



# The Integration of Memories in the Human Brain

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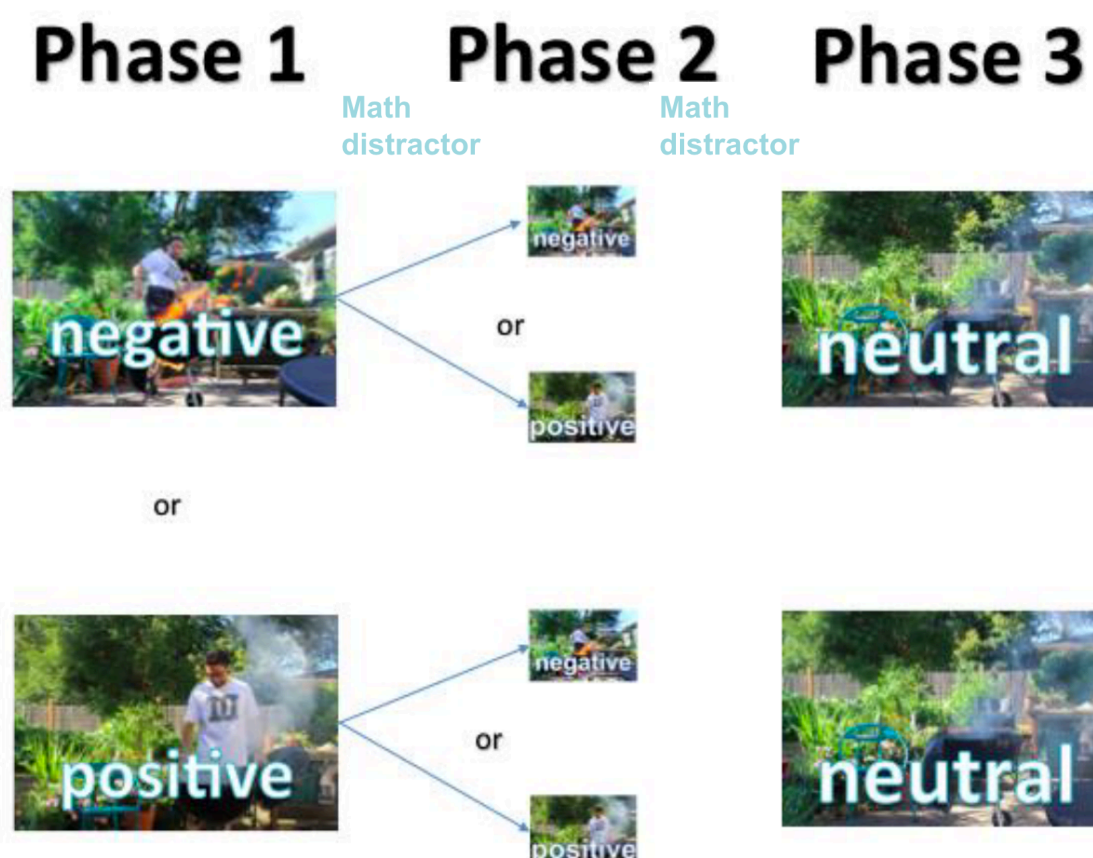


## PURPOSE

- Prior data suggests that generalization originates from inference-based processes at the time generalization occurs.
- However, generalization could be the result of mnemonic processes that occur as events are encoded.
- Shohamy and Wagner (2008) propose that the hippocampus integrates different memory episodes that are similar, resulting in a large and linked network of mnemonic associations.
- Could the linked network of mnemonic associations stored in someone's memory be used to decrease the negative impact of a past trauma?

