loftus and Palmer (1974) experiment in which participant's perception of speed in response to the

Link to Loftus' concept

manipulation of verb use in a questionnaire, and the false recollection of the presence of broken glass after viewing a video of an accident was investigated. As predicted, the use of stronger verbs to depict the accident such as “smashed” and “collided” consequently caused the participants’ perceived speed of the vehicle to be higher. Moreover, participants were more likely to recall the presence of broken glass in the video, when stronger verbs were used in comparison to the use of less forceful verbs such as “bumped” and “contacted”.

What did they conclude?

The present study was designed to expand on previous studies of false memories by testing the influence of specific word structure in questionnaires on the recall of observed events. In Loftus and Palmer (1974), verb use was varied, whereas the present experiment altered the adjective used. It was hypothesised that a week after viewing a video of an automobile accident, participants would falsely recall the colour of a car as blue or orange, after being exposed to questions in a questionnaire in the previous week which either asked “Was the young man’s blue car parked nose in or nose out?” or “Was the young man’s orange car parked nose in or nose out?”.

Finish with a specific hypothesis that predicts who (or which condition) will be faster/slower, bigger/smaller, etc.

Method

Participants

Two-hundred and twenty-five cisgender female and 88 cisgender male undergraduate students at Griffith University, Mount Gravatt campus participated in this experiment during their 1001PSY Introduction to Cognitive and Biological Psychology tutorials. Participant ages ranged between 17 and 54, with the mean age of participants being 19.79 years ($SD = 6.98$).

Specific noun use for identifying gender

Design

The experiment was a between subjects design, where participants were assigned to either Group A or Group B. The independent variable was the use of either the question “Was the young man’s orange car parked nose in or nose out?”, or “Was the young man’s blue car parked nose in or nose out?” The dependent variable was the participant’s recollection of the colour of the car.

Materials

A You Tube video of an automobile accident was used in this experiment. In addition, to two key questions measured the recollection of the car: “Was the blue (or alternatively “orange”) car parked nose in or nose out?” and “What colour was the young man’s car?”.

Procedure

This experiment was a 2 week process in which tutorial classes were labelled either as Group A or Group B. In each group participants were asked to watch the You Tube video “Stupid Old Man Wrecks Ferrari” (Bagleboy550, 2007). This video was watch only once and participants were instructed to pay careful attention as they were to be asked questions on their observations afterwards. Once viewing was complete, participants were then given a questionnaire to fill in based on their perception of the incident. Participants of Group A were asked the critical question “Was the young man’s orange car parked nose in or nose out?”, whilst the participants of Group B were asked “Was the young man’s blue car parked nose in or nose out?” The answers were then collected by the experimenter. A week later, during the same tutorial class, at the same time of day, participants were presented with a set of different questions based on the video. The video was not re-watched. Participants of both groups were asked the question, “What colour was the young man’s car?”

Results

Table 1 displays the results of false car colour recollections for both participant groups. These results indicate that stating the colour of the car as orange in the questionnaire in the first week increases the likelihood of participants of that participant pool to recall the car as actually being orange a week later; similarly for stating the car colour as blue.

Table 1

Distribution of Participant Recollection of the Colour of the Car

Group	Orange	Blue	Other
A	22	18	124
B	2	50	97

Centre the numbers in the table and the table should occupy the width of the page

The first sentence states whether the hypothesis was/was not supported. Following statements relate results to literature.

Discussion

The results of this experiment suggest that memory can be biased by suggestion. Such findings support the hypothesis that utilising the question “Was the young man’s orange car parked nose in or nose out” or alternatively substituting the adjective “orange” for “blue”, would lead to the creation of a significant number of false memories when prompted “What colour was the young man’s car?”. This experiment also supports the findings of Loftus and Palmer (1974), where the manipulation of the language in a questionnaire resulted in the creation of false memories of videos previously viewed. Both experiments were also performed for the same duration of time, with similar numbers of participants. The findings of Lindsay et al. (2004) are also supported by the findings of this experiment as both were performed over a two week period, and both incorporated visual stimuli to induce false memories.

Limitations are provided here. Relate *how* your results were similar and different to previous research

One methodological concern is that the experiment was conducted during a period of time when participants may have been switching tutorials and therefore there may have been an exchange between group participants. There was also no way to prevent participants from viewing the You Tube video again in their own time, outside of the experiment. However, due to the low probability of occurrence, the overall results of the experiment indicate that the hypothesis was not invalidated by this.

How could you fix this?

The results suggest that there is a certain degree of susceptibility of our minds to input information as witnessed truths when it is in fact not. This is particularly dangerous in judicial situations where eye-witness testimony is needed. According to Zaragoza and Mitchell (1996), frequent exposure to misinformation during the interrogation of eye-witnesses is not an uncommon occurrence. Faulty memories in this case could lead to innocent people being wrongfully convicted (Loftus, 2004), thus highlighting the importance of further understanding the creation of false memories.

In conclusion, false memories can be produced by the manipulation of language in a questionnaire, by altering our perceptions of objects and situations which are previously viewed. This as reflected by the results of the current experiment which shows a significant number of participants falsely recalling the car colour as either blue or orange. These findings could have implications for eye-witness testimony being used for making judicial decisions. This study suggests caution is made when using eye-witness accounts for specific details. Further suggested study is a comparison between the susceptibility of the implantation of false memories among different genders. Furthermore, determining what types of event details are more susceptible to bias should be investigated.

Conclusion provides the overall impact of the research. Future research has been included here but could be expanded on.

References

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<https://doi.org/10.1111/j.1467-9280.1996.tb00377.x>

References are listed in ALPHABETICAL order by first Author.

The first line is hanging and the others are indented.

Provide Author, Year, Title, Journal details as outlined in the APA 7th Ed manual and the Loftus (2004) reference above.