

12-9-2022

Testing Wickelgren's Model of Interference and Decay

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Recommended Citation

Hull, Gabriel and Lacy, Isabella, "Testing Wickelgren's Model of Interference and Decay" (2022).

Undergraduate Research Symposium Posters. 144.

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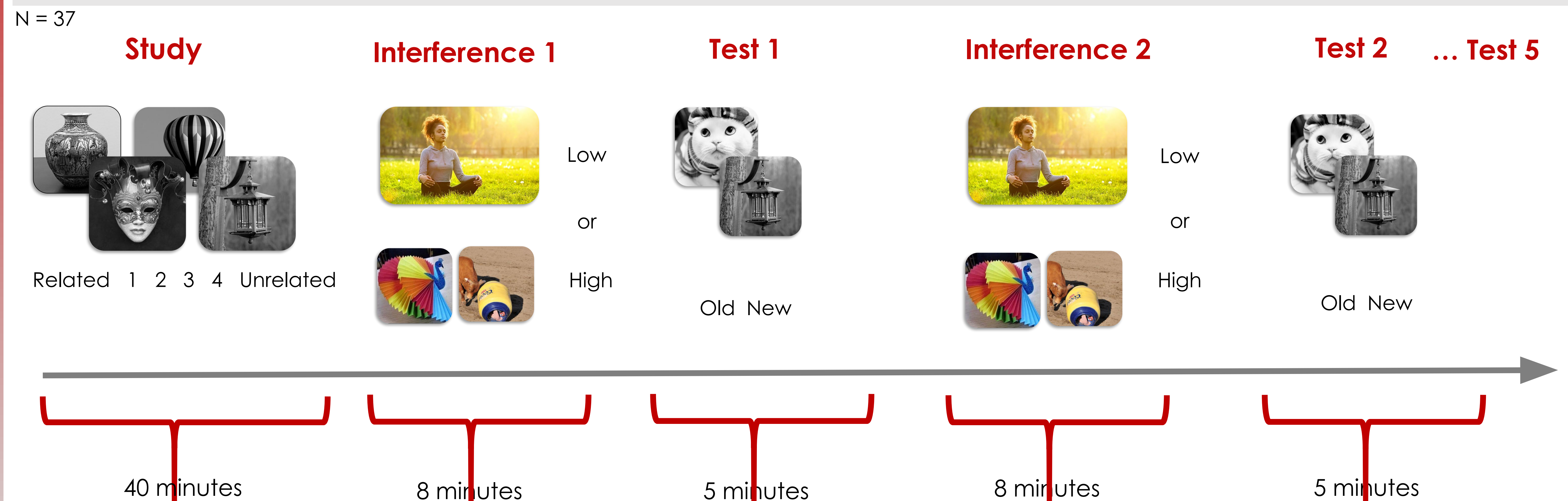
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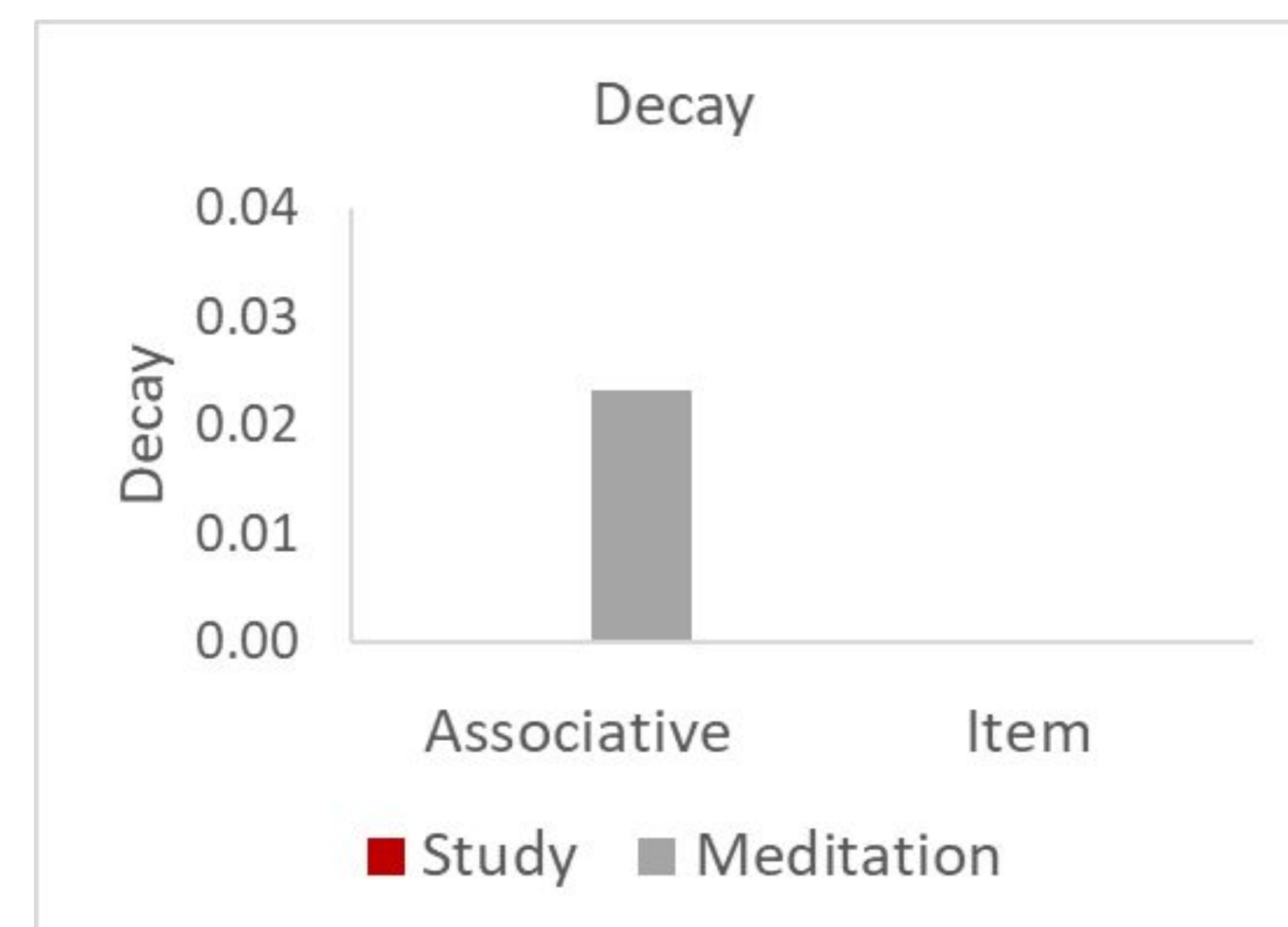
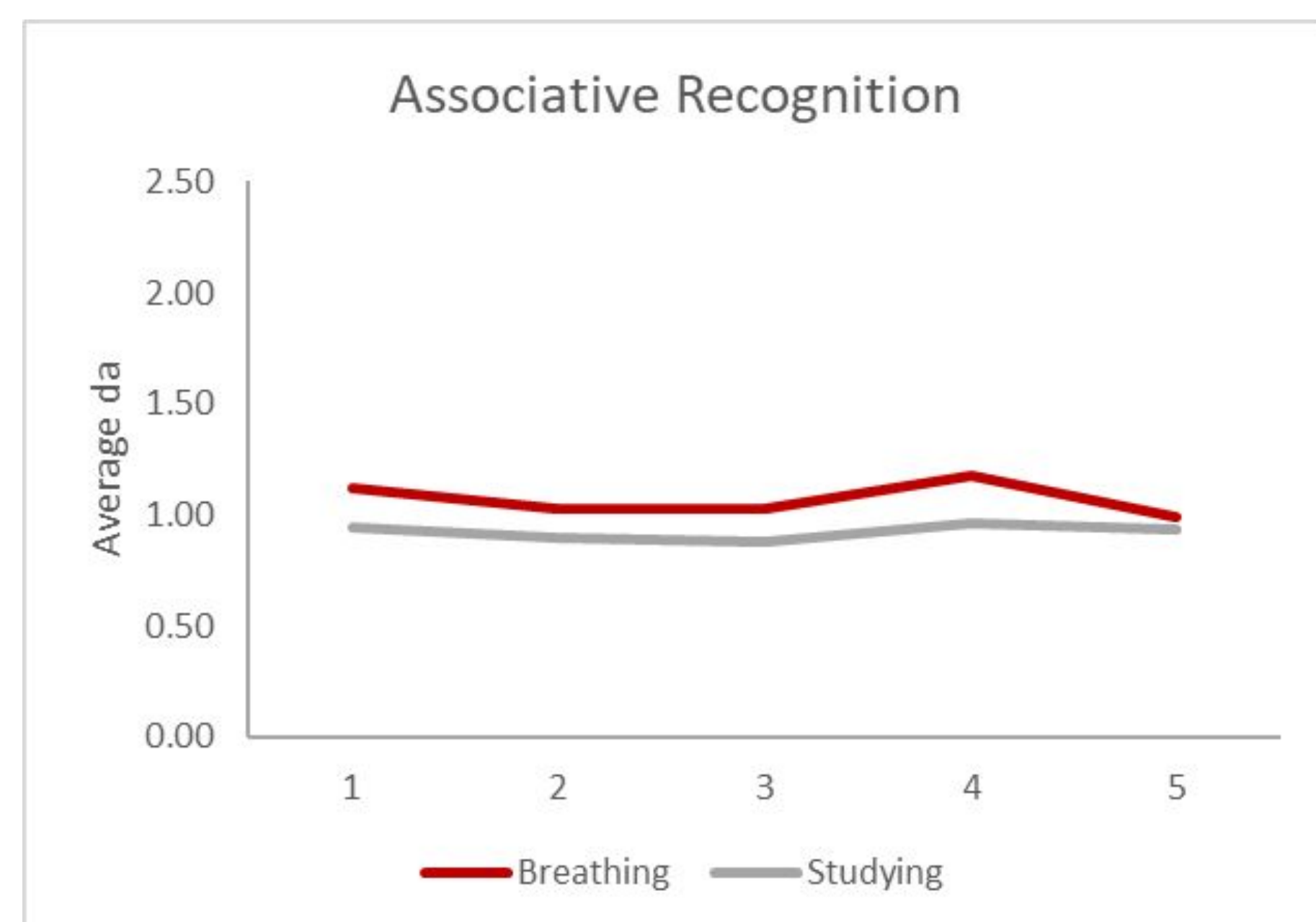
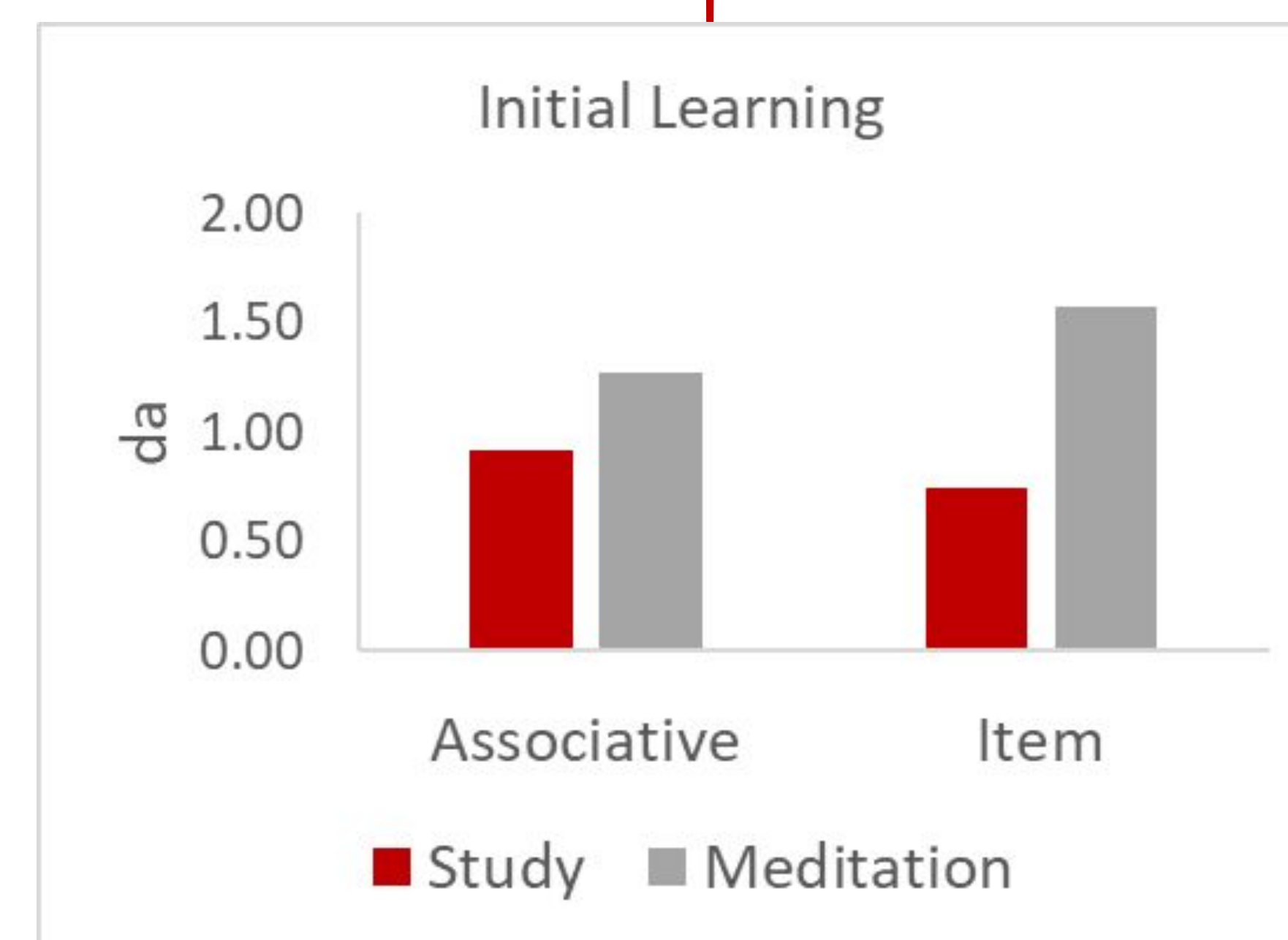
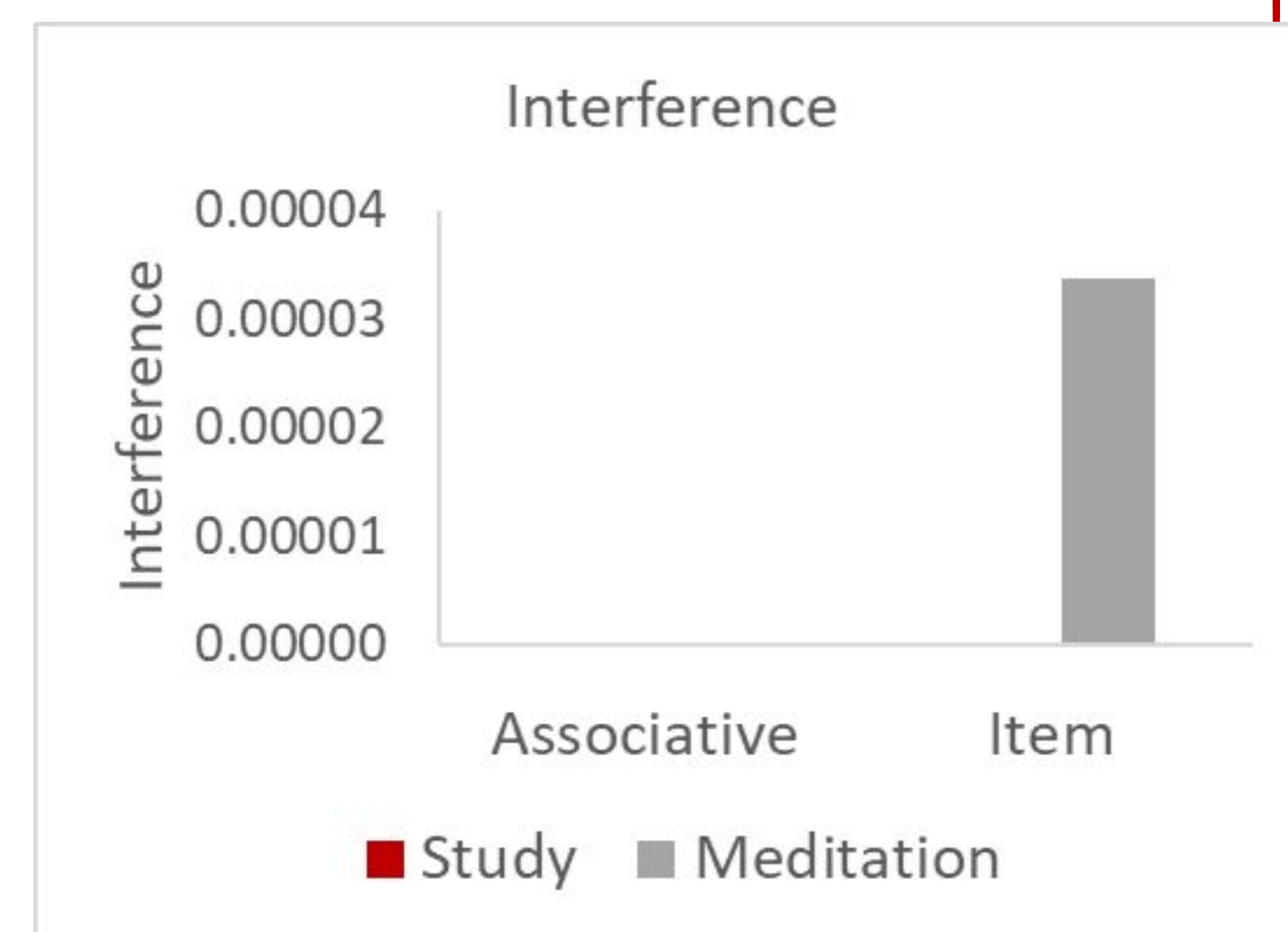
