



# Assessing How Phenomenology Predicts the Debriefing Process in False Memory Formation

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## Background

This study is part of a wider replication of the 'Lost in the Mall' experiment by Loftus and Pickrell (1995). This study provoked much debate in the area of false memory formation. Loftus and Pickrell were the first in false memory research to establish an experiment which attempted to implant a false memory for a childhood event that never happened in a young adult population. Many false memory studies focus on reporting the percentage of participants that formed a false memory, but very few follow-up with the participant and investigate this memory after debriefing.

## Introduction

The effect of debriefing has been neglected in literature, despite the evidence of the persistence of false memories (Zhu et al., 2012). The amount of participants retaining a false memory, belief or non-believed memory after debriefing and at follow-up will be assessed. A secondary aspect will explore the difficulty of 'reversing' a 'sticky' false memory. Phenomenological features can offer insight into the depth of remembrance for events. These features will be analysed to examine if a predictive relationship lies between the effectiveness of debriefing and the remaining presence of a false memory/belief. This area is concerned with the persistence of false memories.

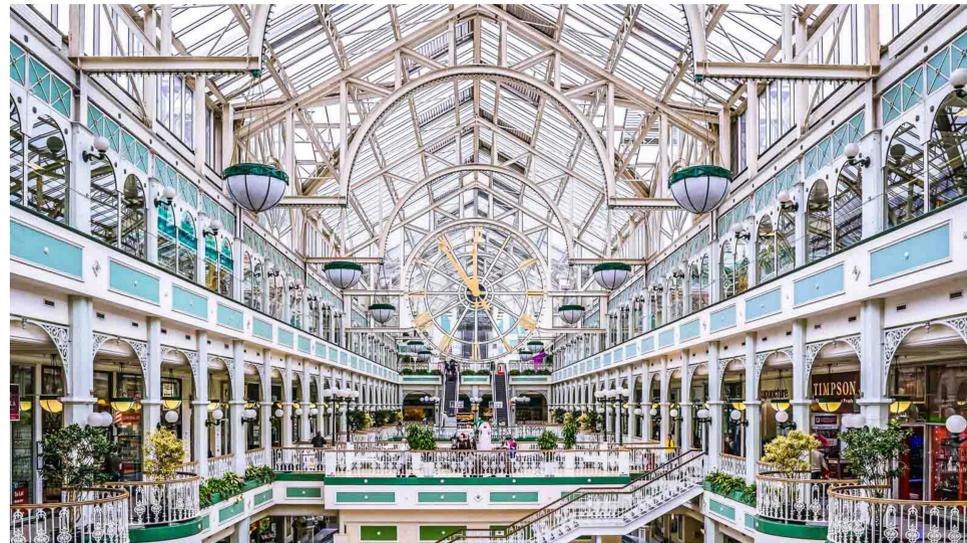
**Aim 1:** How effective was the debriefing? What are the false memory/belief and non-believed memory rates?

**Aim 2:** How can phenomenology of false memory predict the effectiveness of the debriefing process?  
- Higher rates of phenomenology should lead to higher rates of false memories after debriefing

## Methodology

Participants were recruited through convenience sampling. Experimenters were paired and swapped recruited participants. A survey was sent to the participant to share with a parent. The participant's parent was known as the 'informant'. The informant shared information from the participant's childhood, including three true memories. This information was used to create a booklet. This included four of the participant's childhood events. Three of these events were true, and a fourth was false; detailing the participant being lost in a shop/shopping centre at the age of five.

This booklet was sent to the participant. Two interviews conducted over Zoom/Microsoft Teams followed this booklet, at similar intervals. These interviews explored the events in more detail, attempting to implant the false memory. Phenomenological questions of each memory were asked during both interviews, and memory vs. belief was explored both before and after the debriefing process. A follow-up survey was sent to both informant and participant.

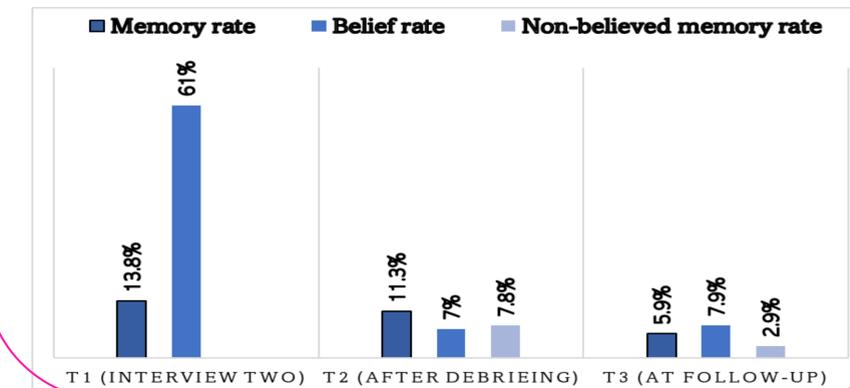


## References

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- Zhu, B., Chen, C., Loftus, E. F., He, Q., Chen, C., Lei, X., Lin, C., & Dong, Q. (2012). Brief exposure to misinformation can lead to long-term false memories. *Applied Cognitive Psychology*.
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## Results

False memory and false belief rates at three times and non-believed memory rates at two times were recorded. To examine how phenomenological features of false memory predict the effectiveness of the debriefing process, four binary logistic regression were performed. Clarity of memory was the only significant predictor of presence of a false memory/belief after debriefing



## Conclusion

- Based on this research, there is confidence in the effectiveness of the debriefing process. False memory, false belief, and non-believed memory rates all reduced from T1 to T2 to T3.
- The low rates of false memory before debriefing suggest that not many participants formed a particularly 'sticky' false memory. The clearer the false memory was for the participant, the more likely they were to report a false memory after debriefing.
- The reduction in false rates over time is most likely due to the participant reminiscing on the debriefing and checking external sources (informant) to validate the falsehood of the shopping event (Johnson et al., 1993).