



Game Based Learning

23 PCIT 504 Human Computer Interaction

Class TY

Date- 17/07/2025

Title of the Activity:

False Memory Station: "Did You Hear That?"

Course:

Cognitive Psychology – Third Year Engineering

Topic:

Memory Construction and False Memory (DRM Paradigm)

Objective of the Activity:

To help students understand how false memories are formed through semantic associations and to illustrate the reconstructive nature of memory using the Deese-Roediger-McDermott (DRM) paradigm and cognitive psychology.

Brief Description of the Activity:

Students participated in a memory recall task using a list of semantically related words. Despite not being presented, many students falsely recalled a "critical lure" word that was strongly associated with the given list. The activity aimed to demonstrate that memory is reconstructive, not a perfect recording, and to discuss its implications in real-world domains such as law, education, and user experience (UX) design.

Details of the Activity:

1. Preparation by Instructor:



- A list of words was selected for each theme (e.g., Sleep, Sweet, Needle, etc.)
- One key word strongly associated with each list was deliberately omitted (e.g., “Sleep” from the sleep list).
- Example List for Theme – *Sleep*:
Bed, Rest, Awake, Tired, Dream, Wake, Snooze, Blanket, Doze, Slumber, Nap, Peace, Yawn, Drowsy, Snore
 - **Critical Lure (not presented):** Sleep

2. Presentation Phase:

- Instructor read the list of words aloud at a steady pace (one word per second).
- Students were instructed to listen carefully and not take notes.

3. Recall Phase:

- After reading, students wrote down all the words they remembered (free recall).
- After 2–3 minutes, the instructor asked whether the critical lure (e.g., “Sleep”) was part of the list.

4. Discussion Phase:

- Students shared whether they believed the critical word was included.
- The instructor explained how semantic networks and associations lead to false memories.
- Connections were made to real-world systems where memory accuracy matters.

Learning Outcomes:

By the end of the activity, students were able to:

- Understand the concept of false memory and the reconstructive nature of human memory.
- Explain how the brain uses semantic associations to fill in gaps.
- Discuss the relevance of memory errors in real-world contexts such as legal testimony and user experience design.
- Reflect on their own memory processes and cognitive biases.

Impact/Reflections:

- The activity led to strong engagement, curiosity, and “aha” moments as students realized they recalled a word that wasn’t read.
- It sparked meaningful discussion on eyewitness reliability, learning techniques, and design considerations.
- The demonstration reinforced cognitive psychological concepts through experiential learning.



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Feedback

Geo Tagged Photos:



Harsha R. Sonune

Sign and Name of the course Instructor