The role of retrieval during study: Evidence of reminding from self-paced study time and overt rehearsal

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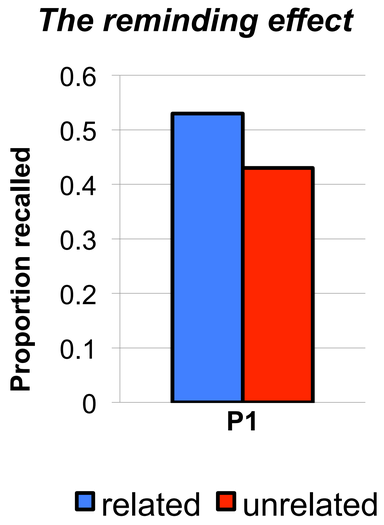
What is reminding?
The potential for events to effect retrieval of similar, earlier events.

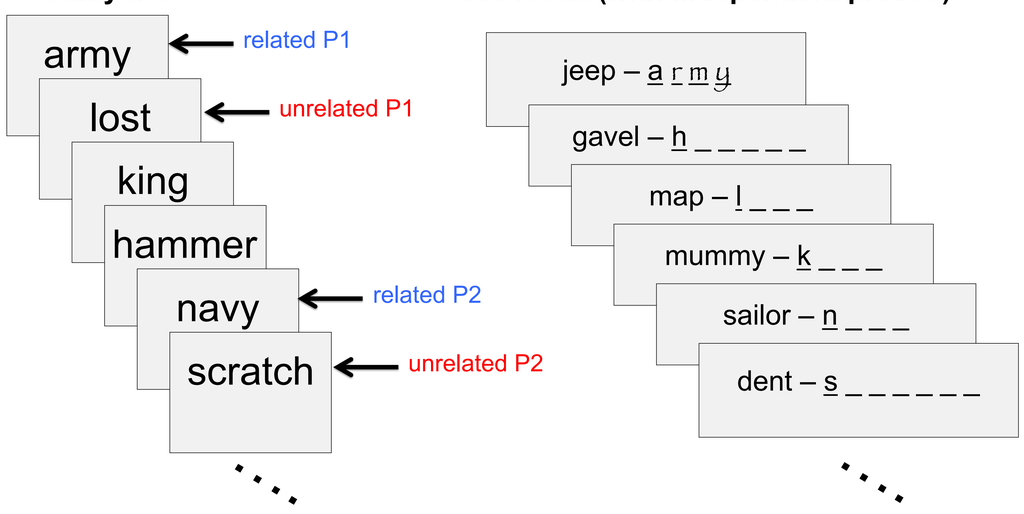
The reminding effect:
Memory for a stimulus (P1) is superior when followed somewhere in the list by a related stimulus (P2) (Tullis et al., 2014).

Current motivation:
Extant research on reminding relies entirely on measures collected during later memory tests.

The current project sought evidence of reminding *at the time of* reminding, during study.



General Procedure



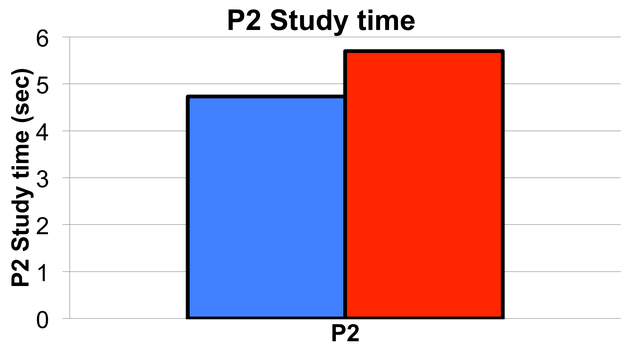
Conclusions

Participants spent less time studying a word when it was related to a previously studied item, and the time spent on P2 was related to memory for P1.

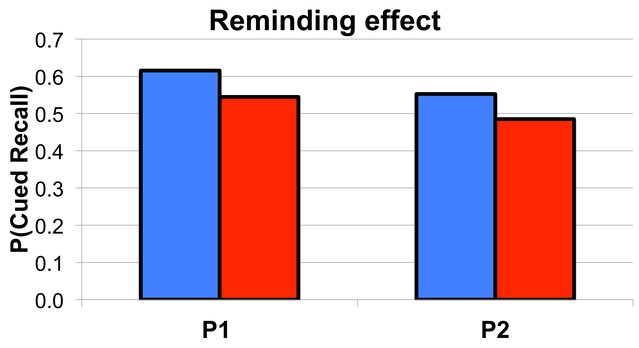
Participants rehearsed previously studied words when presented with related words later in the list, and these additional rehearsals enhanced memory for those earlier items.

