

Contextual Influences on Memory Predictions and Study Time Allocation



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Background and Rationale

Judgments of learning (JOLs) refer to individuals' predictions of future memory performance based on their evaluation of prior learning

The *cue utilization framework* states that individuals use a variety of cues and heuristics to make JOLs

- *Intrinsic cues*: include characteristics of stimuli that disclose its ease/difficulty of learning (e.g. item relatedness)
- *Extrinsic cues*: include the conditions of learning (e.g. the context a stimulus is presented in)
- ❖ Although there is evidence that individuals use cues intrinsic to a given stimulus to predict its future memorability, it remains unclear the extent to which individuals use extrinsic cues to predict future memory performance

Rationale: Manipulating list context (i.e. an extrinsic cue) may differentially impact how individuals allocate study time and evaluate their learning

Koriat, 1997

Method and Procedure

Pilot Data (n = 10)

Wordpair Type

Medium1

Medium2

Wordpair Type

Medium1

Medium2 Difficult

*** Indicates p < .001

Difficult

Easy

Ease of Learning Judgments

Mean Ease of Learning Judgmen

Relatedness Judgments

Mean Relatedness Judgment

Easy (entirely related)
Word-Pairs

brother - sister

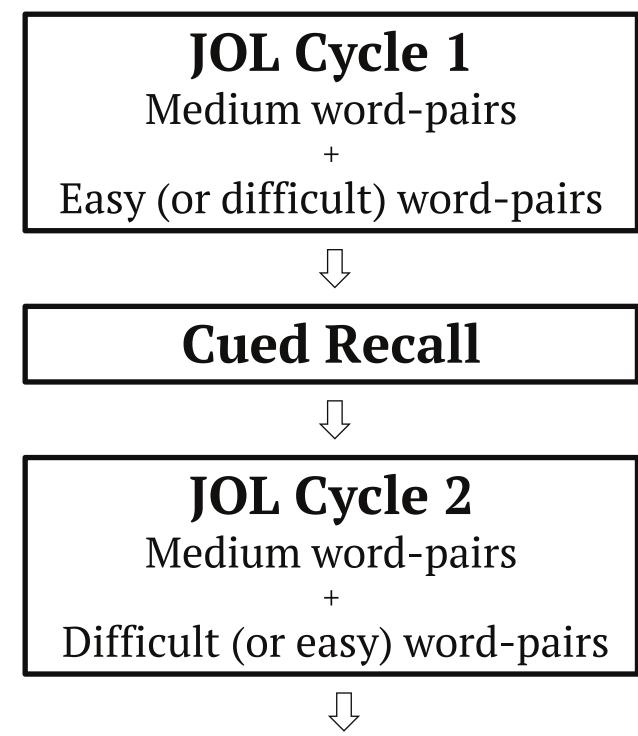
Medium Word-Pairs

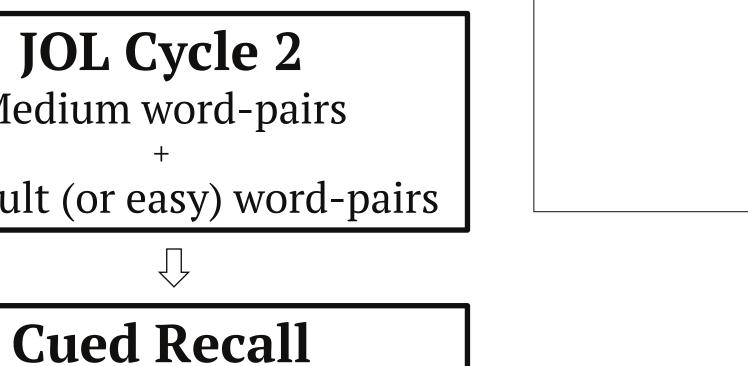
milk - jersey

Difficult (entirely unrelated)
Word-Pairs

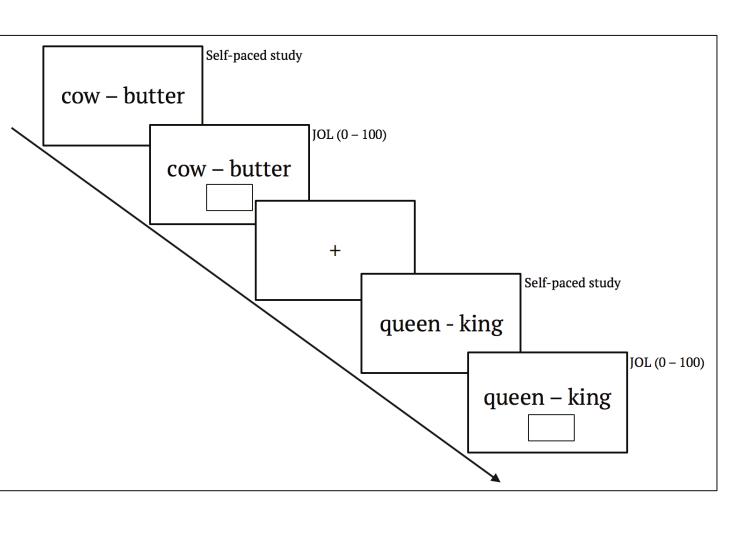
phrase - fashion

Method and Procedure Cont'd



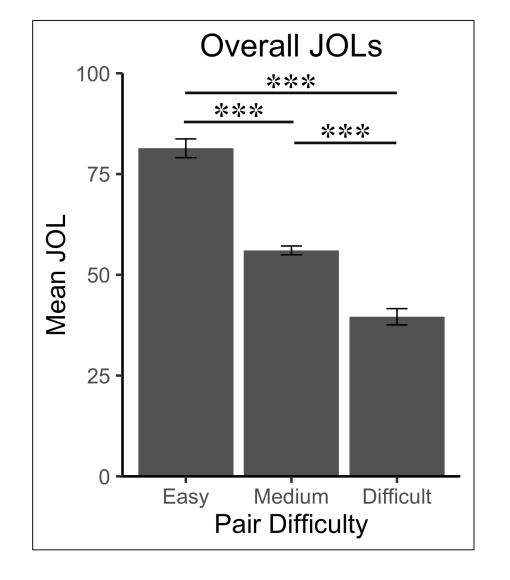


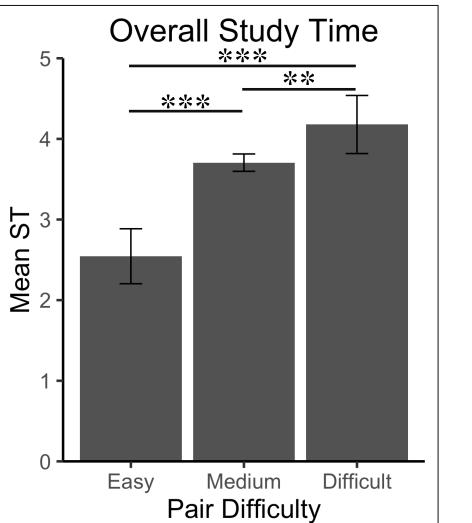
JOL Procedure

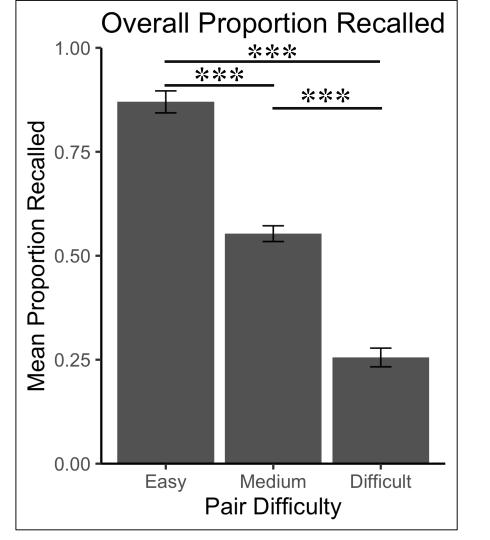


Results (n = 100)

