

Context-dependent use of the Memorizing Effort Heuristic

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* indicates $p < .05$ ** indicates $p < .01$ *** indicates $p < .001$

Background and Rationale

Memorizing Effort Heuristic

- Individuals interpret the amount of effort (i.e., study time) they invest in a given item as indicative of its future memorability (Koriat et al., 2006)
- Results in a negative relation between study time and judgments of learning (JOLs)

The influence of context?

- Koriat (2008): Presented difficult word pairs in isolation and observed a negative ST-JOL relation
- Ackerman (2014): Presented difficult word pairs intermixed with relatively easier items and observed a positive ST-JOL relation

Research Question

Does the context in which items are studied differentially impact the way in which individuals interpret their study effort?

Re-analysis of Laursen & Fiacconi (2021)

Easy (entirely related)
Word-Pairs

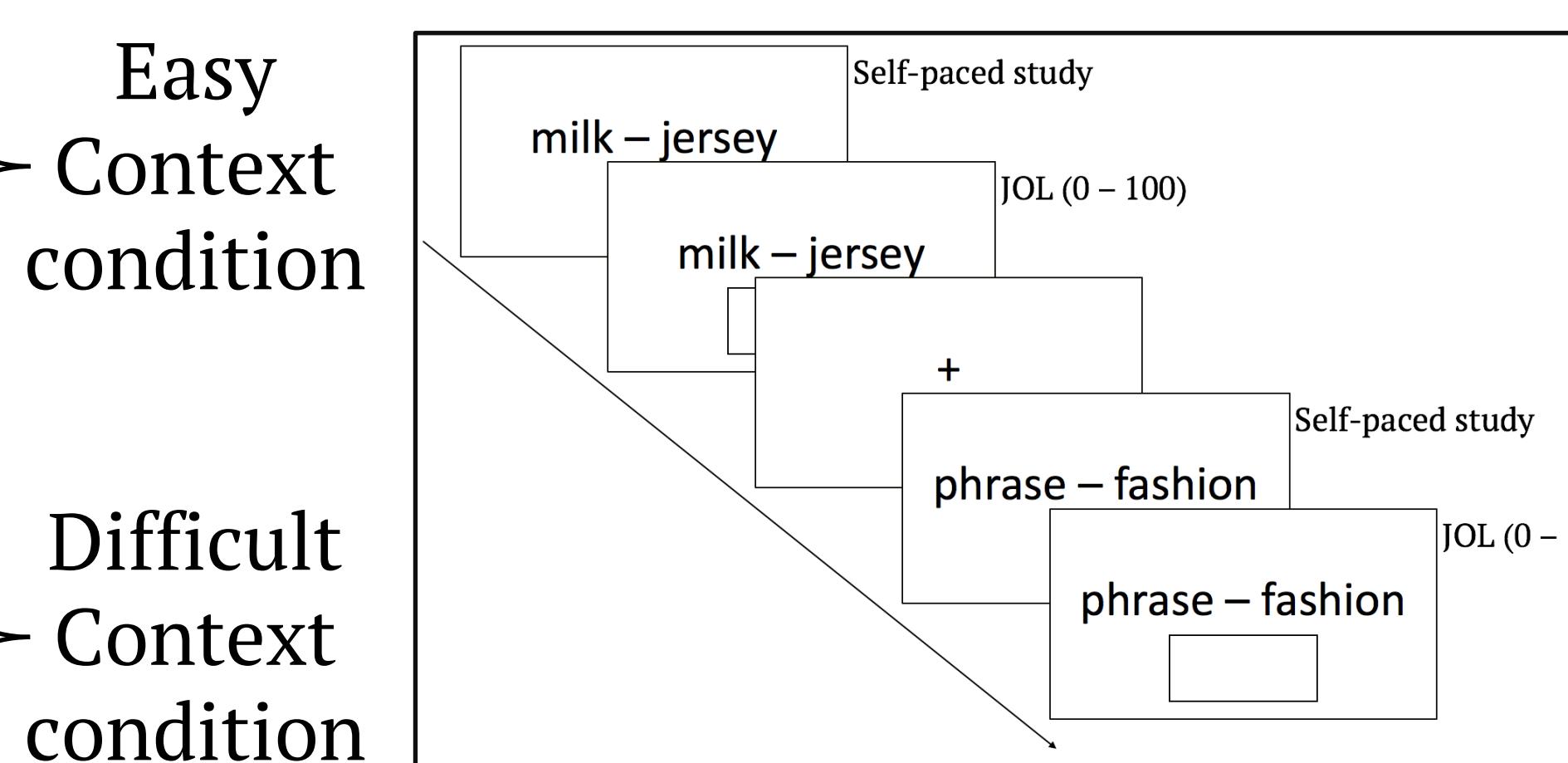
brother - sister

Medium
Word-Pairs

milk - jersey

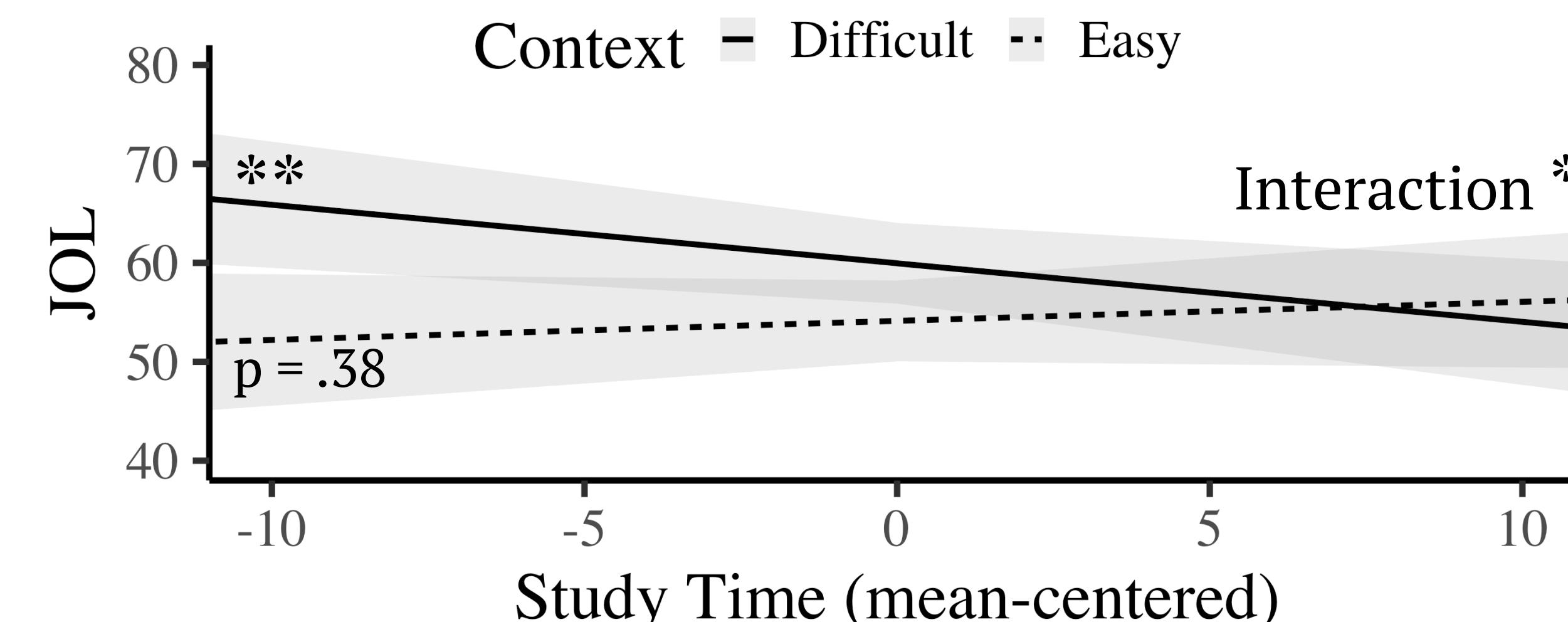
Difficult (entirely unrelated)
Word-Pairs

