



The Locus of the Effects of Psychological Distance on Memory Specificity: Encoding or Retrieval?

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Introduction

Psychological Distance

- The degree to which a particular stimulus is removed from a person's immediate, direct experience (Liberman & Trope, 2008)

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

Psychological Distance and Construal Level

- Construal level theory (CLT; Trope & Liberman, 2003):** Psychological distance influences how a stimulus is represented in a person's mind.

Psychological Distance	Construal Level	Representations
Proximal	Low-level construal	Peripheral, concrete, and local information
Distal	High-level construal	Central, abstract, and global information

Construal Level and Memory Representations

- Fuzzy trace theory (Brainerd & Reyna, 1993):** Two different types of memory representation parallel the construal levels proposed by CLT
 - Verbatim representation* from low-level construal
 - Gist representation* from high-level construal

Psychological Distance and Memory Specificity (Philipps et al., 2022)

- Psychological distance, manipulated during encoding, was found to determine the specificity with which information is remembered.
 - Psychologically *proximal* stimuli produced *verbatim representations*.
 - Psychologically *distal* stimuli produced *gist representations*.
- The locus of the effects of psychological distance on memory specificity remains to be clarified.
 - Encoding:** affecting the way information is initially encoded
 - Retrieval:** affecting the accessibility of different aspects of information already stored in memory

Research Question

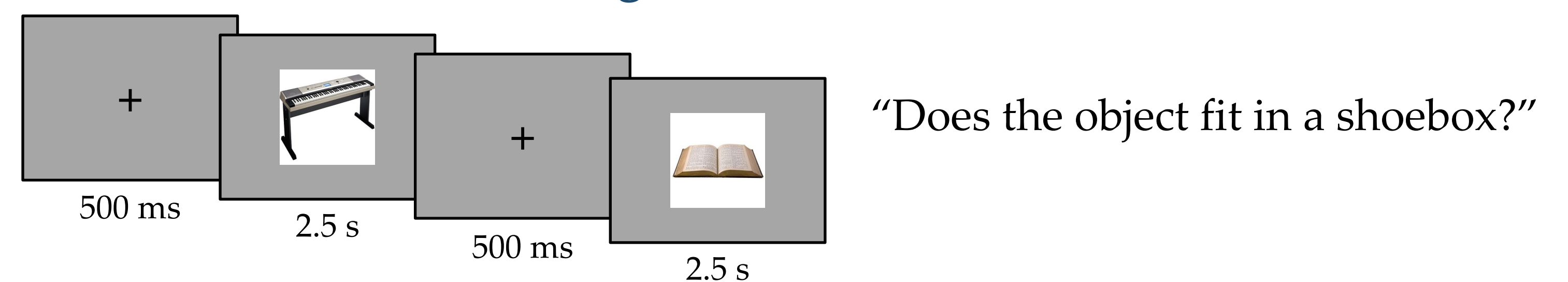
At what stage of memory processing does psychological distance affect memory specificity?

- Do the effects of psychological distance on memory specificity arise at encoding or at retrieval?

Procedure

N = 47 (24 females; M_{age} = 18.98); Psychological distance (proximal or distal) as a between-subjects factor