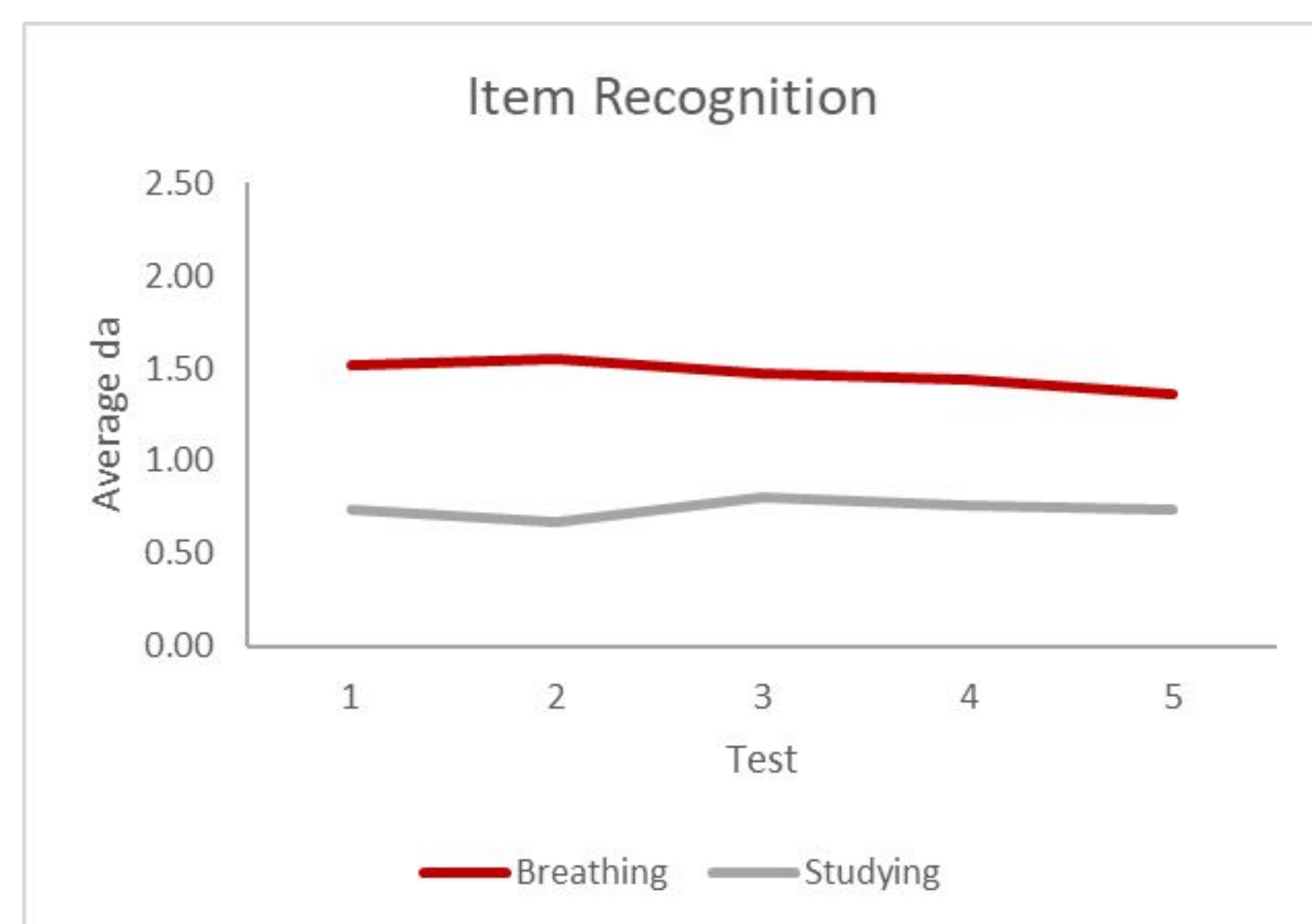
Introduction

- Two explanations have been proposed to explain forgetting: **decay** (forgetting occurs as a function of time) and **interference** (the 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

Method



Results



Discussion

- Parameter estimates revealed that there was greater interference in the item condition when compared to the breathing condition
- When examining the data, there is no apparent forgetting across the 5 tests in either condition, but interference affects item recognition more than associative recognition
- Future research will continue to examine Wickelgren's (1974) model in the context of item and associative recognition using a larger number of participants for each condition, allowing for more model specificity

References

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