phrase - fashion

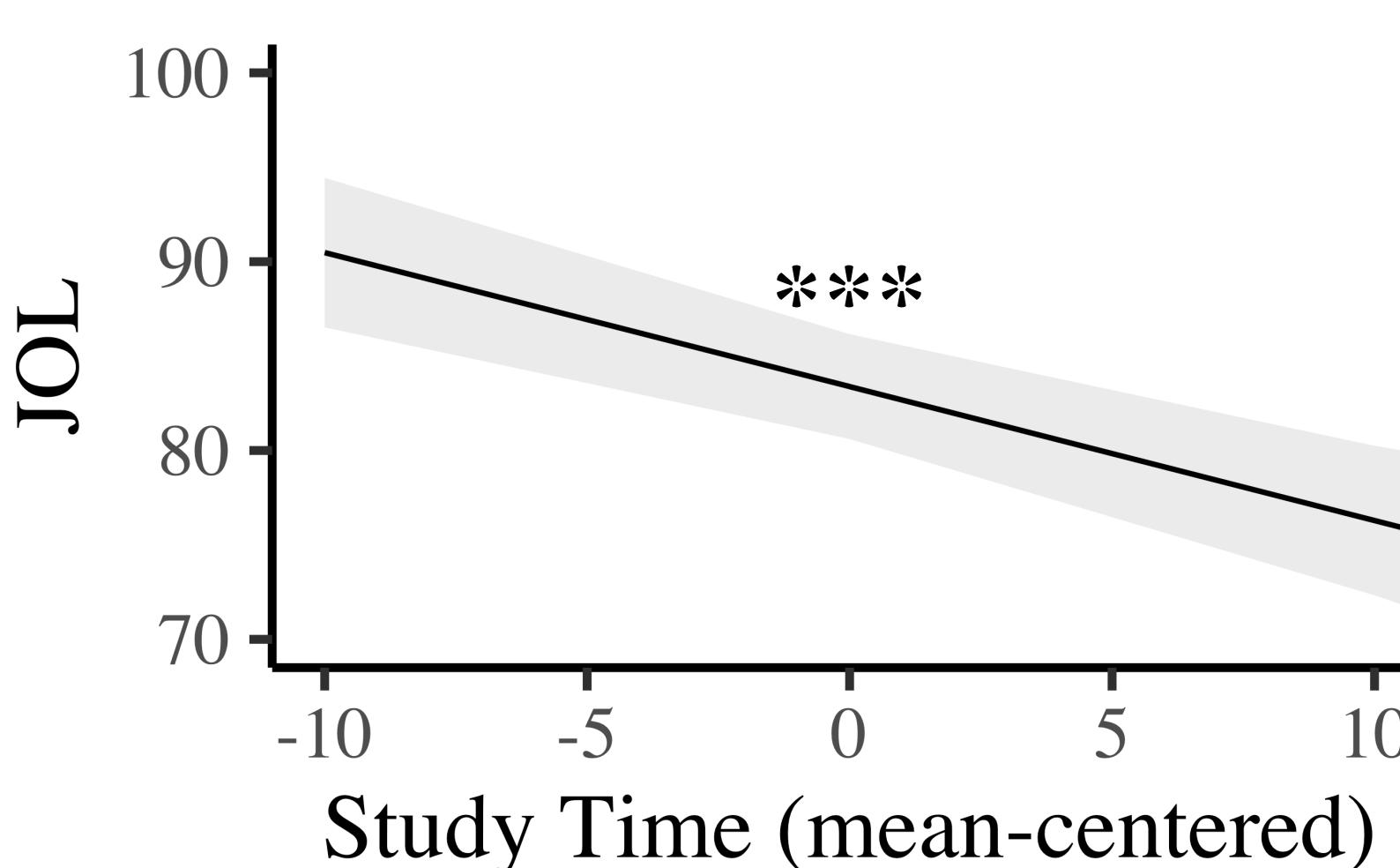


Results: Relation between Study Time and JOLs

