

CogLab 8: False Memory

- Methods:
 - Word Lists
 - Recognition Test
- Independent Variable
 - Kind of word: old, lure, unrelated
- Theory
 - Semantic Node Activation of neighboring concepts will activate Lure
- Prediction
 - subjects will recognize the Lure even though it was never seen

CogLab 8: False Memory

eye

sharp

knitting

cloth

hurt

syringe

haystack

thorn

injection

thread

sewing

pin

point

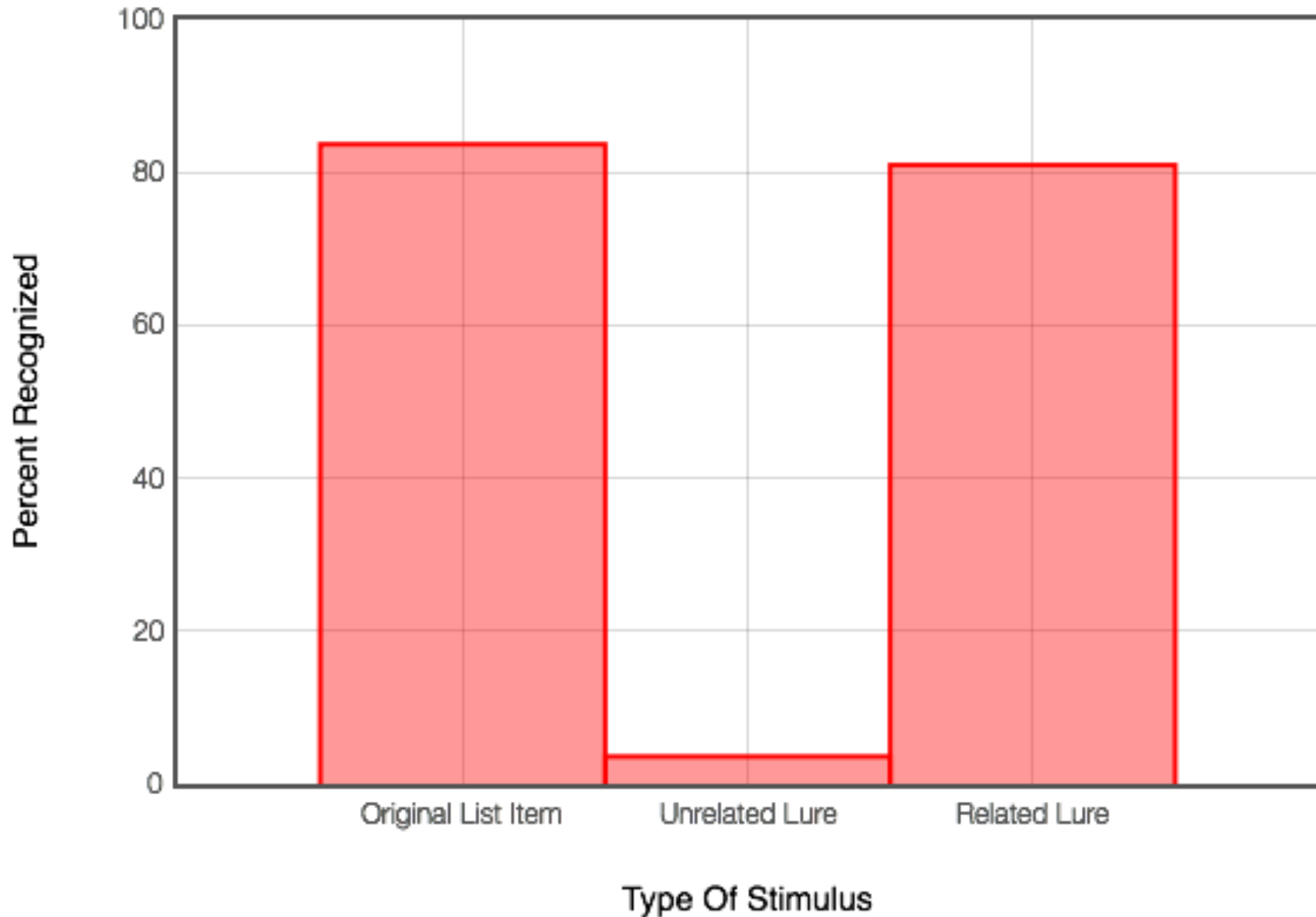
prick

thimble

CogLab 8: False Memory

bed	climb	climber	cushion
hill	mountain	peak	point
prick	sand	ski	slumber
summit	thimble	top	yawn

CogLab 8: Global Data



Roediger & McDermott (1995)

