

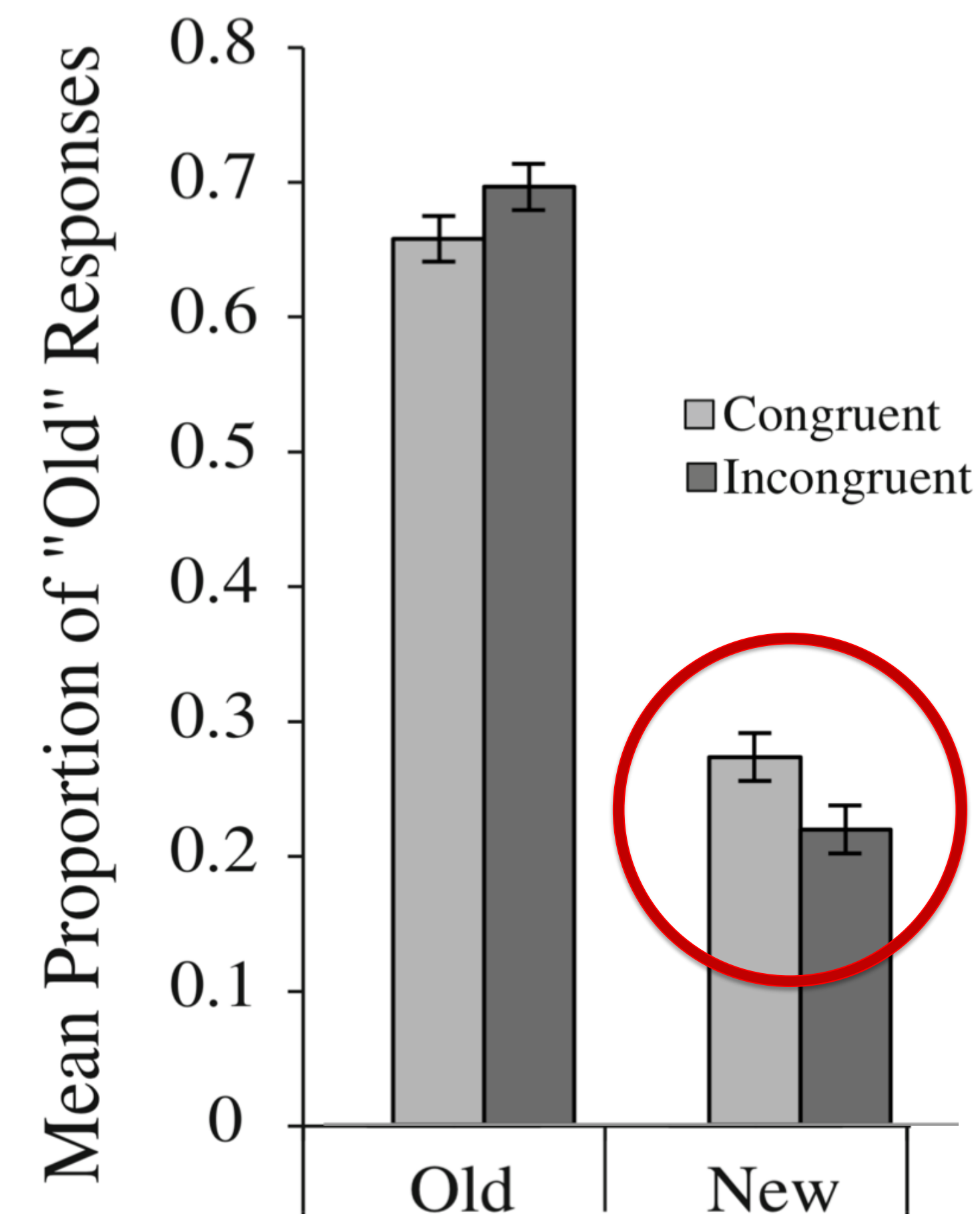
A Perceptual Disfluency Effect on False Recognition

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Background Information

Rosner et al. (2015) False Recognition Effect¹



Incongruent
B A R I C K
A L A R K M

Congruent
C L O U D
C L O U D

Found higher false alarm rates for congruent words, compared to incongruent words.

However, they manipulated words at *study* and test.

This seems related to the Jacoby-Whitehouse effect (JWE)—false recognition for words repeated sequentially (prime-target) rather than simultaneously at test².