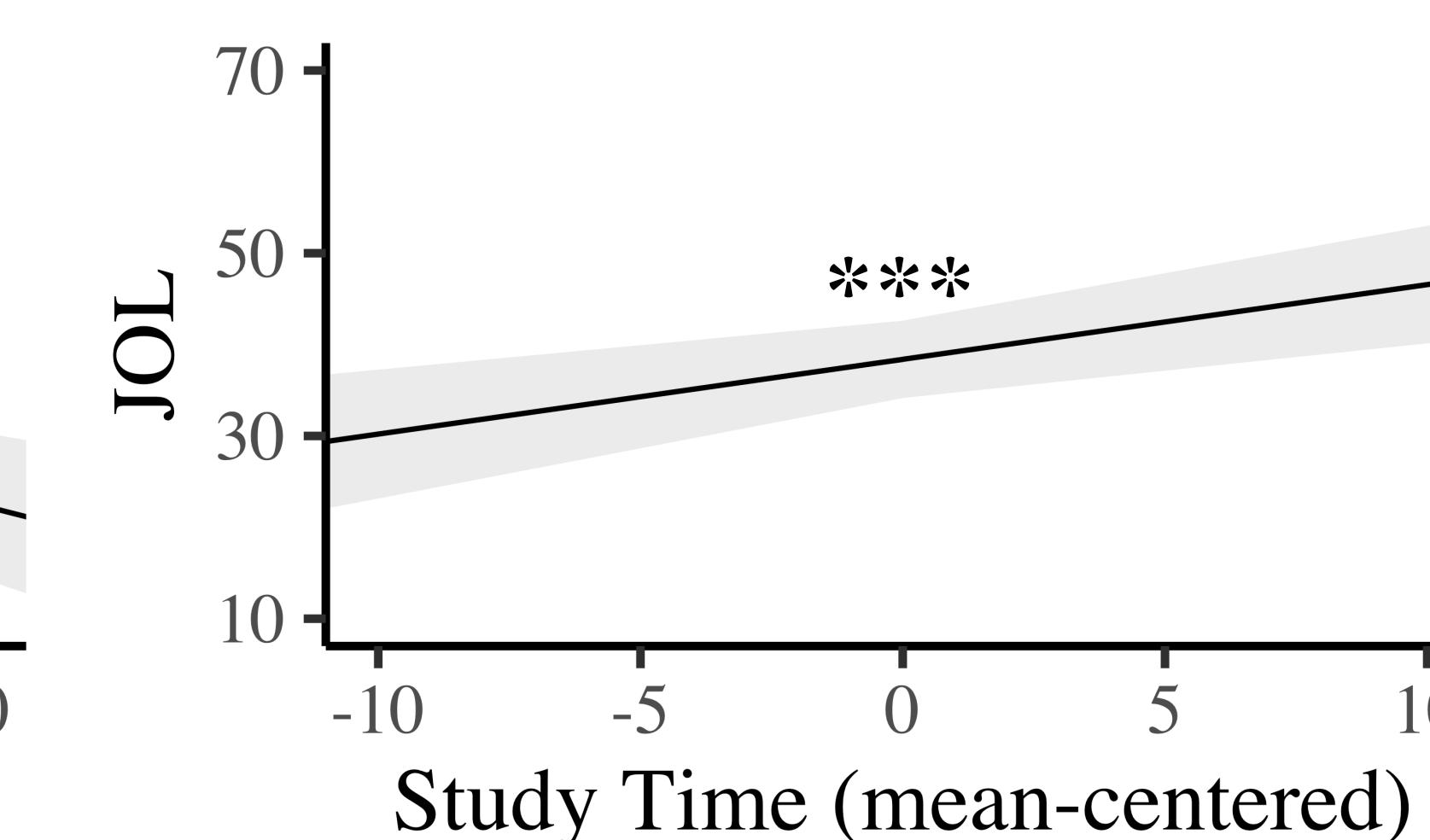
Medium Items



Easy Items



Difficult Items



Experiment 1 (N = 100)

