



# Factors Contributing to False Memory in Short Term Memory

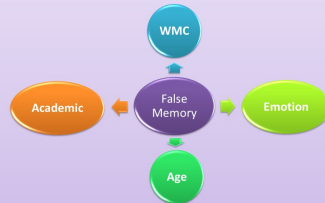
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## ABSTRACT

This research paper aims to conduct a survey on factors contributing to false memory in short term memory. The factors considered include CGPA, multiple intelligences and WMC. This study was inspired from the awareness of certain communities outside Malaysia in the False Memory Syndrome. The survey research will be carried out in two parts: qualitative pre-testing with five senior undergraduates and quantitative research with 65 senior undergraduates in the real survey research. The function of pre-testing is to investigate the precautions to be taken for actual test. In general, the findings from this research reported the existence of relationships between CGPA and false memory formations; and also relationship between WMC and false memory formation. Overall, it is believed that the occurrence of false memory can be reduced by improving the performance on related factors. The extent for application of the research result is subject to further study.

## INTRODUCTION

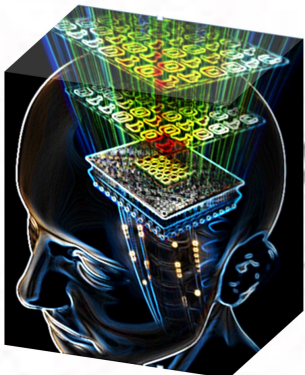
- False Memory Syndrome (FMS)
  - ✓ Introduced in March 1992
  - ✓ A group of USA parents being accused for sexual abuse allegations together build False Memory Syndrome Foundation (FMSF)
- The Innocence Project by USA
  - ✓ 311 post-conviction DNA exonerations which include 18 people have been innocently put into death sentence
- Some Past Research Studies



- Malaysia
  - ✓ Not much studies been done
  - ✓ Local research works may rise public awareness

## RESULTS

- ❖ **CGPA**
  - Shows a significant positive and moderate to low relationship with WORD RECOGNITION ( $p < 0.05$ ,  $r = 0.341$ )
  - Shows a significant positive and moderate to low relationship with SPECIAL DISTRACTOR ( $p < 0.05$ ,  $r = 0.305$ )
  - Shows a significant negative and moderate to low relationship with NORMAL DISTRACTOR ( $p < 0.05$ ,  $r = -0.331$ )
- ❖ **WMC**
  - Shows a significant negative and weak to low relationship with NORMAL DISTRACTOR ( $p < 0.05$ ,  $r = -0.278$ )
- ❖ **Multiple Intelligences**
  - Shows no significant relationship with false memory formation



## FUTURE DIRECTIONS

DRM paradigm with different level of complexity

Consider different health group

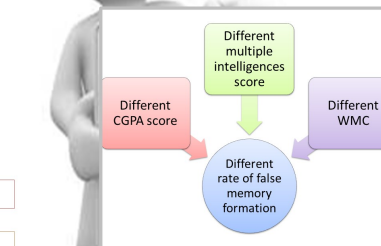
Trying out with Misinformation paradigm

Work on sleep duration

## THEORIES PROPOSED FOR FALSE MEMORY FORMATION

Encoding State	Visual Imagery Hypothesis
	Semantic Network Theories <ul style="list-style-type: none"><li>• Fuzzy Trace Theory</li><li>• Spreading Activation Theory</li></ul>
	Top-Down Processes
Consolidation State	Retroactive Interference
	Sleep Deprivation
Retrieval State	Retrieval Cues
	Activation Monitoring Theory
	Sensory Reactivation Hypothesis

## OPERATIONAL FRAMEWORK



## METHOD

### Participants

- ❑ Qualitative pre-test using 5 senior undergraduate s from local university
- ❑ Quantitative survey research using 65 senior undergraduates from UNIMAS

### Instruments

- ❑ Deese-Roediger-McDermott (DRM) paradigm / False Memory Test for Short-term Memory Tasks
- ❑ Multiple Intelligences Test by Howard Gardner
- ❑ Working Memory Capacity Test by Daneman & Carpenter (1980); Just & Carpenter (1992)
- ❑ Face Recognition Test by BBC

### Data Analysis

- ❑ IBM SPSS Statistics software

### Location

- ❑ Private space with Internet and computer

## CONCLUSION

The findings in this research have indicated that there is a relationship between: CGPA and all the three components inside false memory test; WMC and distractor (one of the components inside false memory test). Being informed with the knowledge learned from the findings, steps can be taken to improve both CGPA and WMC.

For example,

- Better learning and teaching approach for individuals accordingly.
- Special training on memory learning and retrieval; and interpretation of knowledge.
- Good management of time
- Good management of mental health and mood.

Theoretically, if following the research findings, once individuals CGPA and WMC is being improved, the involved young generations may tend to show a lower rate in false memory formation, hence directly forming a society with better justice system as their ability to manage with the memory have turned them to be more ideal witnesses if there are happenings of on-sight criminal cases.

Nevertheless, school teachers or teaching professionals can also use this findings and knowledge to set a better syllabus for education and related examinations

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