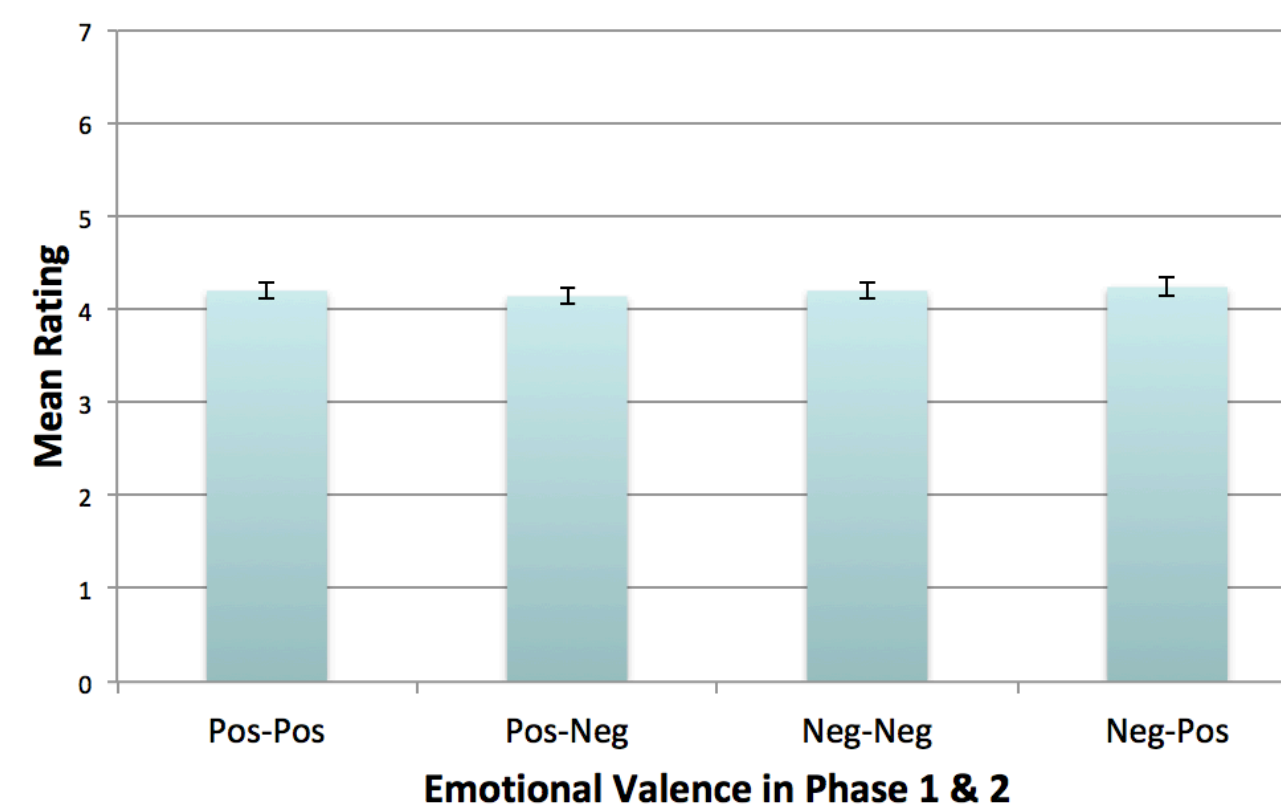
## METHOD & DESIGN

- Participants: 63 Skidmore College undergraduate students
- Stimuli: 24 image triplets of distinct scenes (a total of 72 images)
- There were four conditions: positive-positive, positive-negative, negative-negative, negative-positive



