Retrieval practice based on recognition memory: testing the retrieval effort hypothesis
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Experiment 1: recognition memory vs. restudying

- Between-subjects design, N = 76
- Recognition memory: typical Old/New task
- Matching for Age, Education, FSIQ, Verbal Memory
- Manipulation of the intervening tasks: 2 successive study trials (SSS), Group 1; 1 successive study trial + 1 successive test trial, Group 2
- Main outcome: Performance at final test (25 min. delay)

Results 1

- Before final test, study duration was on average 11 minutes in the « Study-Test » group, 7.4 minutes in the « Study » group and only 6.3 minutes in the « Test » group
- Still, « Study-Test » & « Test » conditions yielded better long-term memory (A,B), without increase in False Alarms (C), and « Test » condition led to better 25 minutes - retention (D)

Discussion

- Experiment 1 shows that the retrieval practice effect can be observed when retrieval is based on recognition memory rather than recall. Thus, learning does occur during recognition testing
- Importantly, both experiments show that the benefits of memory retrieval based on recognition memory are immune to negative side effects like extra false alarms
- When retrieval is constrained to fast and automatic processes (around 320 ms), thus being mostly familiarity-based, the generation of elaborative retrieval cues is somewhat effortful (controlled) processing and quite unlikely. Even when, extensive restudying does not outperform retrieval practice. Repeated automatic retrieval yields similar learning levels than extensive restudying, up to a 6 months delay

References

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