Examining the tendency to mind wander when preparing for different test formats and how this impacts future memory

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Background and Rationale

Mind Wandering: Task-unrelated thought

- *Intentional mind wandering*: deliberately thinking about things unrelated to the task
- *Unintentional mind wandering*: spontaneously thinking about things unrelated to the task

Mind wandering has been shown to produce *performance decrements* (e.g., decreased memory performance)

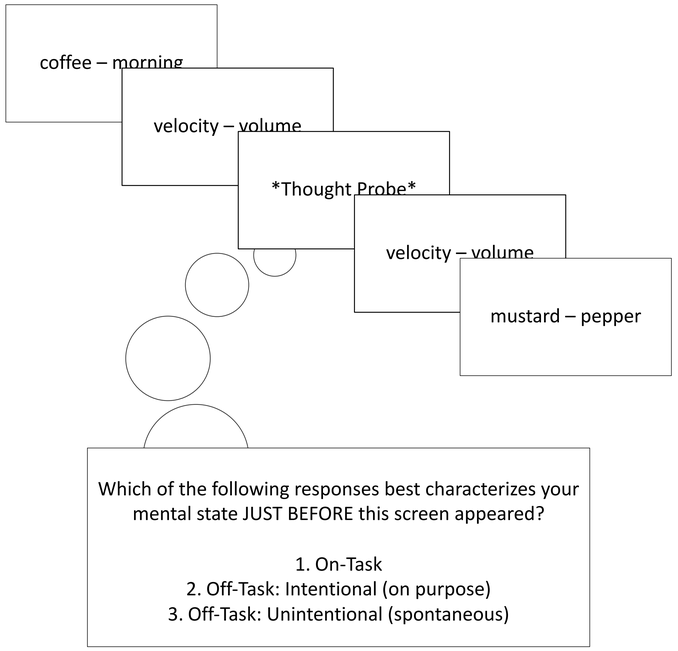
Test Format:

- Forced-choice recognition (multiple choice)
  - Easy: unrelated lures
  - Hard: related lures
- Cued-recall
  - Easy: provided part of the target word
  - Hard: must recall the target word entirely from memory

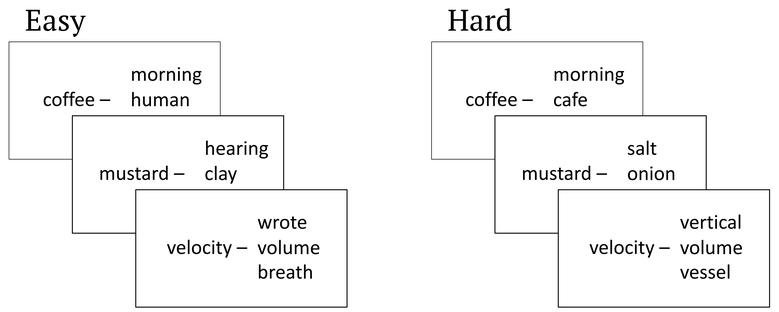
Does mind wandering produce larger performance decrements when the expected test format is more challenging?