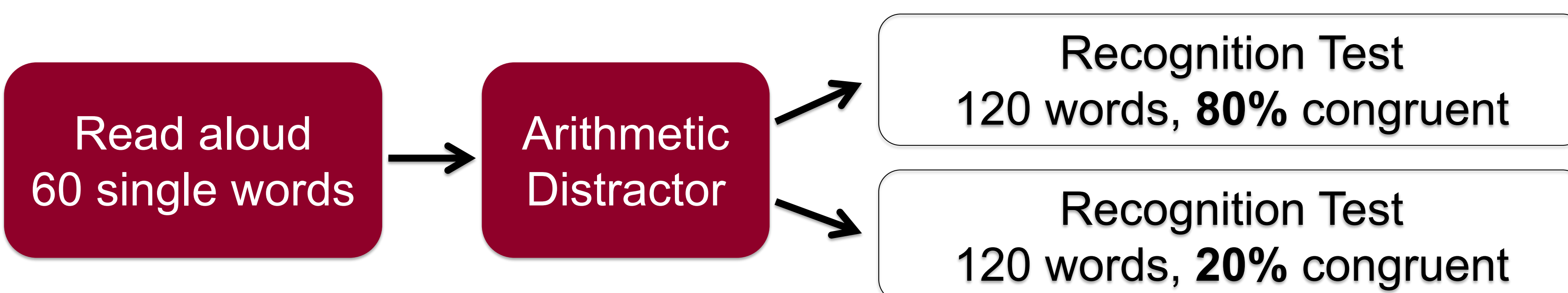
Jacoby and Whitehouse (1989) proposed that processing fluency is often misattributed to memory of prior experience, causing a feeling of familiarity².

Westerman (2008) showed the JWE is sensitive to expectancy effects using a proportion-repeated manipulation³.

Research Questions: Is the false recognition effect found by Rosner et al. replicable; and is it related to the JWE?

Methods

Experiment 1 & 2 (N = 32 in each):



Experiment 1 Test Items

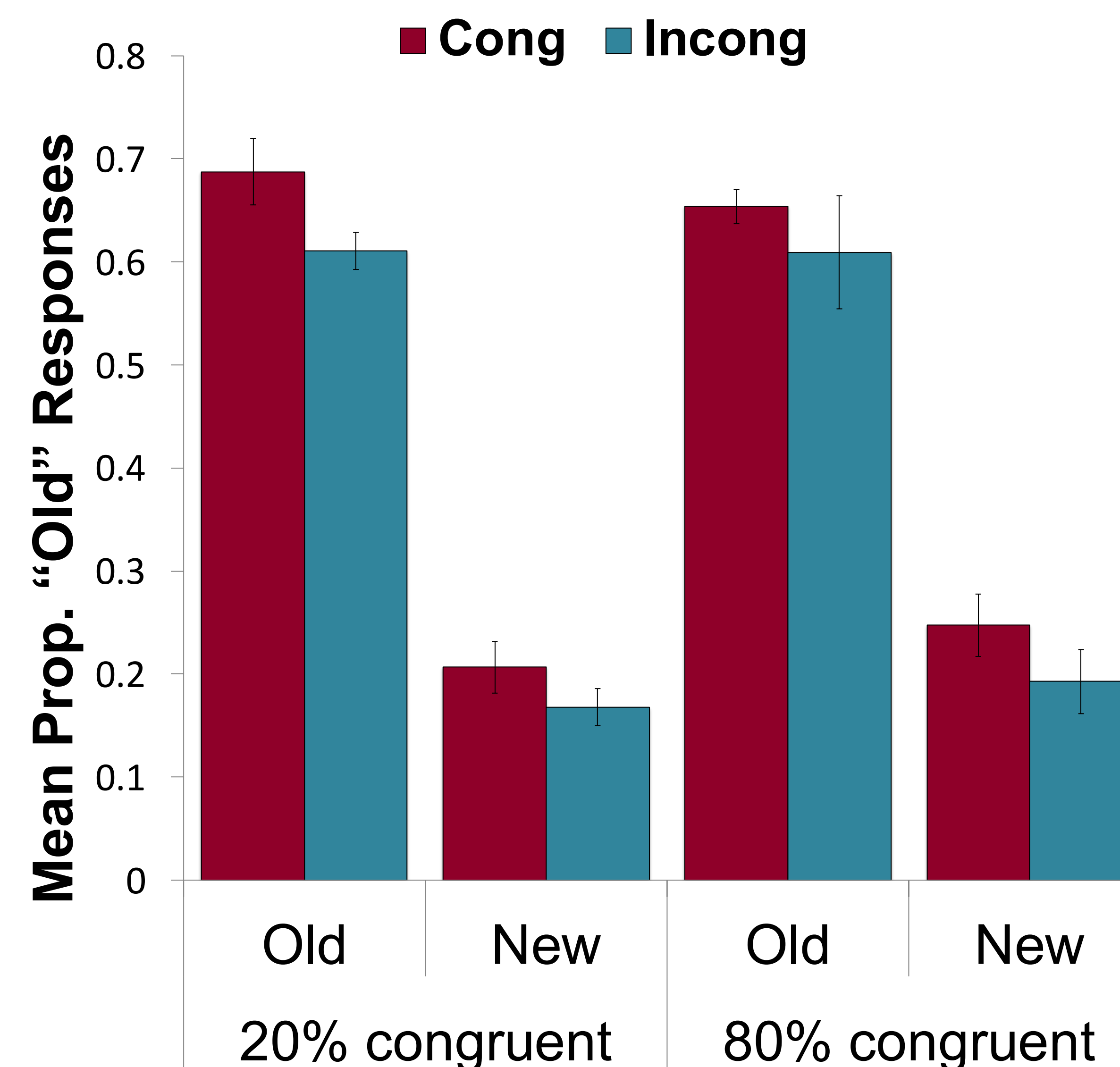
C L O U D vs. B A R I C K
C L O U D vs. A L A R K M
OLD NEW OLD NEW

