Stability of Individual Parameters in a Model of Optimal Fact Learning

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background

facts are stored in memory and we forget them over time.

we can optimize learning by capitalizing on differences.

we know that some people forget faster than others but...

how stable are rates of forgetting over time and over materials?

the rate of forgetting is estimated for each item and learner.

experimental design

Session #1
- Swahili words
- distraction task
- test

Session #2
- Swahili words
- distraction task
- test
- maps with US cities
- distraction task
- test

Session #3
- Swahili words
- distraction task
- test
- biopsych facts
- distraction task
- test

individual parameters

% correct on test vs. time

results

vocabulary: vocab1, vocab2, vocab3
flags: 0.76, 0.77, 0.86
maps: 0.60, 0.56, 0.49, 0.60
biopsych: 0.63, 0.57, 0.53, 0.51, 0.38

conclusions

the rate of forgetting is:

(1) stable over time (within a domain)
(2) not stable over materials