Overview of Methods and Procedure

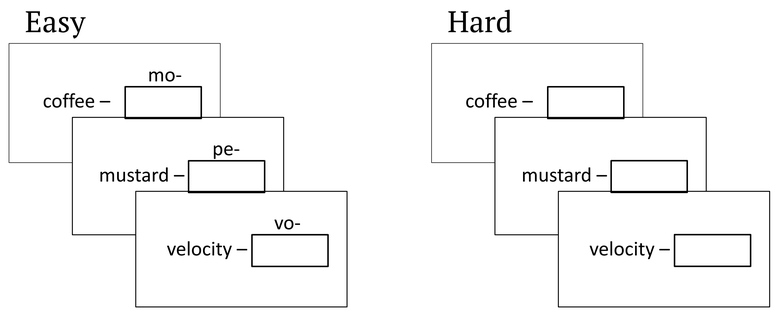
Study Phase



Test Phase: Forced-choice recognition

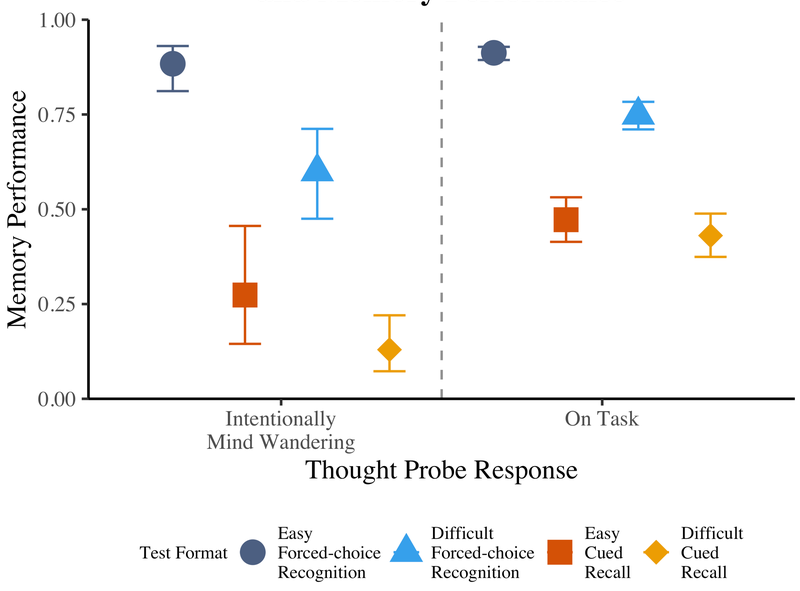


Test Phase: Cued-recall



Results and Conclusions

Intentional Mind Wandering during Study and Memory Performance



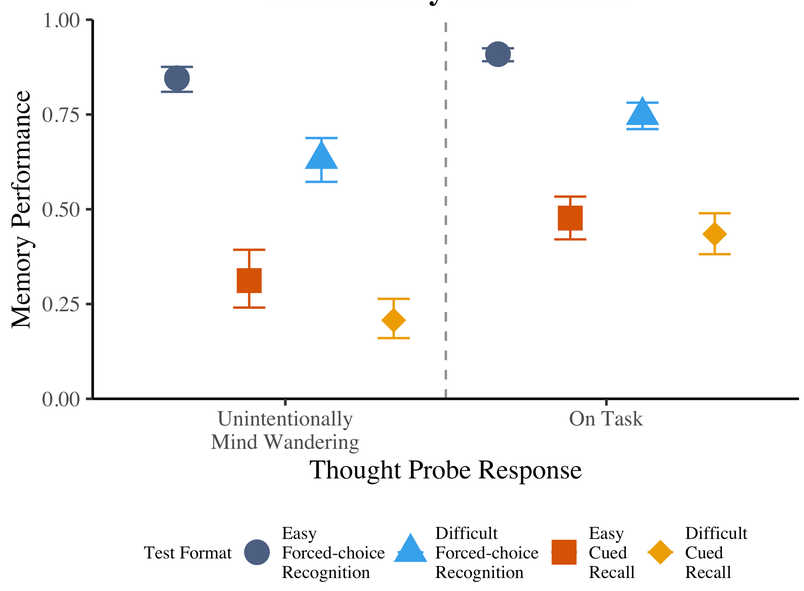
Significant interaction between Test Format and Thought Probe Response, $\chi^2(1) = 8.427$, $p = .038$

Significant difference between Intentionally Off Task and On Task for all test formats except Easy Forced-choice Recognition

- Size of the effect increases as the test format increases in difficulty

Intentionally thinking about things unrelated to a task is most detrimental for the most difficult test formats

Unintentional Mind Wandering during Study and Memory Performance



Significant interaction between Test Format and Thought Probe Response, $\chi^2(1) = 8.366$, $p = .039$

Significant difference between Unintentionally Off Task and On Task for all test formats

- Size of the effect increases as the test format increases in difficulty

Spontaneously thinking about things unrelated to a task is detrimental no matter the test format – harder test formats may have more detriments