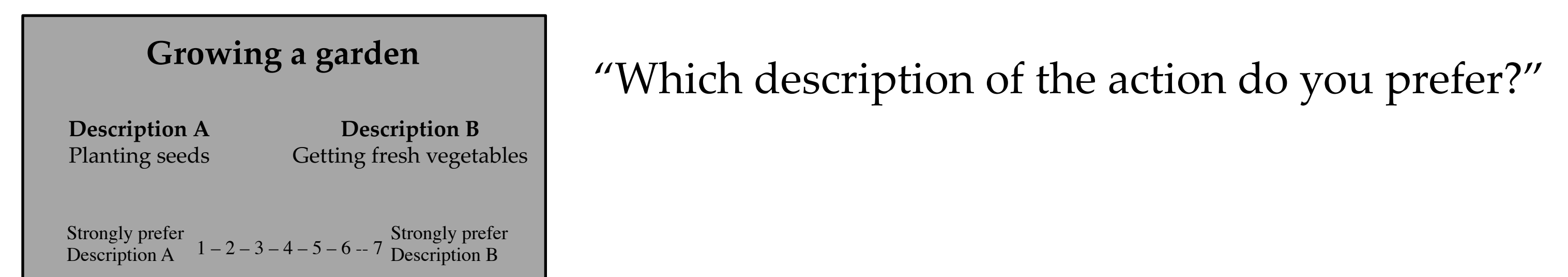
Phase 1: Incidental Encoding



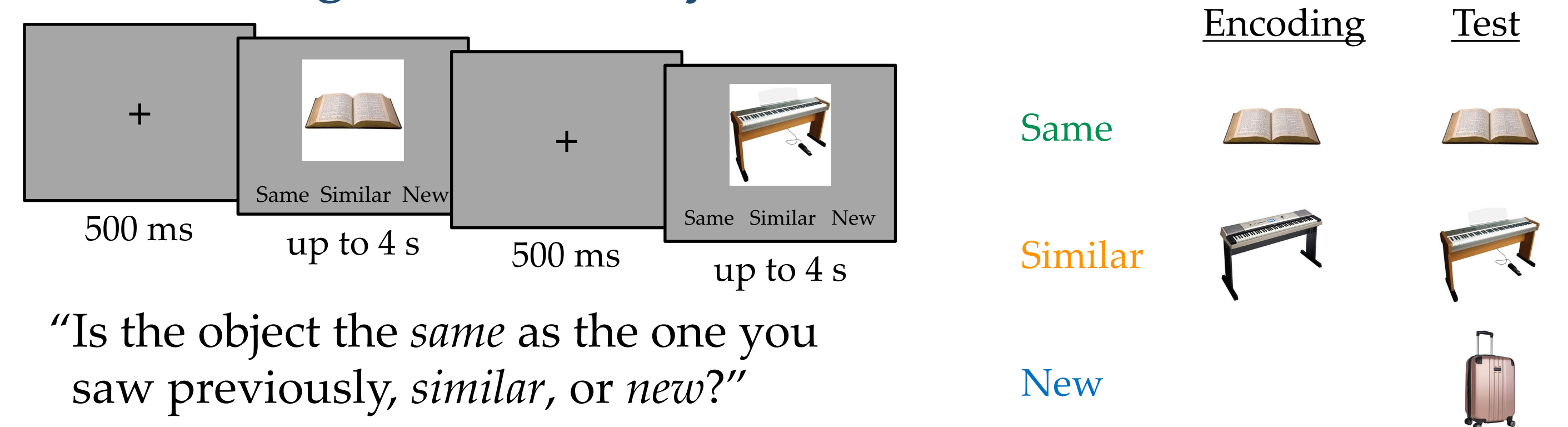
Phase 2: Writing Task

- Proximal:** "Write about your life *tomorrow*"
- Distal:** "Write about your life *one year from now*"

Phase 3: Behavioral Identification Form (Vallacher & Wegner, 1989)



Phase 4: Recognition Memory Test



Phase 5: Mood Ratings

"How positive or negative (calm or excited) did you feel while completing the writing task on a scale from 1 (*negative/calm*) to 7 (*positive/excited*)?"