Materials

Easy (entirely related)
Word-Pairs

brother - sister

Difficult (entirely unrelated)
Word-Pairs

phrase - fashion

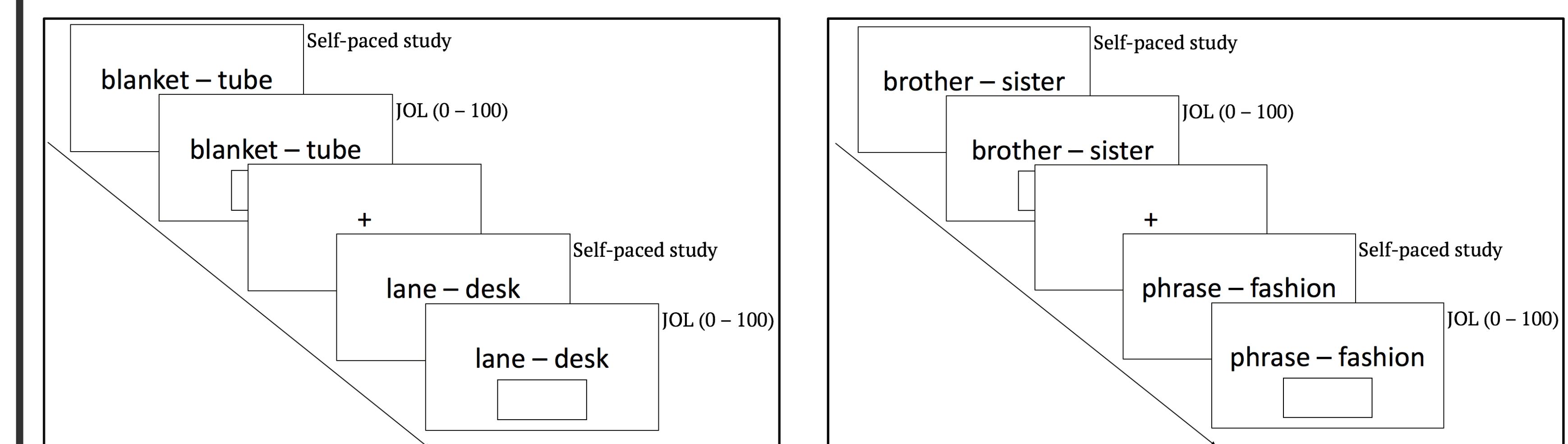
Procedure

Isolated condition

24 Difficult word pairs

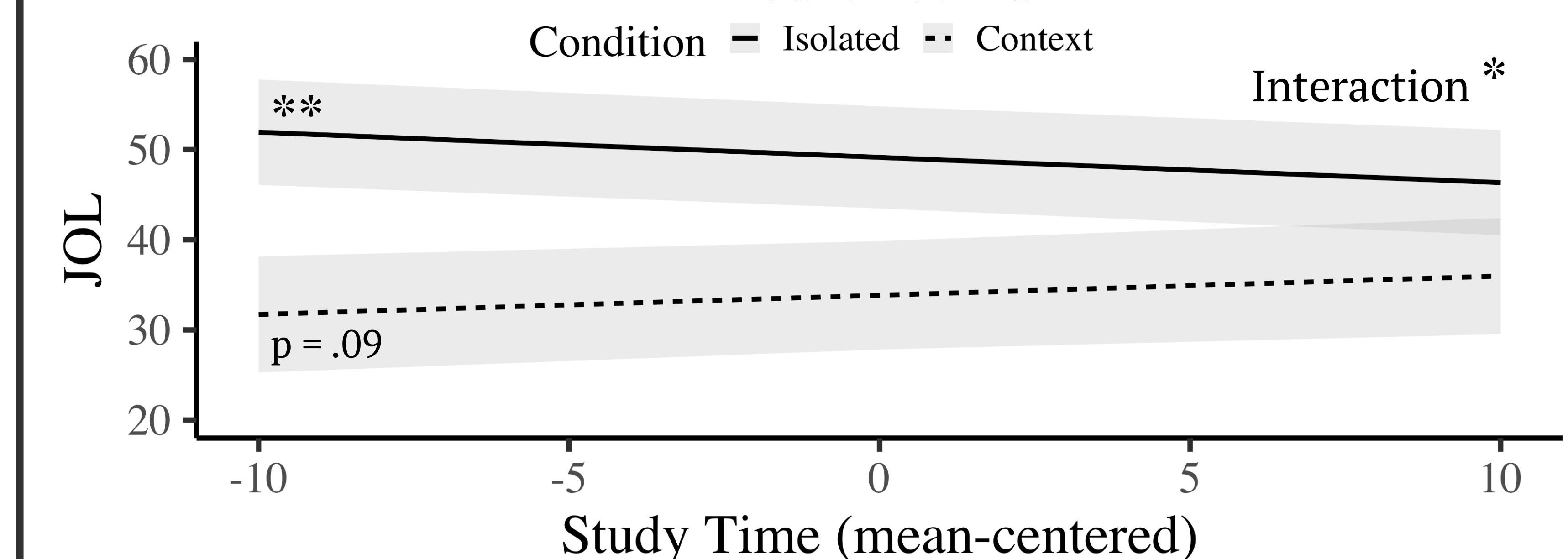
Context condition

24 Difficult word pairs
