Lab experiment
Participants were 240 army enlisted men
Participants were read a list of words and then have to recall them either immediately or after a distraction.

Results:
- recall of the first and last words were recalled the best
- However, when distraction was used then recall of only the first words were good

Conclusion:
- The recall of the first words are in the long term memory because they have been rehearsed (primacy effect) and the last words were still in short term memory (recency effect).
- clearly illustrating the two separate stores of short term memory which was easily displaced by distractor tasks (recency effect) and how the first words were rehearsed into LTM and were available for recall (primacy effect).

Evaluation:

Strength:
- As it is a controlled laboratory study (demonstrates highly controlled variables)

Limitation:
- Limited ecological validity (artificial environment)

Link (GLO3 – Research Methods):
- Took placed in a laboratory environment
- Used standardized procedures
- Easy to replicate
- Researcher manipulated the IV (recall either immediately or after a distraction)
- Used at the cog LOA as it investigates primary and recency effect on memory (cognitive process)

Link (CP2 – Memory Models):
- As it demonstrates that there are separate short term memory stores and a long-term memory stores


Aim: to investigate if participants can use different parts of working memory at the same time

Method:
- Participants were asked to perform two tasks at the same time (dual task technique)
- Task involved a digit span task which required the participants to repeat a list of numbers
- Other task involved a verbal reasoning task which required the participants to answer true or false to various questions

Results:
- Smashed had to highest estimation sheet
- bumped had to lowest.

**Conclusion – Experiment 1:**
- Leading questions affect memory and may negatively affect it.
- Schemas may be argued to have been used as the verb may have activated a certain schema.
- As the word smashed is usually correlated to violence

**Method Experiment 2:**
- Participants were presented with a one-minute film showing a multiple car accident then asked questions about it with a critical question about speed.
- Three conditions were used and two groups were asked questions about the speed by using either smashed or hit.
- The control group was not asked anything about speed.
- One week later, all participants were asked: “Did you see any broken glass?”
- Even through there was no broken glass.

**Result – Experiment 2:**
- 32% of those who had been asked about the car’s speed with the verb smash claimed to have seen broken glass
- 14% of the participants in the hit group
- 12% in control group also reported seeing glass.

**Conclusion – Experiment 2:**
- The schema activated by the verb smashed must have aroused a stronger expectation of broken glass than that activated by the verb hit.

**Conclusion:**
- Demonstrates unreliability of memory because it was found that the leading question asked to eye-witnesses caused a distortion of memory as the result of the reconstructive processes of memory.
- 'smashed' lead participants to remember the accident as more severe than 'contacted
- Therefore, it is clear that leading questions are influenced by previously stored information in memory
- Proves schemas

**Evaluation:**

**Strength:**
- Laboratory experiment which applied a standardised procedure
- establish a cause and effect relationship between the use of specific words and estimation for speed.

**Limitation:**
- Not a real life accident as actual accident which is more shocking unexpected
- Uni students so can only generalise to other US students
- High ecological validity
- Interviews gave in-depth qualitative data

Limitation:
- Interview was not focused (as it had to control all possible variables)
- Perhaps distress in having to remember a tragic event


Aim: to investigate the theory of flash bulb memory through the Challenger disaster event

Method:
- Participants = 106 psychology students
- Participants were given a questionnaire and asked to write a description of how they had heard the news
- Had to answer seven questions based on where they were, how they felt, what they were doing, etc.
- Participants reported on the event twice, 24 hours after the incident and 2 and a half years later
- 2 and a half years later, 44 of the original students answered the questionnaire again, but this time they were asked to rate how confident they were on the accuracy of their memory on a scale of 1-5.
- Sometime after the last questionnaires, the researchers performed a semi-structured interview to test whether the participants could remember what they had written previously.
- Participants then saw their original reports from the first questionnaire.

Results:
- Only 11 participants out of the 44 remembered that they had filled out the questionnaire before
- There were major discrepancies between the original questionnaire and the follow-up two and a half years later.
- The mean score of correctness of recall of the seven questions was 2.95 out of 7.
- For 11 participants the score was 0, and 22 scored 2 or less.
- The average level of confidence in accuracy for the questions was 4.17.
- The results challenge the predictions of the FM theory and also question the reliability of memory in general.
- Participants were confident that they remembered the event correctly both times and they could not explain the discrepancies between the first and second accounts.
- Participants memory of how they had heard of the disaster had changed over time
- Can be concluded that their memory had deteriorated significantly during the 2-and-a-half-year time period

Conclusion/Link (CE2 – Emotion on Memory):
- Thus flash bulb memories are not reliable
- claimed that FBM may just be ordinary memory
due to the fact that even when emotion was involved, the accuracy of the memory recall was not greater than when emotion was not involved