

# Schema versus saliency in memory for places

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PHASE 1/GRP2



## Schema vs. Saliency

- Brewer & Treyens (1981) showed that schema has a greater role in real world memory recall over saliency.
- In a follow-up study, Pezdek et al. (1989) found that saliency had the upper hand when participants had to actively encode their environment.
- Hypothesis:** There will be a significant difference in the number of office objects (schema) recalled relative to non-office objects (saliency) in an office environment.



Brewer & Treyens (1981)

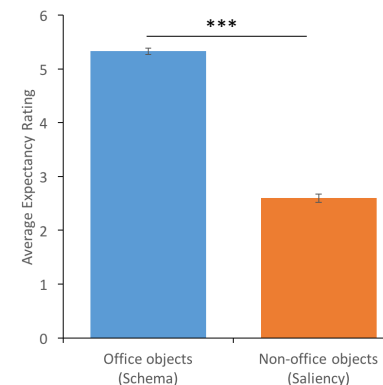
## Methods



- 49 participants (male = 29) were given 30 seconds to passively encode objects in a staged office environment with a mix of office and non-office objects.
- Participants had to spot 6 specific objects in the room (passive encoding) that were then excluded in the recall phase.
- After 30 seconds, participants performed a free recall memory task and rated each object on a 6-point scale for expectancy in an office.

## Results

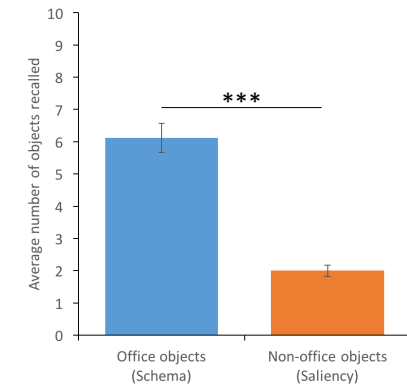
### Expectancy rating for objects



- Participants give office objects (schema) a significantly higher expectancy rating

\*\*\*  $P < 0.001$

### Number of objects recalled



- Participants recall significantly more office objects (schema) than non-office objects (saliency)

\*\*\*  $P < 0.001$

## Conclusions and references

- Participants remember more office-related objects (schema) in an office environment.
- This supports previous work by Brewer and Treyens (1981).
- Our study provides evidence that schema for environments has a large impact on our ability to recall objects.

### References:

- Brewer, W. F., & Treyens, J. C. (1981). Role of schemata in memory for places. *Cognitive psychology*, 13(2), 207-230.
- Pezdek, K., Whetstone, T., Reynolds, K., Askari, N., & Dougherty, T. (1989). Memory for real-world scenes: The role of consistency with schema expectation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 15(4), 587-595.