+
24 Easy word pairs

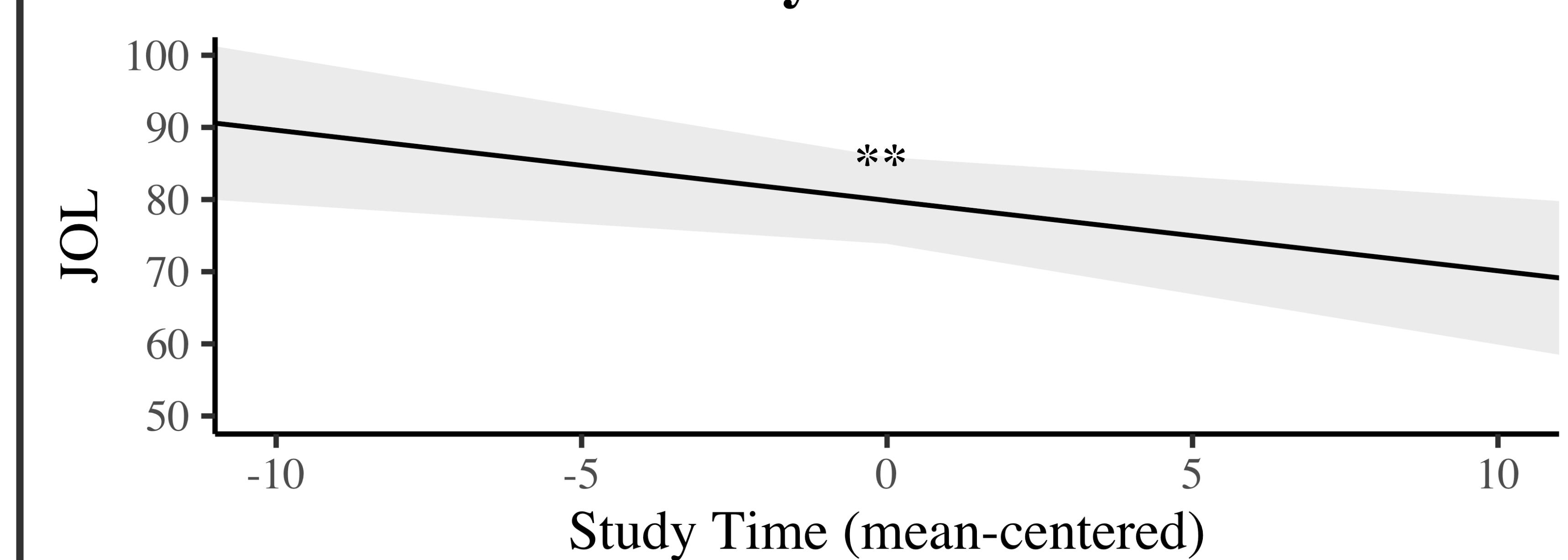


Results: Relation between Study Time and JOLs

Difficult Items



Easy Items



Experiment 2 (N = 108)

Research Question

Does previous experience with context impact individuals' predictions of memory performance for others?

