

False memory for previously tested items: Investigating test-induced associative and repetition priming

MATTHEW CRUMP and MICHAEL BLECHER, *Brooklyn College of CUNY*, RANDALL JAMIESON, *University of Manitoba*

Test-induced Priming in the DRM Paradigm

False-recognition can reliably be obtained in the laboratory using the classic DRM procedure. Here, subjects encode lists of thematically related words, and show false memory for new category lures during test.

Spreading activation accounts of the DRM effect suggest that category lures are falsely recognized because they have been strongly activated by exposure to related words. In principle, presenting lists of related words as lures during the recognition test should also lead to increased false-recognition for following category words.

Evidence for test-induced priming (TIP) has been ambiguous. TIP sometimes increases false-recognition for category lures from studied lists (Coane & McBride, 1006); and other times does not (Dodd et al., 2006). TIP sometimes produces false-recognition for category lures for non-studied lists (Marsh, McDermott, & Roediger, 2004), and sometimes does not (Dewhurst, Knott, & Howe, 2011).

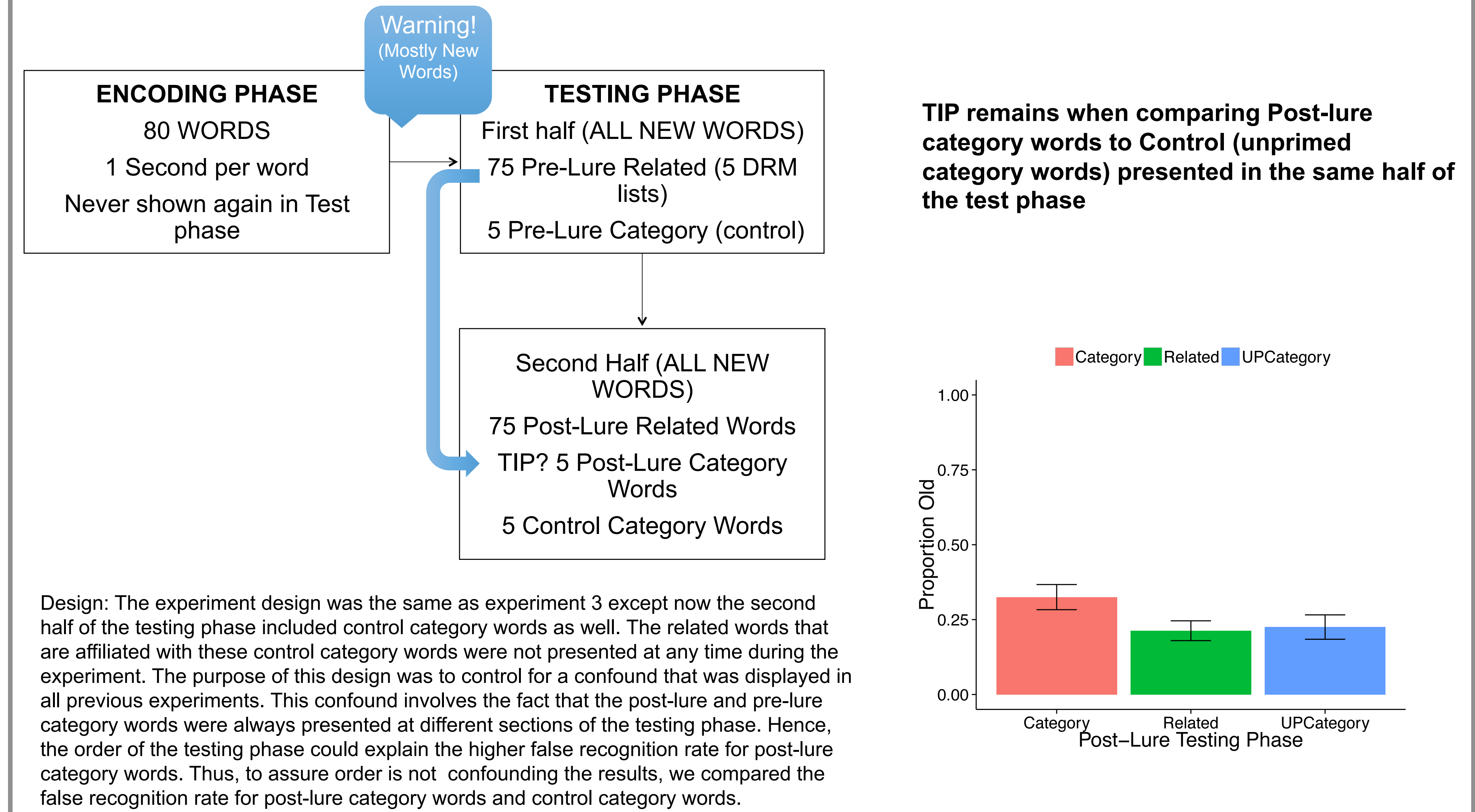
Aims

1. Independently demonstrate a reliable test-induced priming effect for non-studied words presented at test
2. Compare associative and repetition forms of test-induced priming
3. Attempt to eliminate observed TIP effects by systematically improving monitoring functions during the recognition test (Dewhurst, Knott, & Howe, 2011)