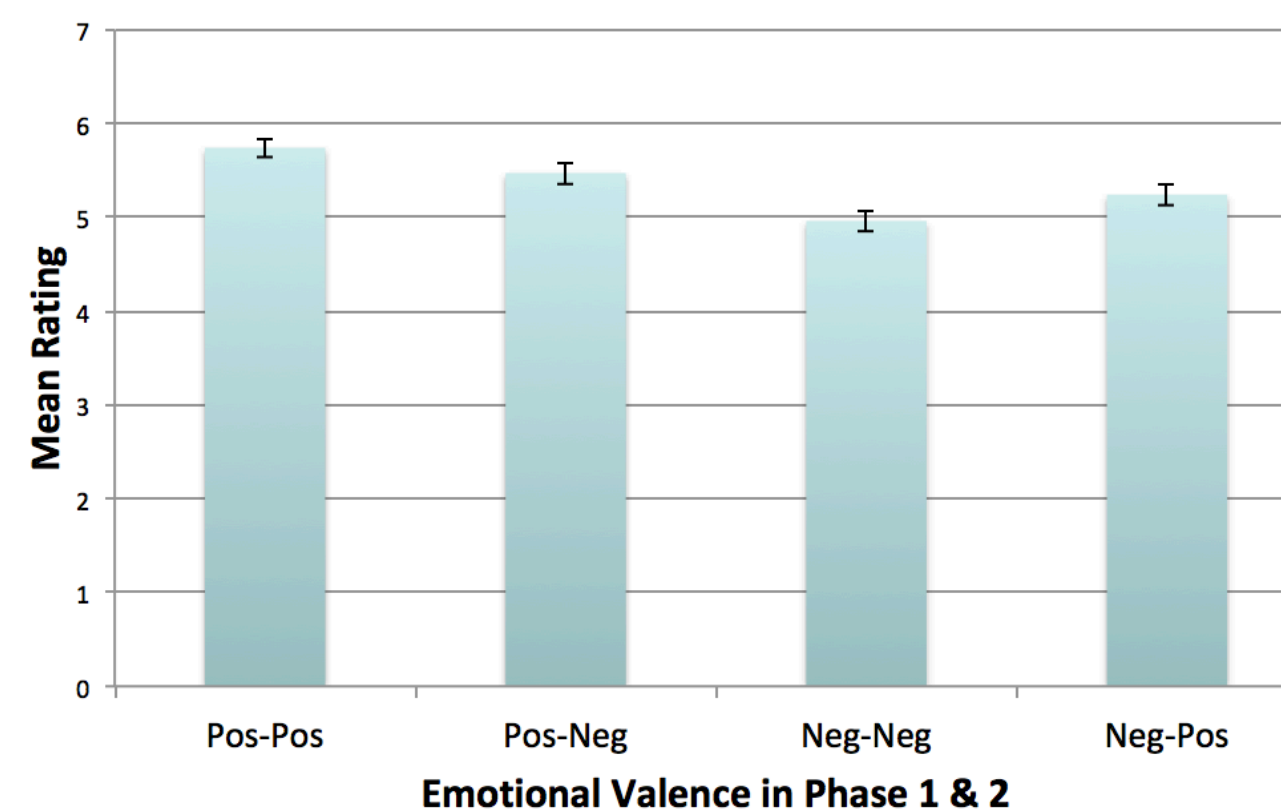
## RESULTS

### Implicit Measure of Emotion



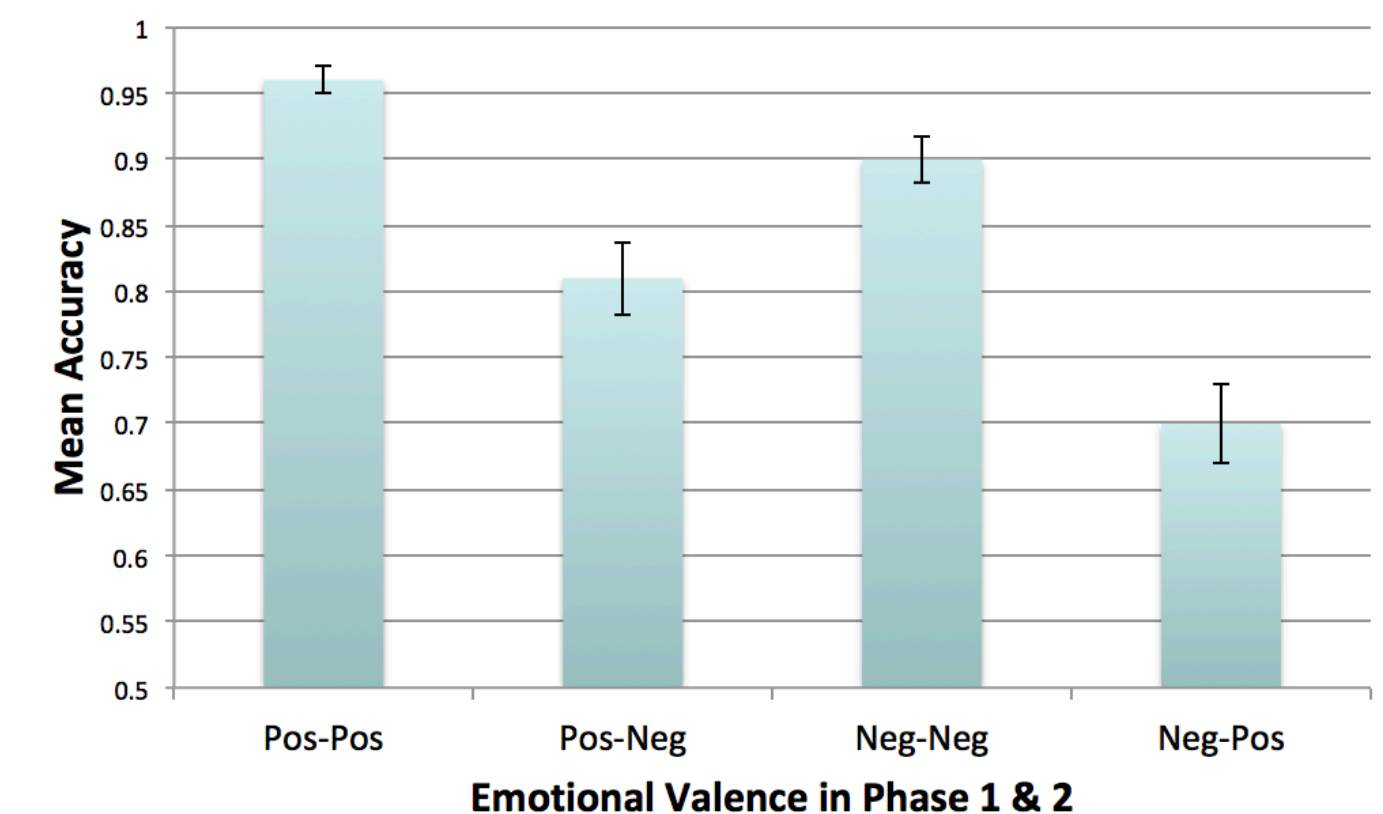
The Mood-Congruent Judgment Scale did not generate any significant results,  $p = 0.93$ .