Procedure

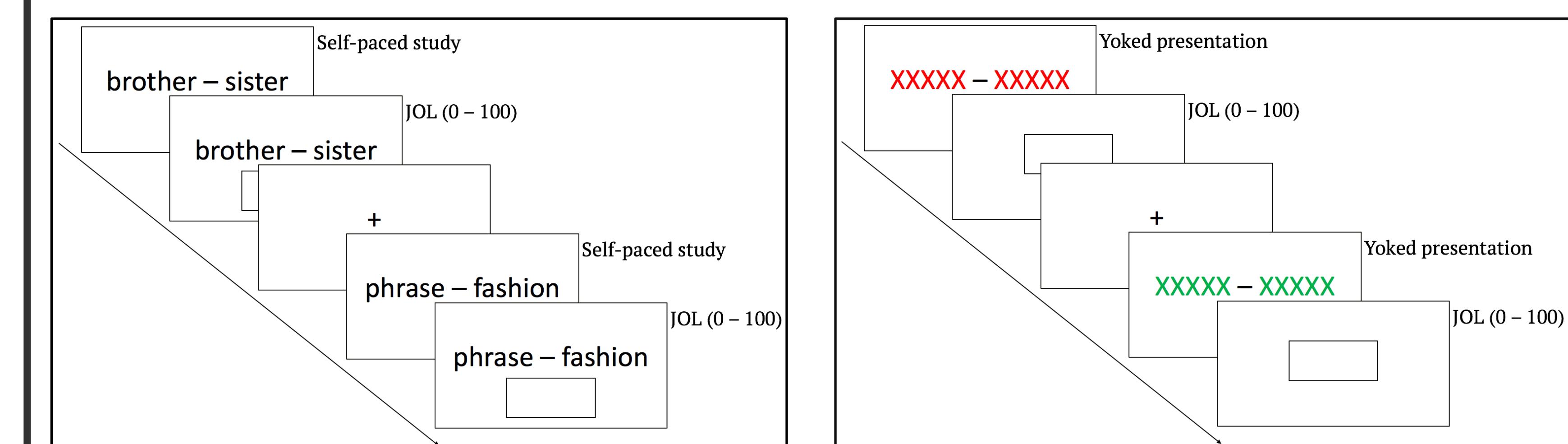
Study Phase

Identical to Context condition from Experiment 1

Observation Phase

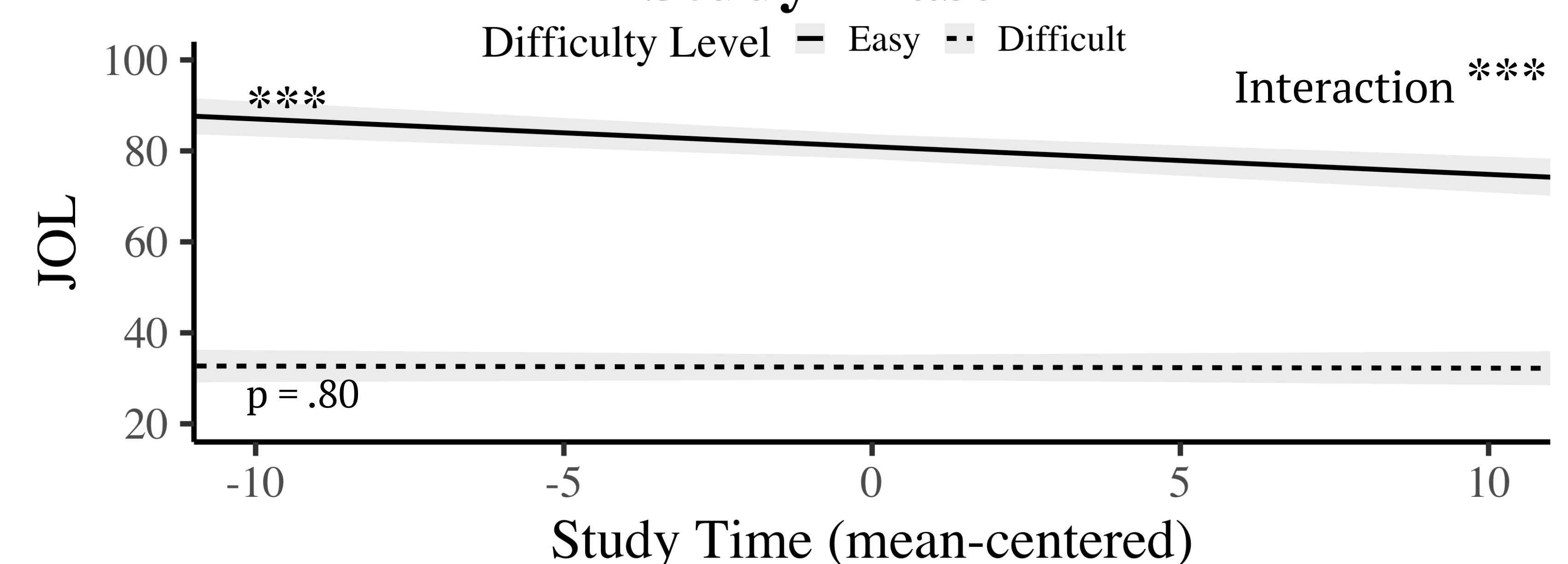
Study time yoked to 1 trial from previous study phase