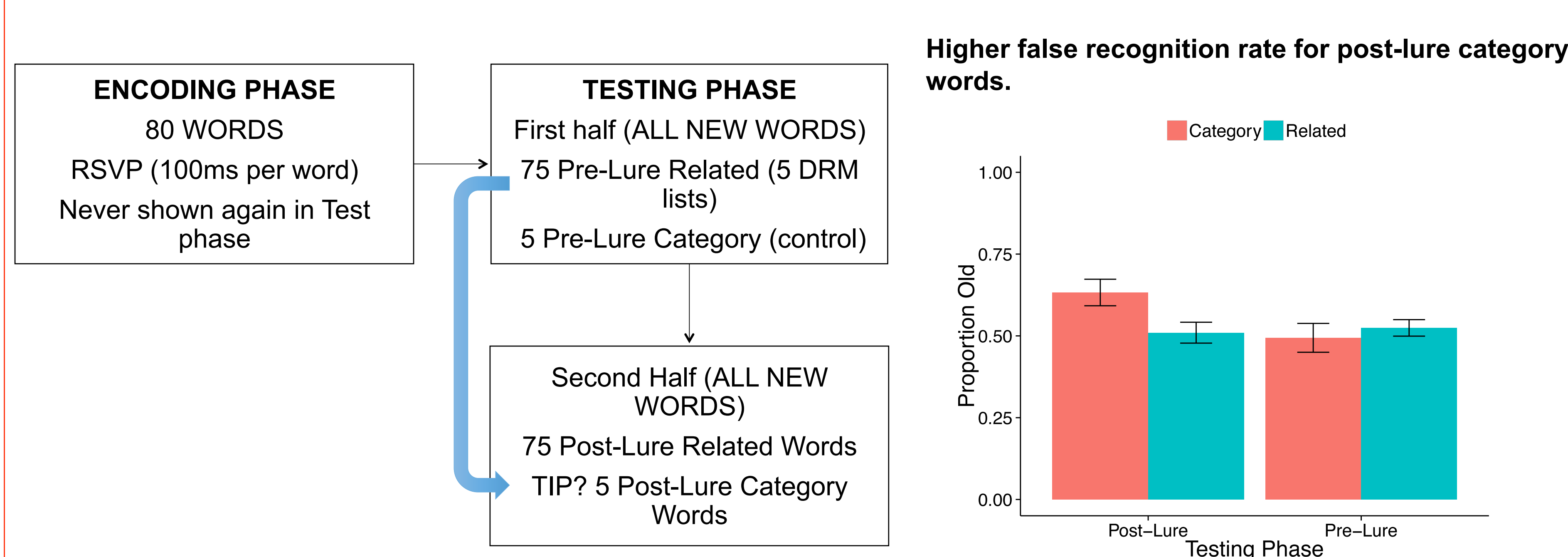
Methods overview

1. All experiments conducted online using Amazon Mechanical Turk (N~50 in each).
2. Materials taken from 24 lists reported by Roediger & McDermott (1995).
3. Subjects encoded 80 words, then judged the OLD/NEW status of 160 words in a 2AFC recognition test (one word at a time).

