

Reevaluating Restudy vs Testing: The Benefit of Semantic Engagement During Repeated Study

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Introduction

- Testing leads to higher rates of recall and faster retrieval times (RT) compared to passive restudy.
 - Stronger effect after repeated rounds of testing
- Are participants engaging with the material during Passive Restudy?
 - Current literature may overestimate the benefits of testing over restudy due to lack of engagement

Research Question: Does inducing semantic engagement during restudy improve recall and retrieval speed compared to passive restudy & retrieval practice?

Design

Exp1

Between Subjects

- IV 1: Study method
 - Passive Restudy, Engaged Restudy, Retrieval Practice
- IV 2: Practice Rounds
 - 1 Round vs 4 Rounds
- 259 Undergraduate participants
- 76 word-pairs: forward (.027) and backward (.029) associative strength

Exp 2

- Same materials and design, controlled time on task (TOT)
- 239 Undergraduate participants

Materials

Power - Circuit

Passive Restudy

Power - Circuit

Can one of these be found in a house?
Type 1 for YES, 0 for NO

Semantic Engaged Restudy

Power - ?

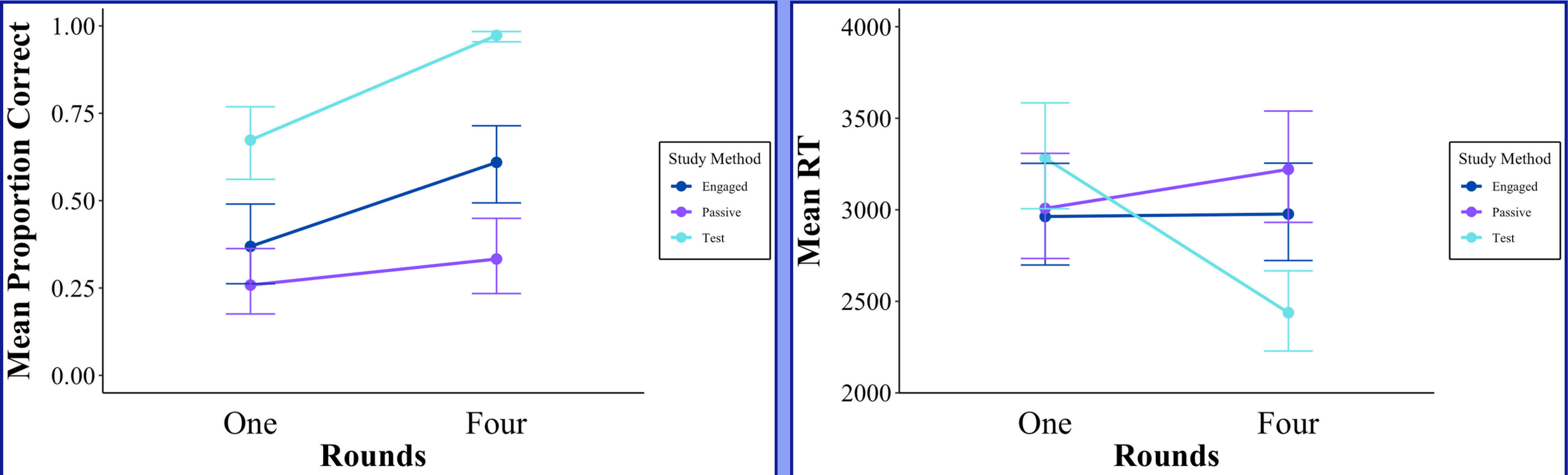
Type Answer

Retrieval Practice

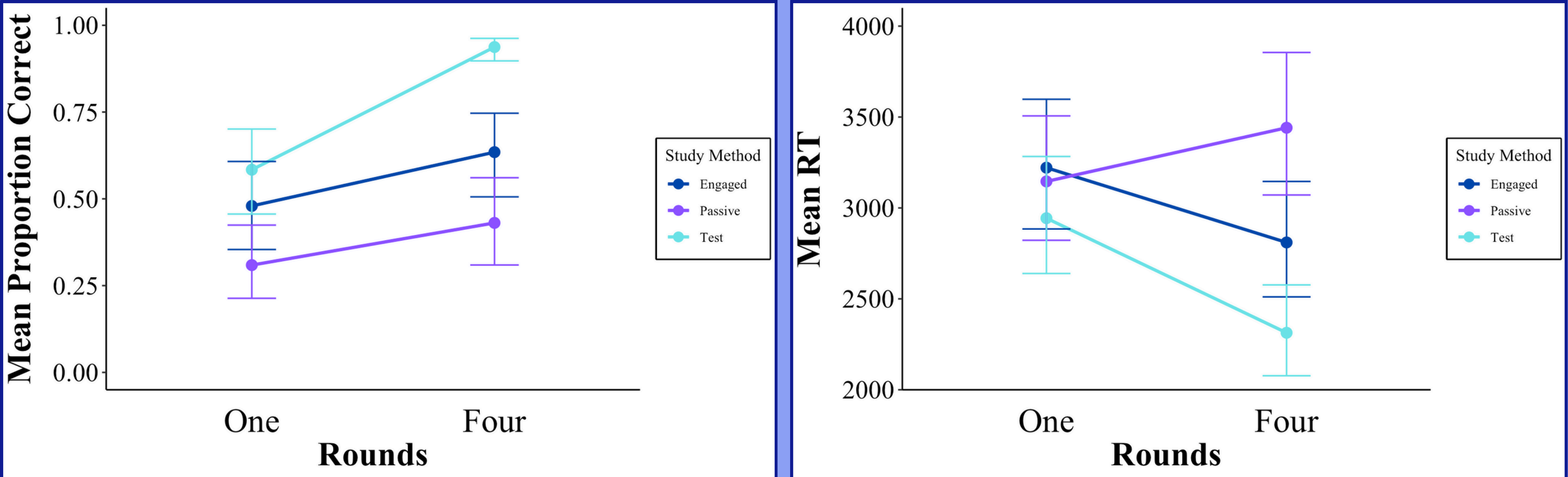
Results

*Error Bars represent CI for GLMM and LMM Marginal Means

Experiment 1



Experiment 2 (Controlled TOT)



Discussion

Accuracy

- Retrieval Practice led to better performance compared to both Engaged and Passive Restudy
- Overall, Engaged Restudy outperformed Passive Restudy
 - mixed evidence of interaction for Engaged Restudy

RT

- Participants produced faster RTs in Retrieval Practice group compared to Engaged and Passive Restudy
- Mixed results for RT improvement in Engaged Restudy

Opens the door to explore optimized forms of restudy that may be comparable to retrieval practice

Key Takeaway

Engaged Restudy helped close the gap between Passive Restudy and Retrieval Practice, but doesn't eliminate the Testing Effect



SCAN ME!