### Explicit Measure of Emotion



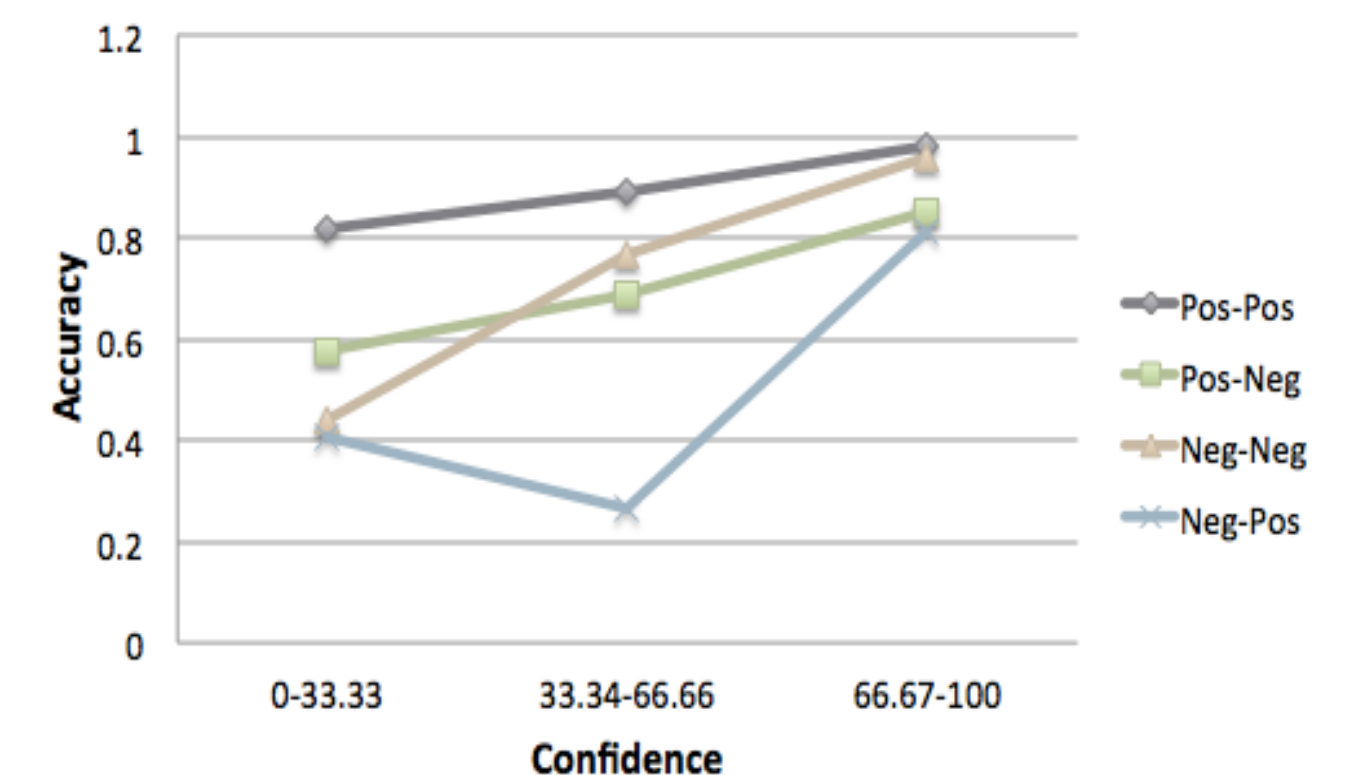
There was a significant effect of emotional valence on Likert answers,  $p \leq 0.00$ ,  $\eta_p^2 = 0.16$ .

### Source Memory Accuracy



There was a significant effect of emotional valence on source memory accuracy,  $p \leq 0.00$ ,  $\eta_p^2 = 0.38$ .

### Confidence and Accuracy



## CONCLUSIONS

- The Negative-Positive condition was significantly less accurately recalled compared to the other three conditions, demonstrating that the intervention was successful.

Thank you to Skidmore College for funding me through the Travel to Present Award.