The Impact of Metacognitive Judgments on Restudy Decisions and Learning Outcomes

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Background

- An important component of self-regulated learning is deciding what items to restudy.
- Our lab has previously shown that learners who make RCJs are more likely to drop known items from study, whereas learners who make JOLs select to continue studying known items.
  - Retrospective Confidence Judgments (RCJs) - evaluations of previous retrieval
  - Judgment of Learning (JOLs) - predictions of future retrieval
- Previous studies have shown that there are learning disadvantages to dropping items from study.

Research Question

- When given the opportunity to restudy the selected items, do learners who make JOLs show better final test performance than learners who make RCJs?

Method

- 178 participants randomly assigned to conditions:
  - JOL (n = 60)
  - RCJ (n = 59)
  - No Judgement (n = 59)
- Dependent variables:
  - Restudy Decisions - Proportion of correct and incorrect items selected for restudy
  - Restudy Behaviors - Total time spent studying correct and incorrect items
  - Learning Outcomes - The accuracy of retrieval for each participant

Metacognitive judgments impact restudy decisions and restudy behaviors, however, differences do not generalize to differences in learning outcomes.
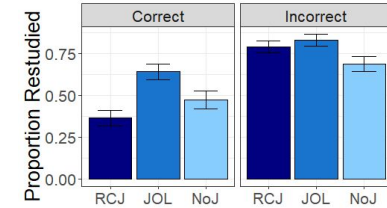
Procedure
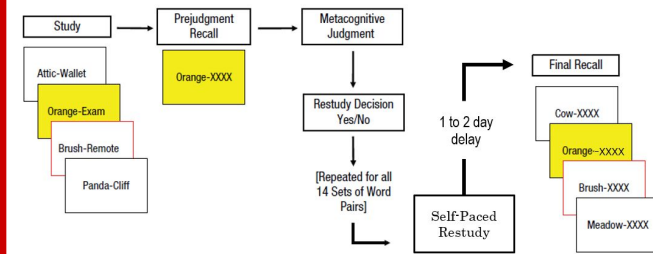
Results

Fig 1. Proportion of items selected for restudy conditional on prejudgement recall accuracy
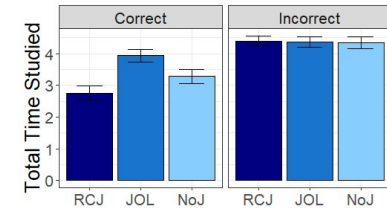

Fig 2. Total amount of time spent restudying conditional on prejudgement recall accuracy
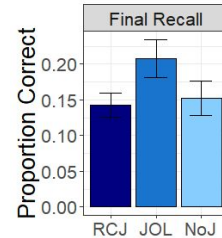

Fig 3. Final Recall Accuracy

Discussion

- Learners who make JOLs chose to restudy more items than other learners, particularly items they are retrieving correctly.
- Similarly, learners who make JOLs spend more time studying items they already retrieved correctly.
- Type of metacognitive judgment does not affect final recall accuracy or efficiency.