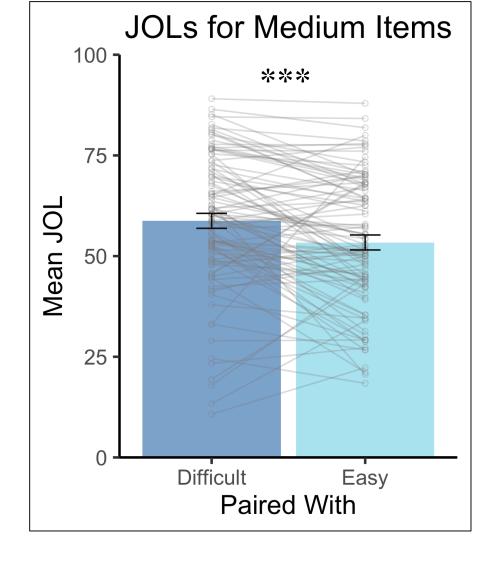
Overall Results

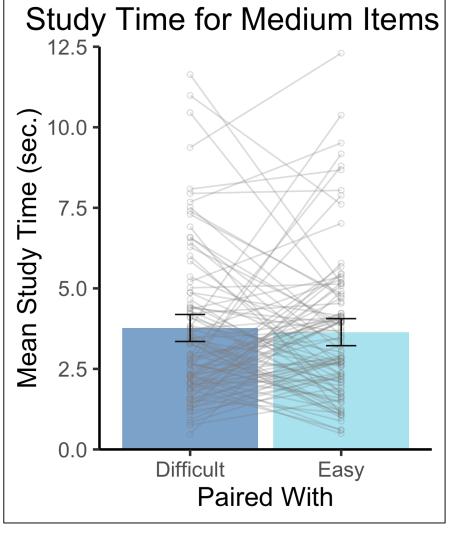


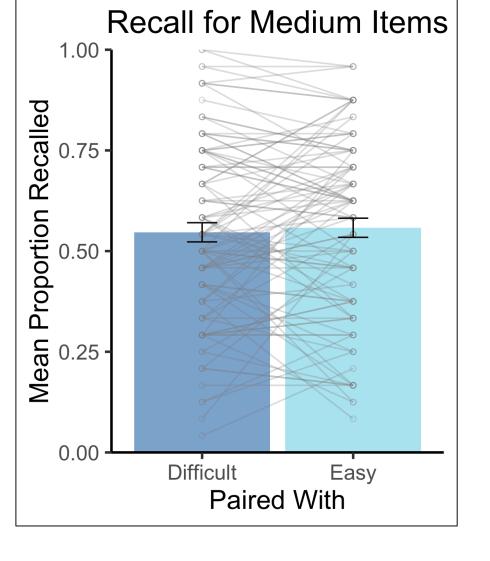




Effect of List Context

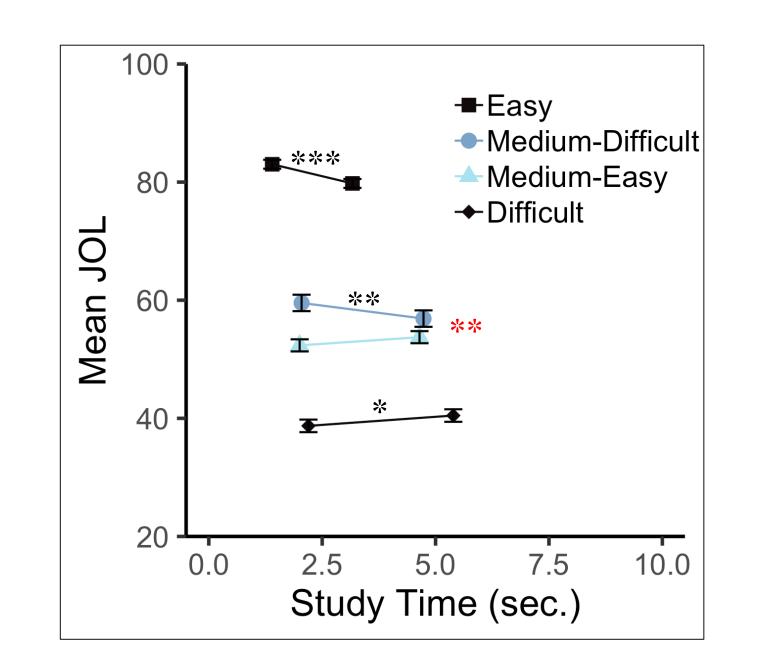




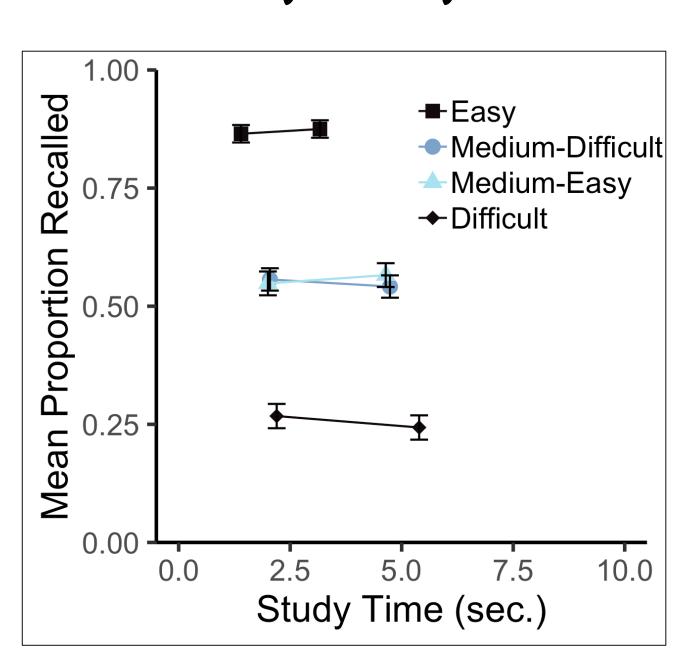


Results Cont'd (n = 100)

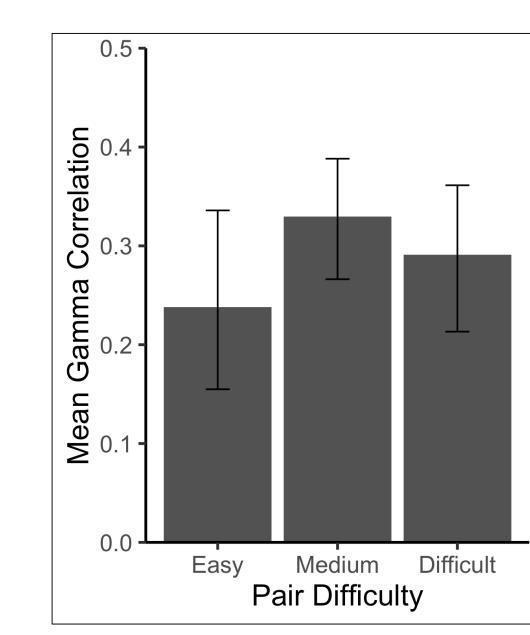
JOLs by Study Time



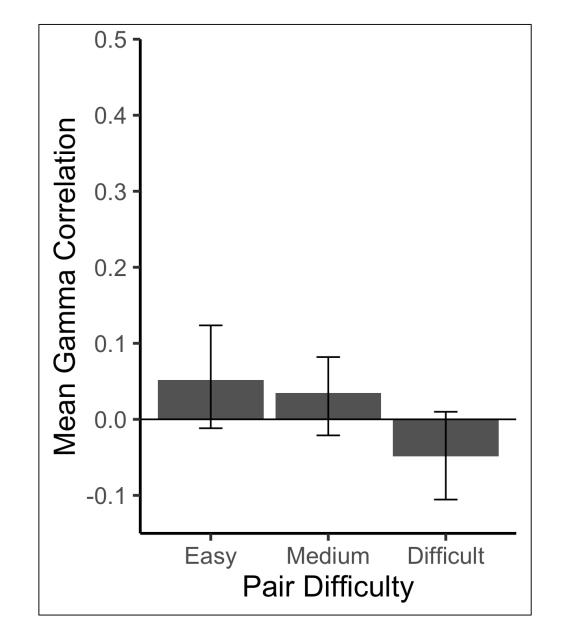
Recall by Study Time



Correlating JOLs and Recall



Correlating Study Time and Recall



* Indicates p < .05 ** Indicates p < .01 ** Indicates significant interaction at p < .01 *** Indicates p < .001 Error bars represent 95% CI

Conclusions & Future Directions

- These results demonstrate that at least one type of extrinsic cue (e.g. list context) can impact individuals' judgments of learning
- Context did not impact study time; however, individuals' interpretations of study time were differentially impacted by the context in which an item was presented
- ❖ Future studies should seek to understand the role that learners' expectations play when interpreting study time as a cue for judgments of future memorability