The influence of partial and distributed tests on learning and retrieval-induced forgetting

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The forward testing effect

The effect is often investigated in multi-list procedures, where studied lists are followed by a retrieval test, or a control task such as restudying, and learning is compared on the final list.

In most studies of the effect, tests include all material from the preceding list.

In educational settings, tests will typically include only some of the learned material, as well as material taught over multiple separate classes and lessons.

Testing of all studied material is not necessary to produce beneficial effects on new learning, or to reduce intrusions.

The beneficial effects of testing were substantially mediated by reduced proactive interference.

There was little evidence that the forward learning benefits of partial and distributed tests are offset by a cost to untested items via retrieval-induced forgetting.

Research Question

Are tests that are partial (not including all studied items) and distributed (including retrieval of items from earlier lists) effective in enhancing new learning?

CONCLUSIONS

Testing of all studied material is not necessary to produce beneficial effects on new learning, or to reduce intrusions.

The beneficial effects of testing were substantially mediated by reduced proactive interference.

There was little evidence that the forward learning benefits of partial and distributed tests are offset by a cost to untested items via retrieval-induced forgetting.