Results

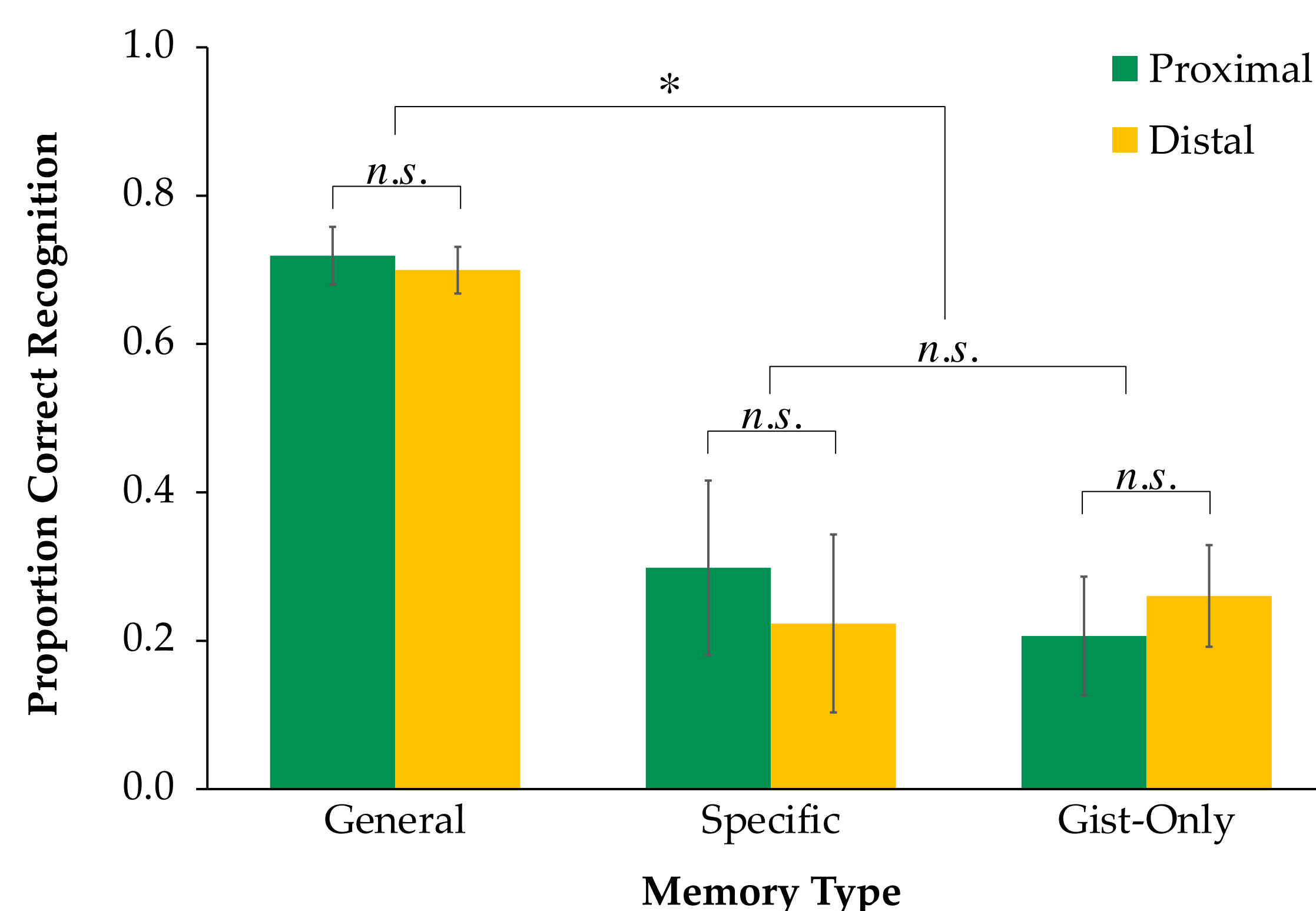
Mood Valence and Arousal Ratings

- Valence:** Proximal (M = 5.22) vs. Distal (M = 4.79), $t(45) = 1.15, p > .2$.
- Arousal:** Proximal (M = 3.39) vs. Distal (M = 3.42), $t(45) = 0.07, p > .9$.

Behavioral Identification Ratings

*higher rating = more preference for high-level construals

- Proximal (M = 3.60) vs. Distal (M = 4.55), $t(45) = 2.99, p = .005$.



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)

- A significant main effect of Memory Type, $F(2, 90) = 17.46, p < .001, \eta_p^2 = .28$.
- No significant main effect of Psychological Distance, $F(1, 45) = 0.06, p > .8$.
- No significant Memory Type x Psychological Distance interaction, $F(2, 90) = 0.26, p > .6$

Conclusion

Psychological distance manipulated after encoding but prior to retrieval does not affect the specificity with which information is remembered.

- Psychological distance does not appear to affect the relative accessibility of different aspects of information already stored in memory at memory retrieval.
- Rather, the effects of psychological distance appear to operate at encoding, affecting what aspect of information is preferentially attended to and retained.
- With further data collection, the findings of the present study can shed light on the precise mechanisms through which psychological distance affects memory.

References

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