- Experiment 1
 - Free Recall then Recognition
- Experiment 2
 - Half of lists included Recall test, Half did not (did math problems)
 - DV:
 - “Remember” : Vivid Memory (Explicit)
vs
“Know” : Feeling (Implicit)
 - Hits: 65% (in Study + Math condition)
 - False Alarms: 72% (in Study + Math condition)

RM vs CogLab

- Methods:
 - RM: Experiment 2 included both Recall and Recognition conditions. The recognition condition included math tests as distractor.
 - CogLab: Recognition only, no distractor
 - RM: also asked about “Remember” vs. “Know”
- Results
 - RM: critical lure recognized almost as much as studied words
 - CogLab: very similar

Roediger & McDermott (1995)

Table 2

Recognition Results for Studied Items and Critical Lures in Experiment 2

Item type and condition	Proportion of Old responses		
	Overall	R	K
Studied			
Study + recall	.79	.57	.22
Study + arithmetic	.65	.41	.24
Nonstudied	.11	.02	.09
Critical lure			
Study + recall	.81	.58	.23
Study + arithmetic	.72	.38	.34
Nonstudied	.16	.03	.13

Note. R = remember judgment; K = know judgment.

Focus
on these
results:

Roediger & McDermott (1995)

- “How robust is this effect? Are there limits to this effect?”
- “The effect is quite robust and perhaps most surprisingly, it works well even when participants know what the experiment is about (i.e., you were asked to do a lab on false memory, read background information about the phenomenon, and then still most likely exhibited false memory).”

Roediger & McDermott (1995)

- Also noticed Serial Position Curve

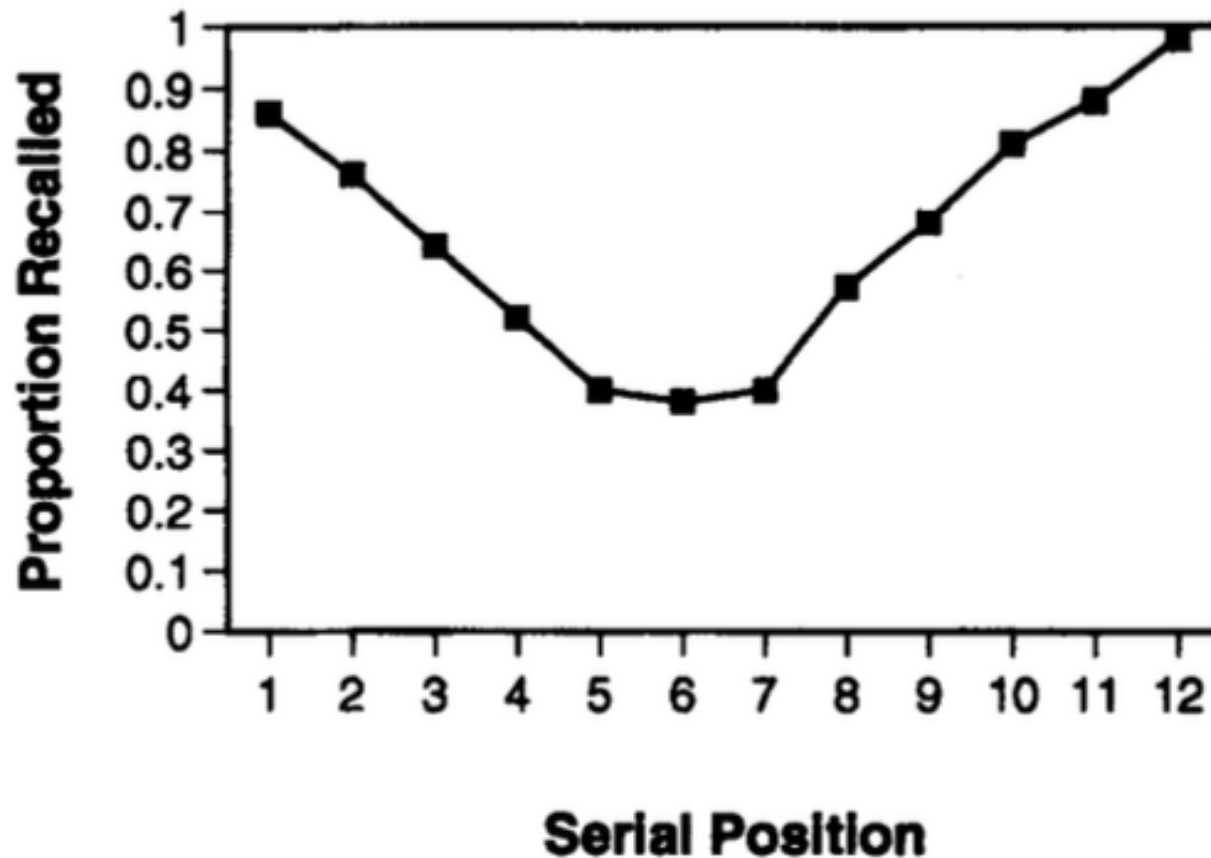


Figure 1. Probability of correct recall in Experiment 1 as a function of serial position. Probability of recall of the studied words was .65, and probability of recall of the critical nonpresented item was .40.