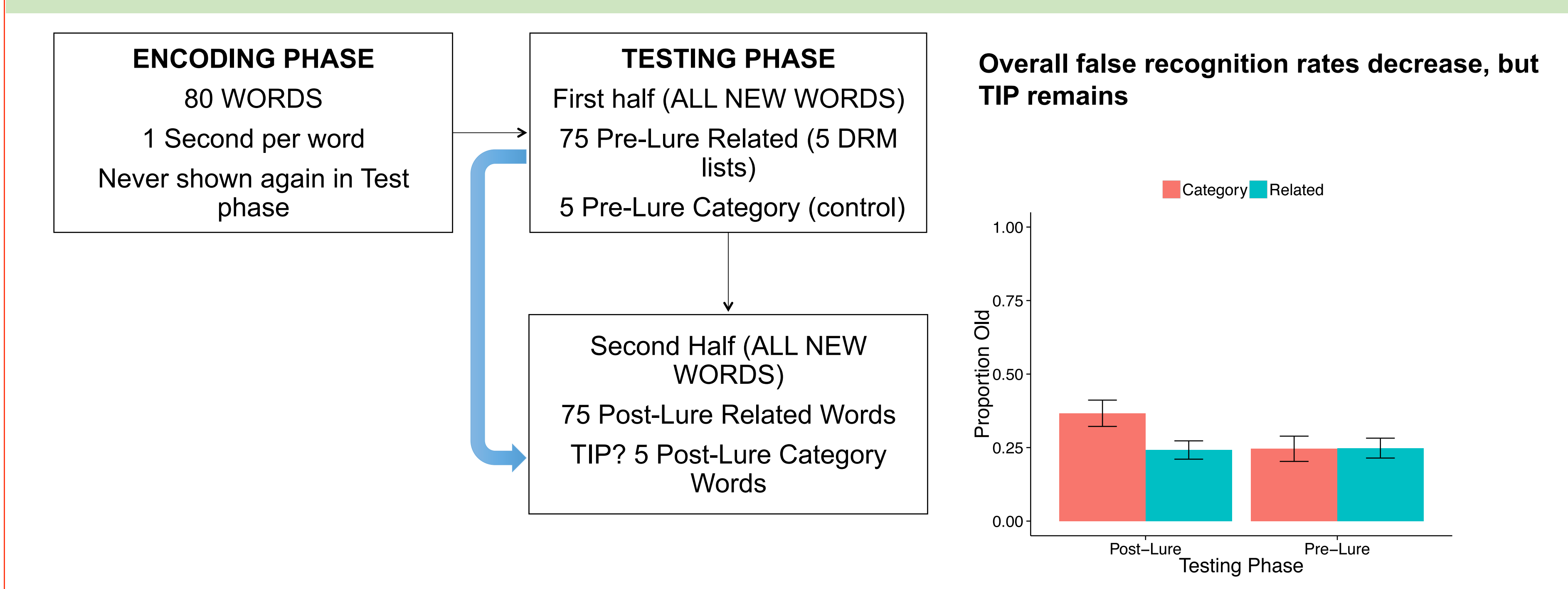
Experiment 4: E3 + control category words in the 2nd half of the test phase (address order confound)



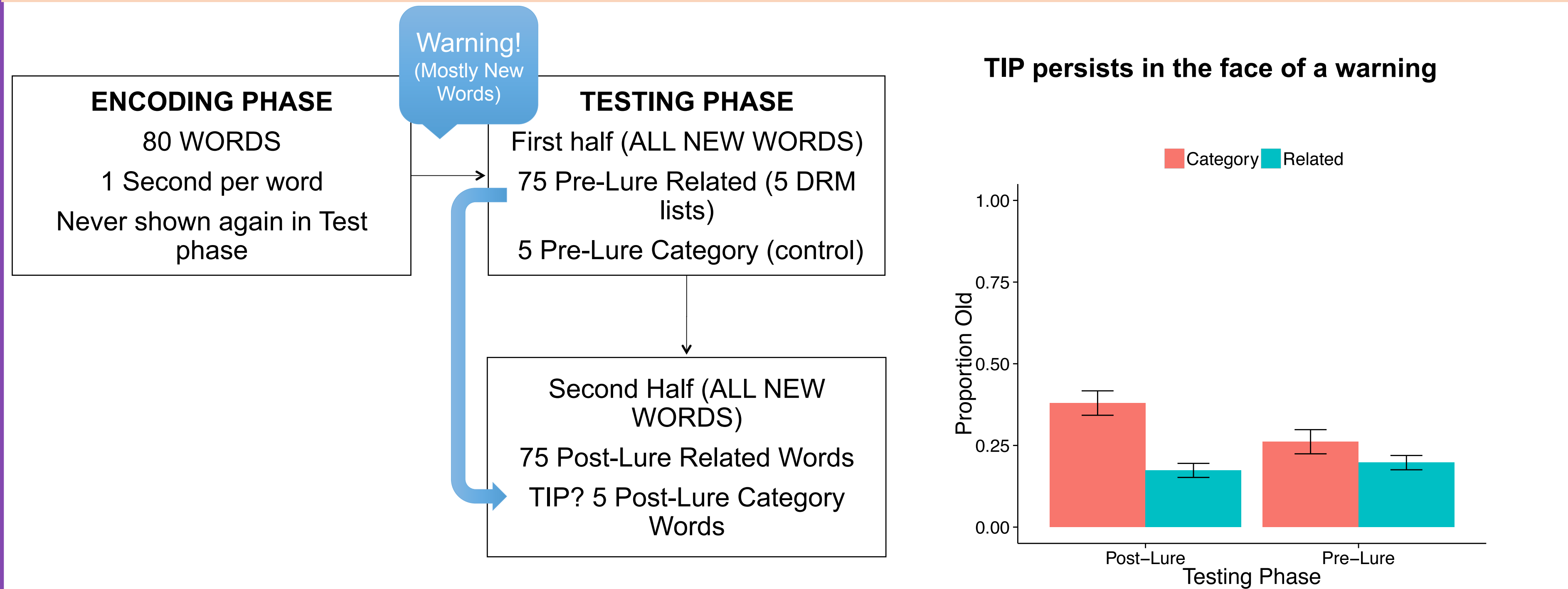
E1: A new demonstration of Test-induced priming (TIP) RSVP (100ms) encoding...no OLD words in the test phase