Taken together, measures taken during encoding reveal how learners allocate study resources in a manner consistent with the principles of reminding theory (Benjamin & Tullis, 2010).

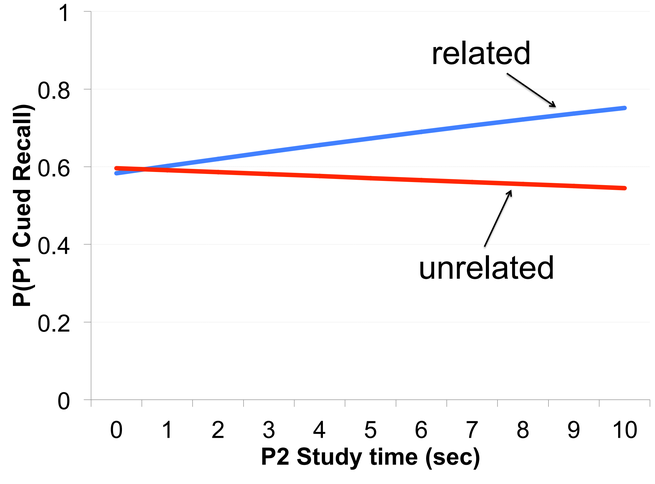
Experiment 1: Self-paced study time



Subjects studied P2 for less time when it was preceded by a related P1 than when it was preceded by an unrelated P1.

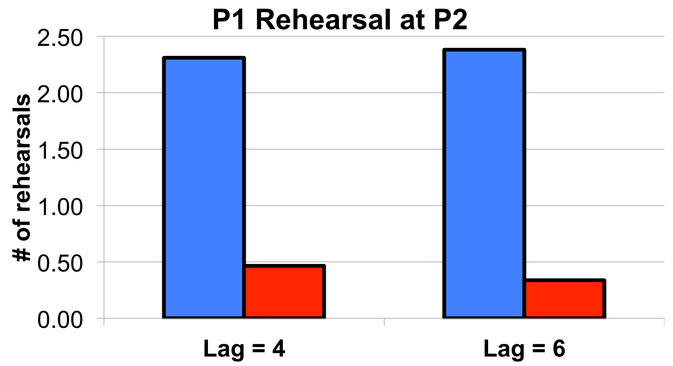


Subjects recalled P1 at a higher rate when it had been followed by a related P2 than when followed by an unrelated P2.

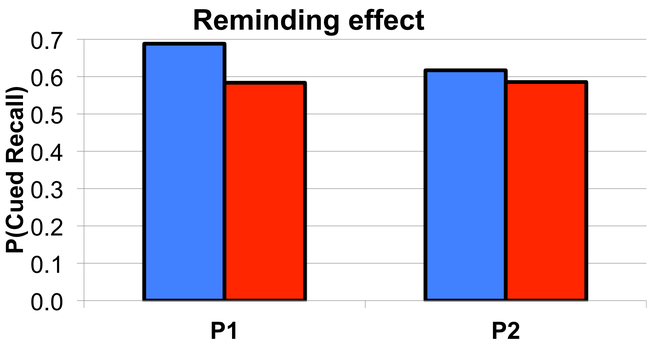


P2 study time predicted gains in memory for P1 when they were related but not when they were unrelated.

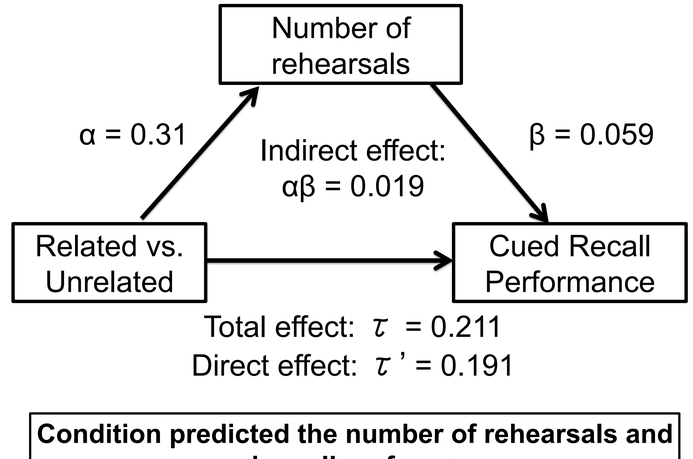
Experiment 2: Overt rehearsal



P1 was rehearsed more often during P2 presentation for related pairs.



Subjects recalled P1 at a higher rate when it had been followed by a related P2 than when followed by an unrelated P2.
(observed for a lag of 6, but not 4)



Condition predicted the number of rehearsals and cued recall performance.

The extra rehearsal given to a related item (partially) mediated the relationship between condition and memory performance.