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#### The Role of Interference in Short-Term Forgetting

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## The Role of Interference in Short-Term Forgetting

Monserrat Leal-Arcos, Gabriel Hull, Francisco Sanchez, Rhiannon N. Soriano Smith, William B. Ridgway, Colleen M. Parks

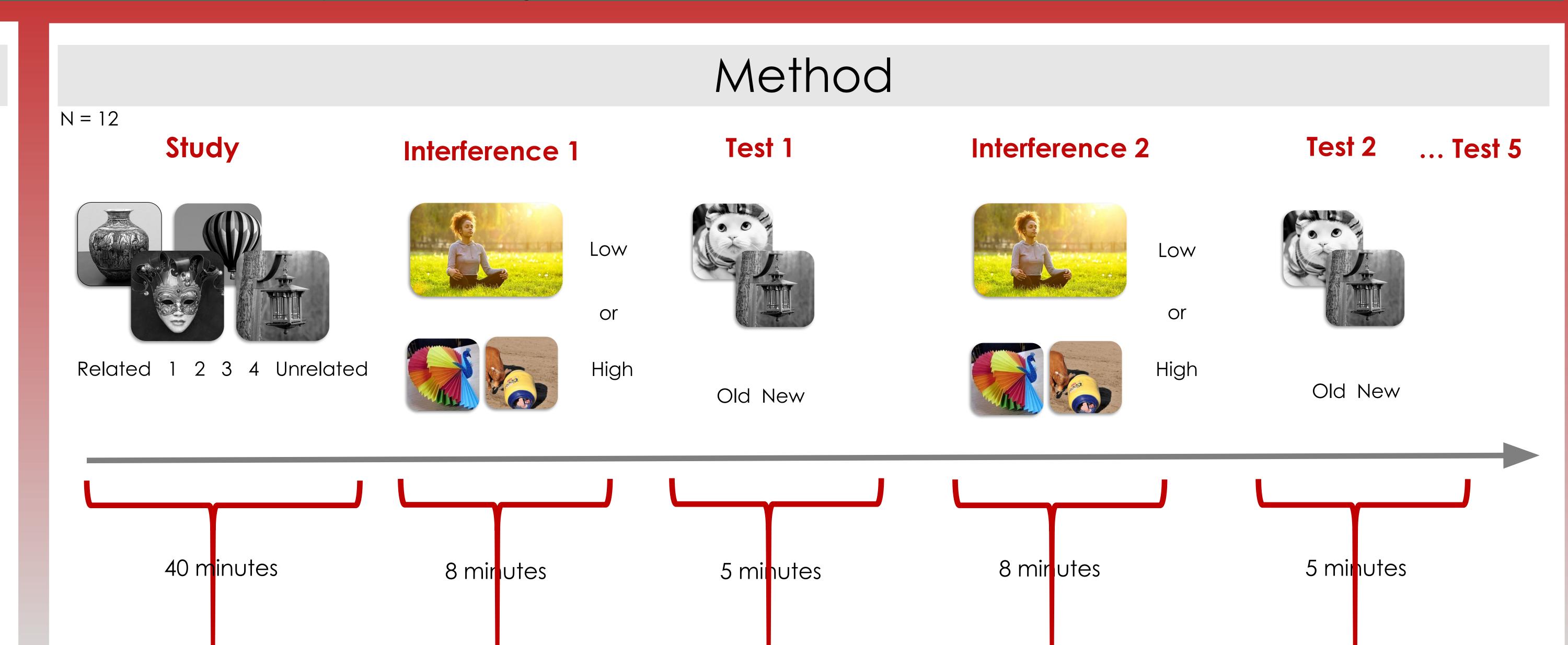


University of Nevada, Las Vegas

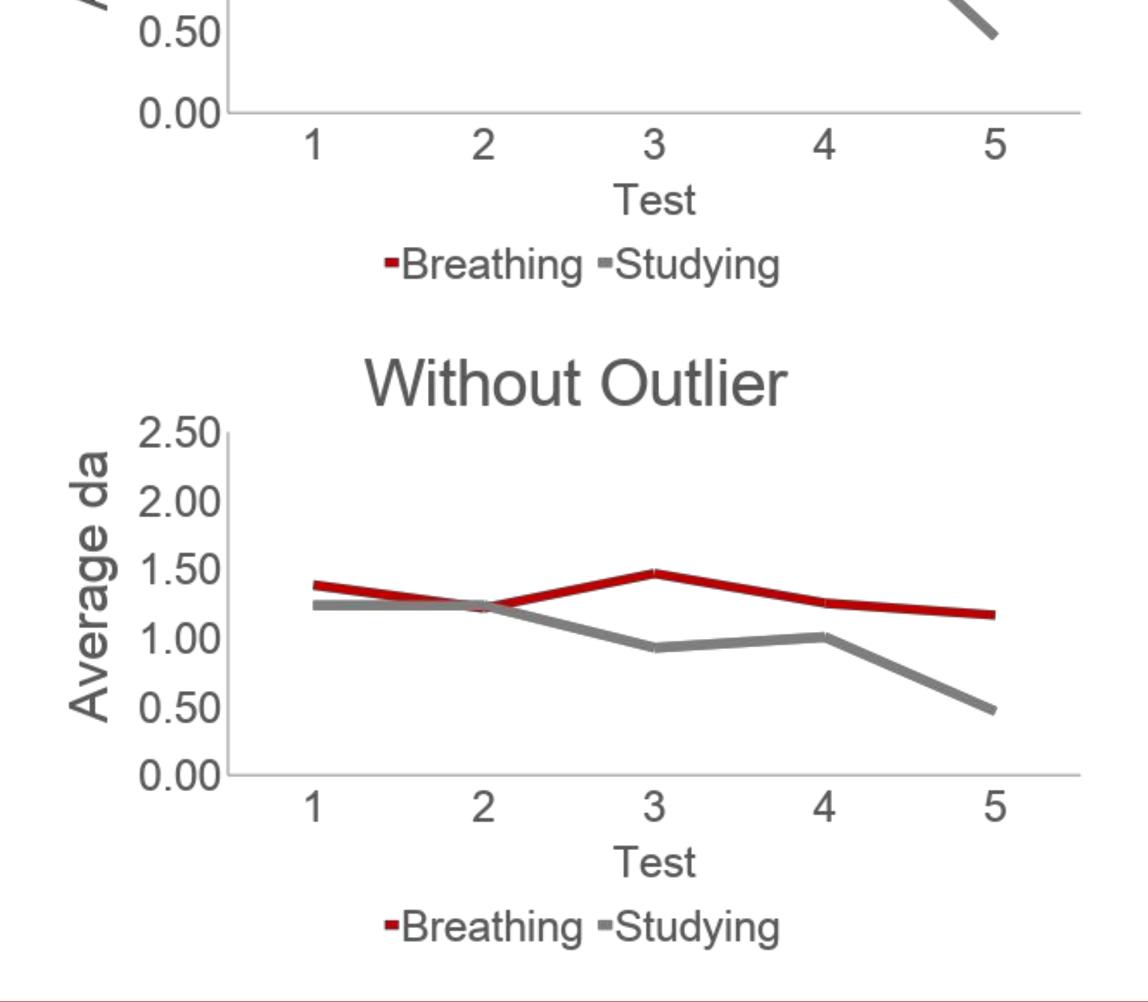
### Introduction

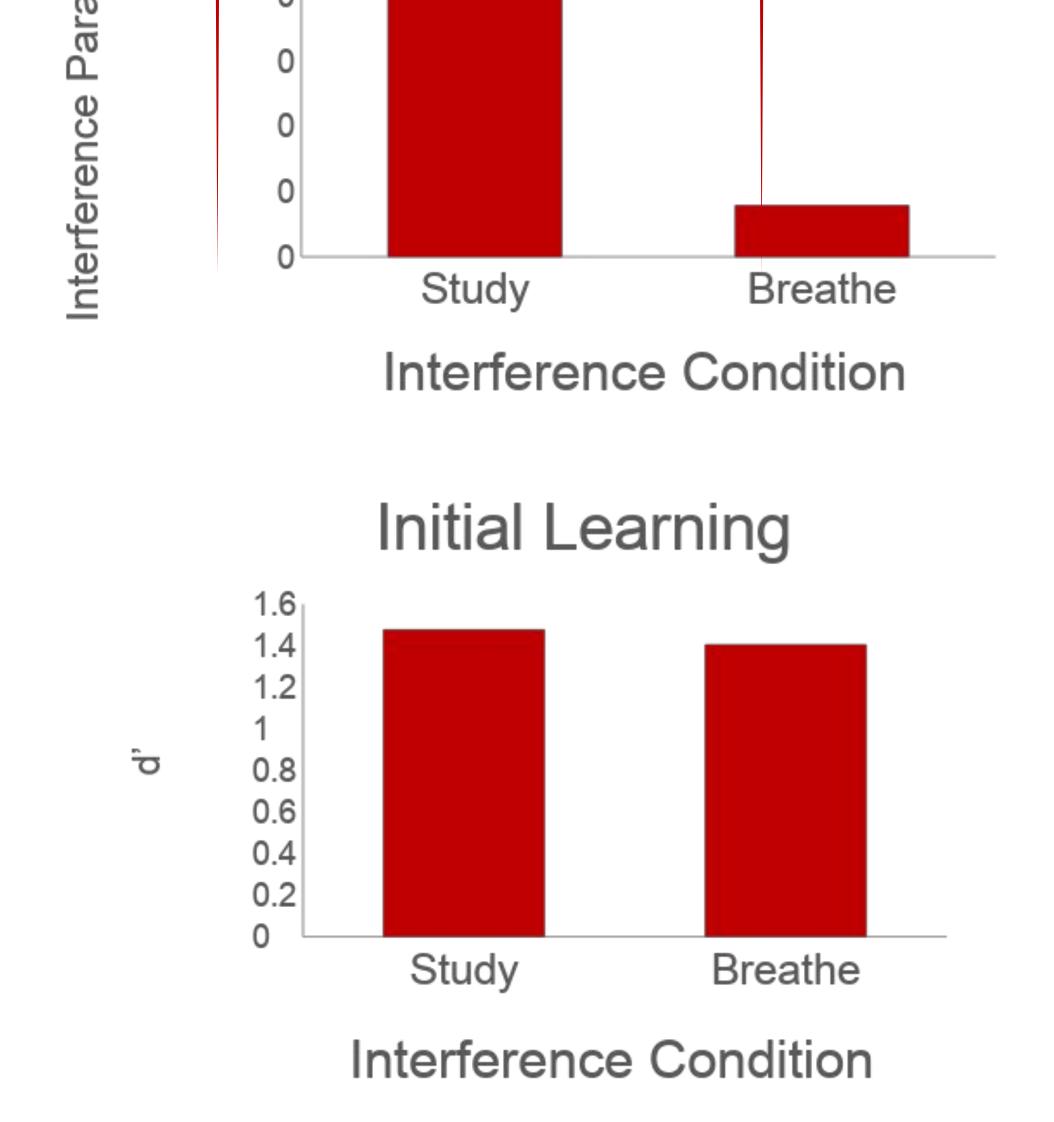
- Two explanations have been proposed to explain forgetting: decay
  (forgetting occurs as a function of time) and interference (mental
  activity can impinge on the consolidation of a recently acquired
  memory)
- Wickelgren (1974) proposed a model of forgetting which suggests that forgetting is a function of both decay and interference, best expressed as a power-exponential function
- The present research will be the first to directly examine whether
   Wickelgren's model accurately predicts the observed effects of these
   two components on forgetting
- This research will further the study of human memory by improving current models, and helping to resolve the debate surrounding decay and interference

With Outlier



#### Results





Interference

# Discussion

- Parameter estimates revealed that there was greater interference in the study condition when compared to the breathing condition, as predicted
- While the current research examines Wickelgren's model in the context of item recognition, future research will also include associative recognition
- In the context of associative recognition, we expect to find that interference will remain higher in the study condition when compared to the breathing condition

#### References

Wickelgren, W.A. (1974). Single-trace fragility theory of memory dynamics. *Memory & Cognition*, 2, 775–780.

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