Provide JOL rating the other participant gave

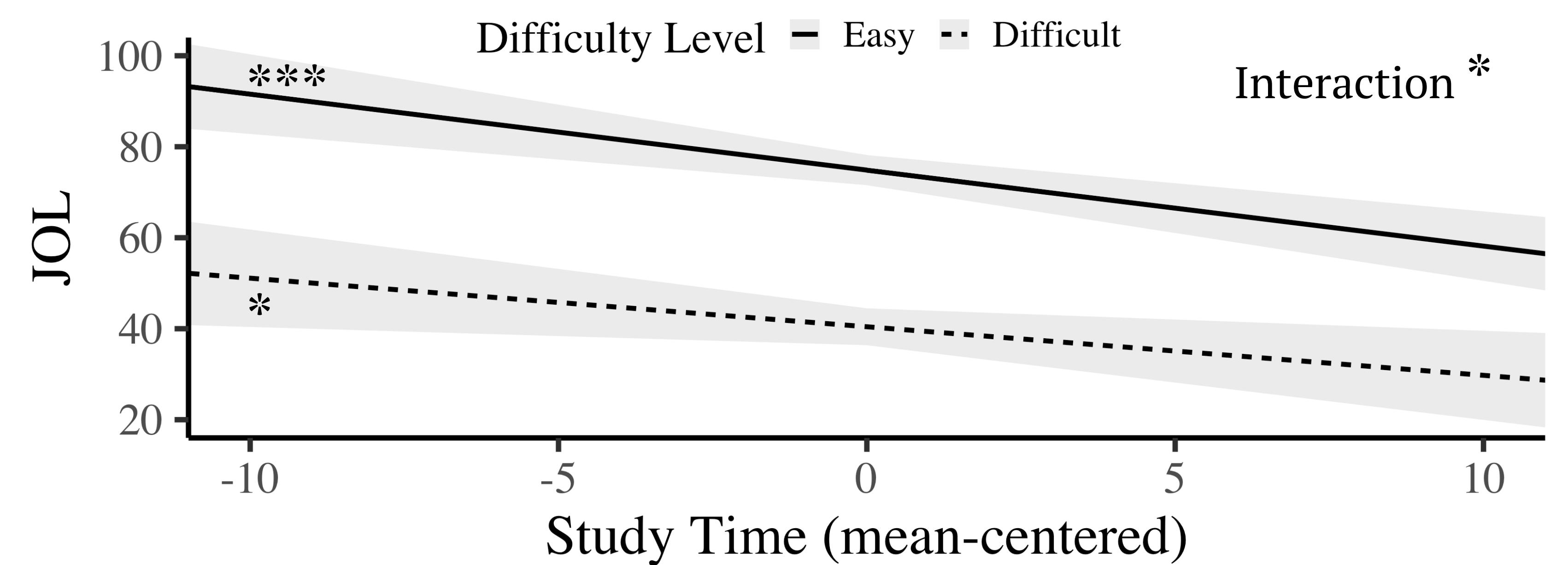


Results: Relation between Study Time and JOLs/JOLs for Others

Study Phase



Observation Phase



Conclusions

- The memorizing effort heuristic may not be applied as universally as thought – its use varies as a function of list context
- When making predictions regarding others' memory performance, individuals do not adapt their use of the memorizing effort heuristic in the same context-dependent manner as when they predict their own memory performance

Questions?

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