Experiment 2 Test Items

C L O U D vs. C L O U D vs. T R U C K
C L O U D vs. A L A R K M
OLD NEW OLD NEW OLD NEW

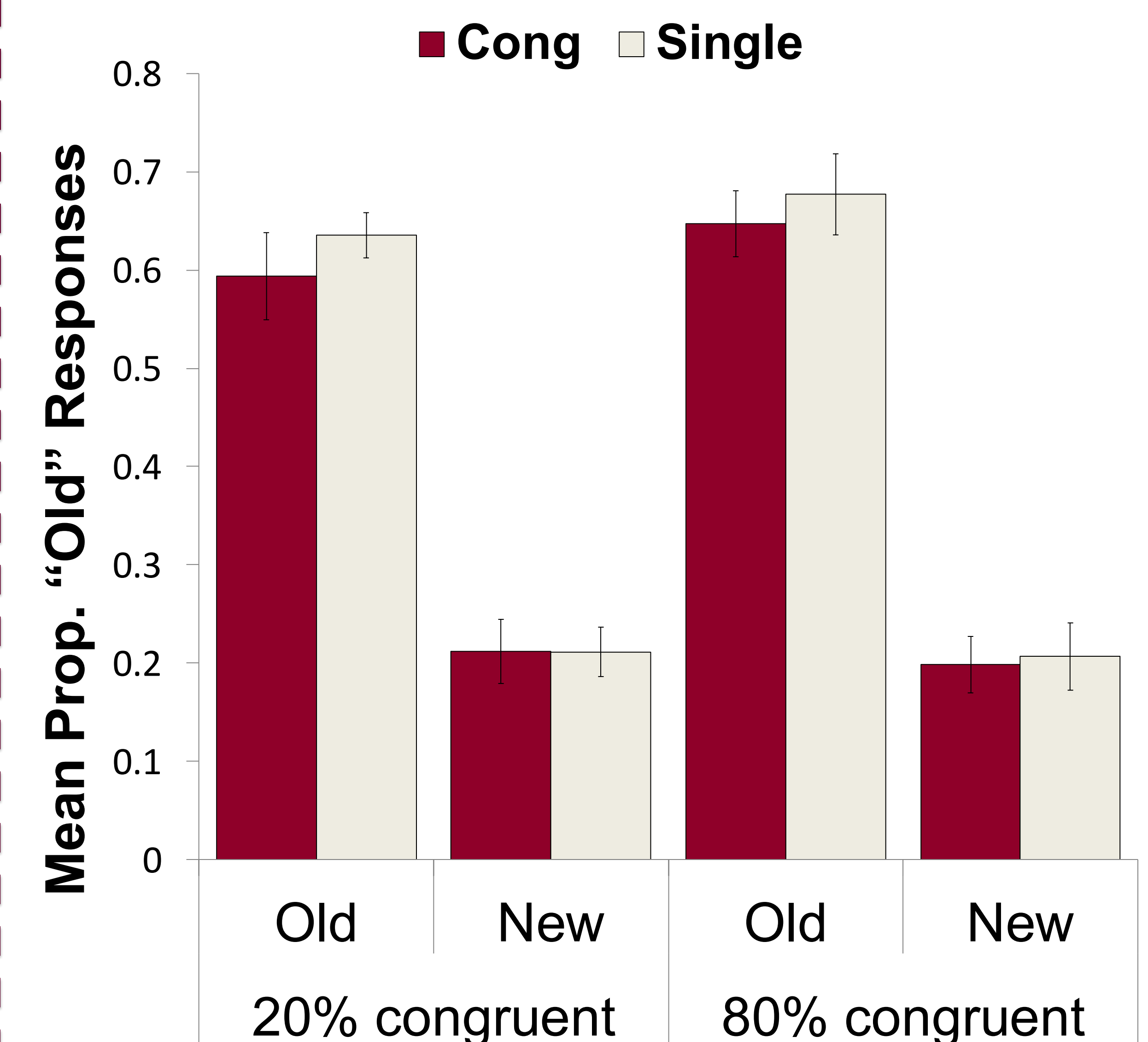
Results

Experiment 1: Rosner et al. Effect Sensitive to Expectancy?



Main Effect: Congruency	$F(1,30) = 8.84, p = .006$
Congruency \times Prop.	$F < 1$

Experiment 2: Fluency or Disfluency?



Main Effect: Congruency	$F(1,30) = 1.18, p = .285$
Congruency \times Prop.	$F < 1$

Discussion

- Rosner et al. effect is replicable; congruent items appear to be more familiar than incongruent items.
- This effect is insensitive to expectancy, suggesting that it differs from the JWE.
- It seems this effect is not driven by the fluency associated with congruent items; likely driven by disfluency of incongruent items.
- Next Step:** To compare incongruent items to single items; honing in on what is driving this effect.

References

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