Roediger & McDermott (1995)

- Probability of Intrusion more likely towards later recall

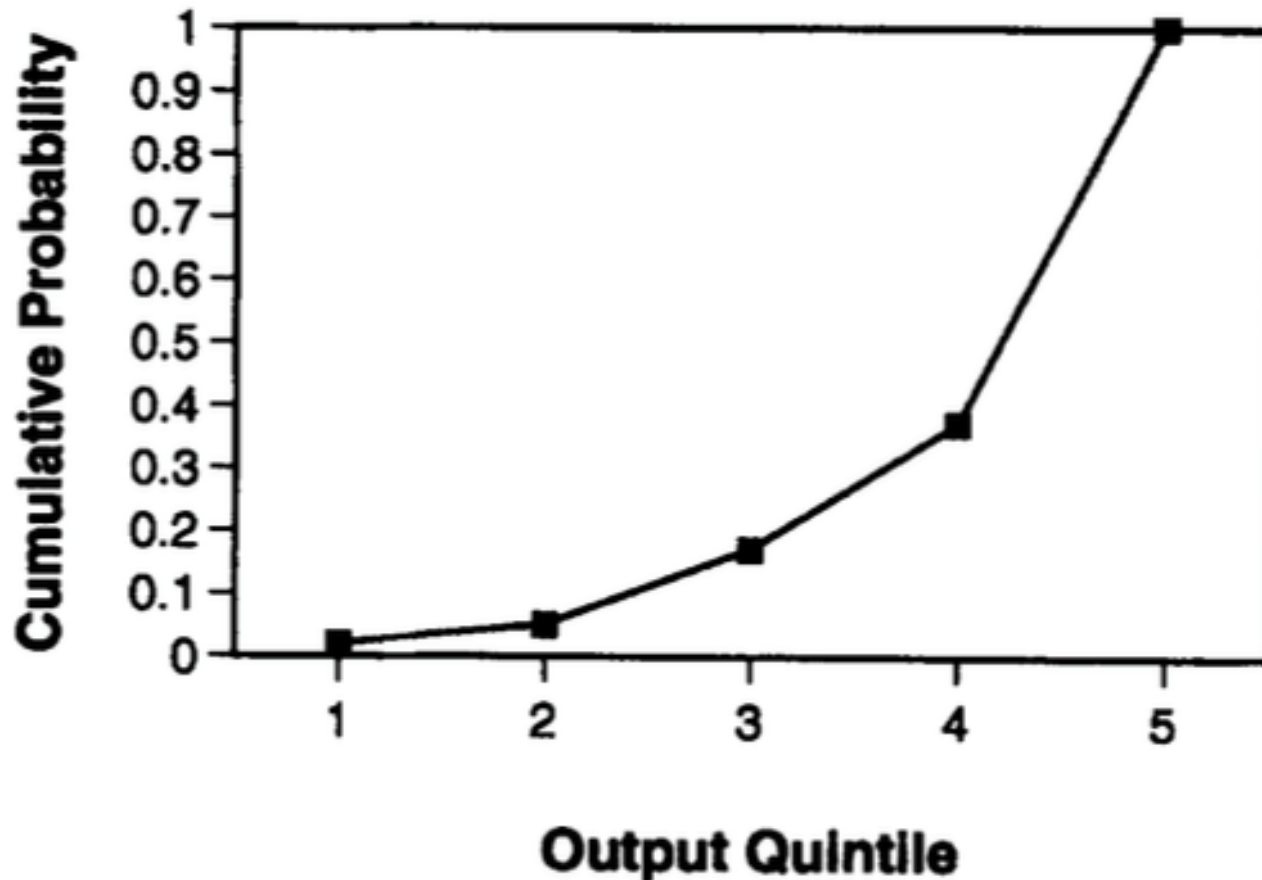


Figure 2. Recall of the critical intrusion as a function of output position in recall. Quintiles refer to the first 20% of responses, the second 20%, and so on.

CogLab 8: False Memory

- Debriefing
 - Methods
 - differences?
 - Predictions?
 - Robust? Limitations?