Effects of Psychological Distance on Memory Specificity

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Introduction

Psychological Distance

- Perceived distance between a stimulus and a person's direct experience (Trope & Liberman, 2010)

Dimensions	Proximal	Distal
Spatial	nearby	far away
Temporal	present	past/future
Social	self	other
Hypothetical	likely/real	unlikely/hypothetical

- Automatic assessment of psychological distance (Bar-Anan et al., 2007)

Psychological Distance and Construal Level

- *Low-level, concrete* construals for psychologically *proximal* stimuli vs. *high-level, abstract* construals for psychologically *distal* stimuli (Trope & Liberman, 2010)

Two Types of Memory Representations

- *Verbatim* representation preserving the exact perceptual details of a stimulus vs. *gist* representation capturing the global/categorical meaning of a stimulus (Brainerd & Reyna, 1993)

Psychological Distance and Memory

- Better memory for information when its representational format is congruent with psychological distance (Amit et al., 2019)
  - *Concrete* representational format (e.g., pictures): Proximal > Distal
  - *Abstract* representational format (e.g., words): Proximal < Distal
- Increasing psychological distance improves decision making under conditions of information overload via gist memory (Fukukura et al., 2013)

Research Question

Does psychological distance affect memory specificity when the representational format of stimuli remains constant?

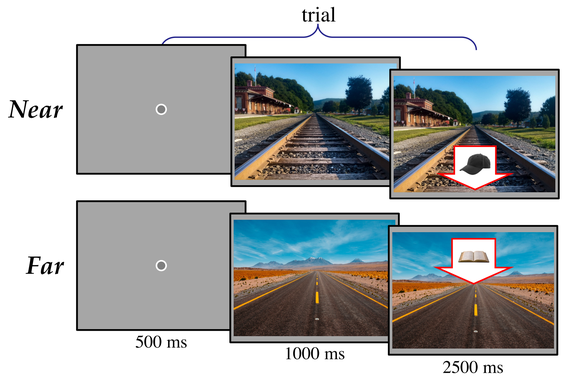
If so, there should be a verbatim memory advantage for psychologically proximal stimuli and a gist memory advantage for psychologically distal stimuli.

Procedure

N = 108; psychological distance (proximal or distal) as a within-subjects factor

Phase 1: Incidental Encoding

"Does the object appear ***near*** or ***far*** from you?"



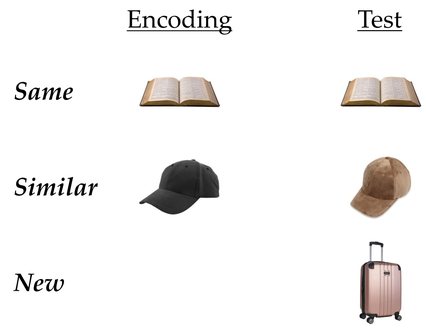
Phase 2: Free Recall Test

"List as many objects as you can recall from the first phase."

- Timed for 5 minutes

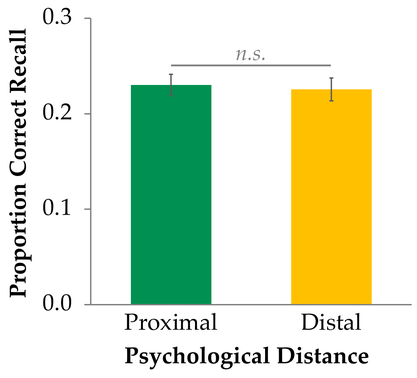
Phase 3: Recognition Test

"Is the object the ***same*** as the one you saw before, ***similar***, or ***new***?"



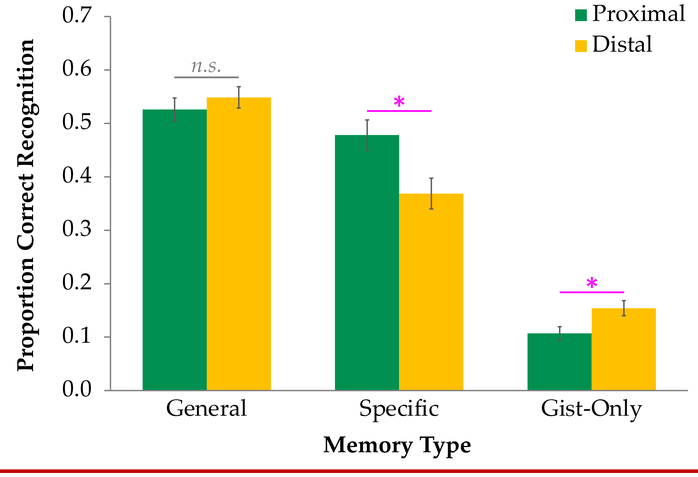
Results

Free Recall



Recognition

- ***General***: P("same"/"similar" responses to *same*/*similar* items) – P("same"/"similar" responses to *new* items)
- ***Specific***: P("same" responses to *same* items) – P("same" response to *similar* items)
- ***Gist-only***: P("similar" responses to *same* items) – P("similar" responses to *new* items)



Conclusion

Psychological distance at encoding influences the specificity with which information is remembered.

- A ***verbatim*** memory advantage for stimuli encoded in a psychologically proximal manner vs. a ***gist*** memory advantage for stimuli encoded in a psychologically distal manner

The locus of the effects of psychological distance?

- At ***encoding,*** affecting what aspect of information is preferentially attended/retained or at ***retrieval,*** affecting what aspect of information already stored in memory is more readily accessible
- Manipulating psychological distance after encoding but prior to retrieval could help locate the locus of the effects.

The present findings suggest that psychological distance can be used to aid memory in situations where retaining the gist of information is more beneficial than retaining the exact perceptual details (e.g., complex decision making; future prospection) or vice versa (e.g., eyewitness testimony).

References

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