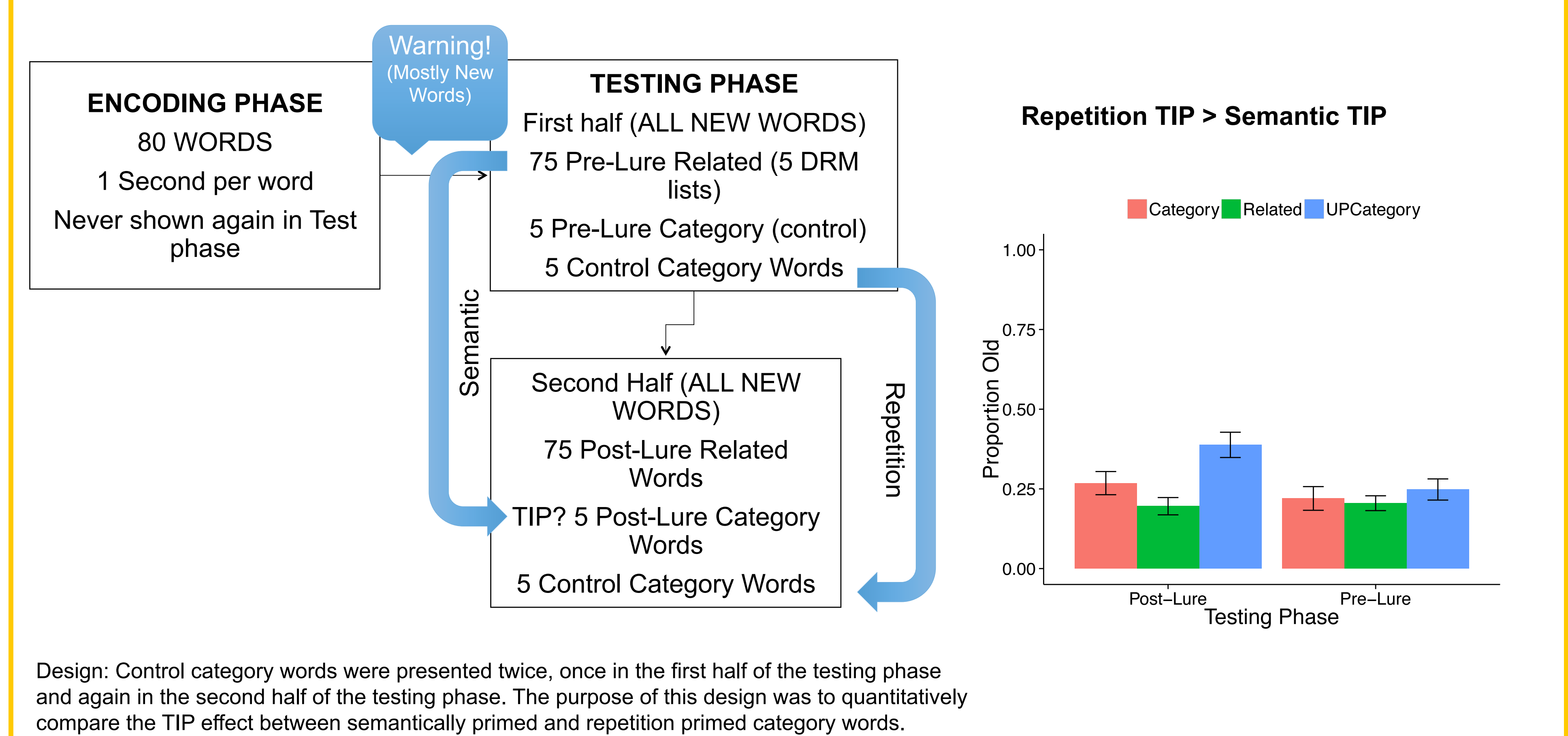
Experiment 2: E1 + Longer encoding duration (1 second per word)



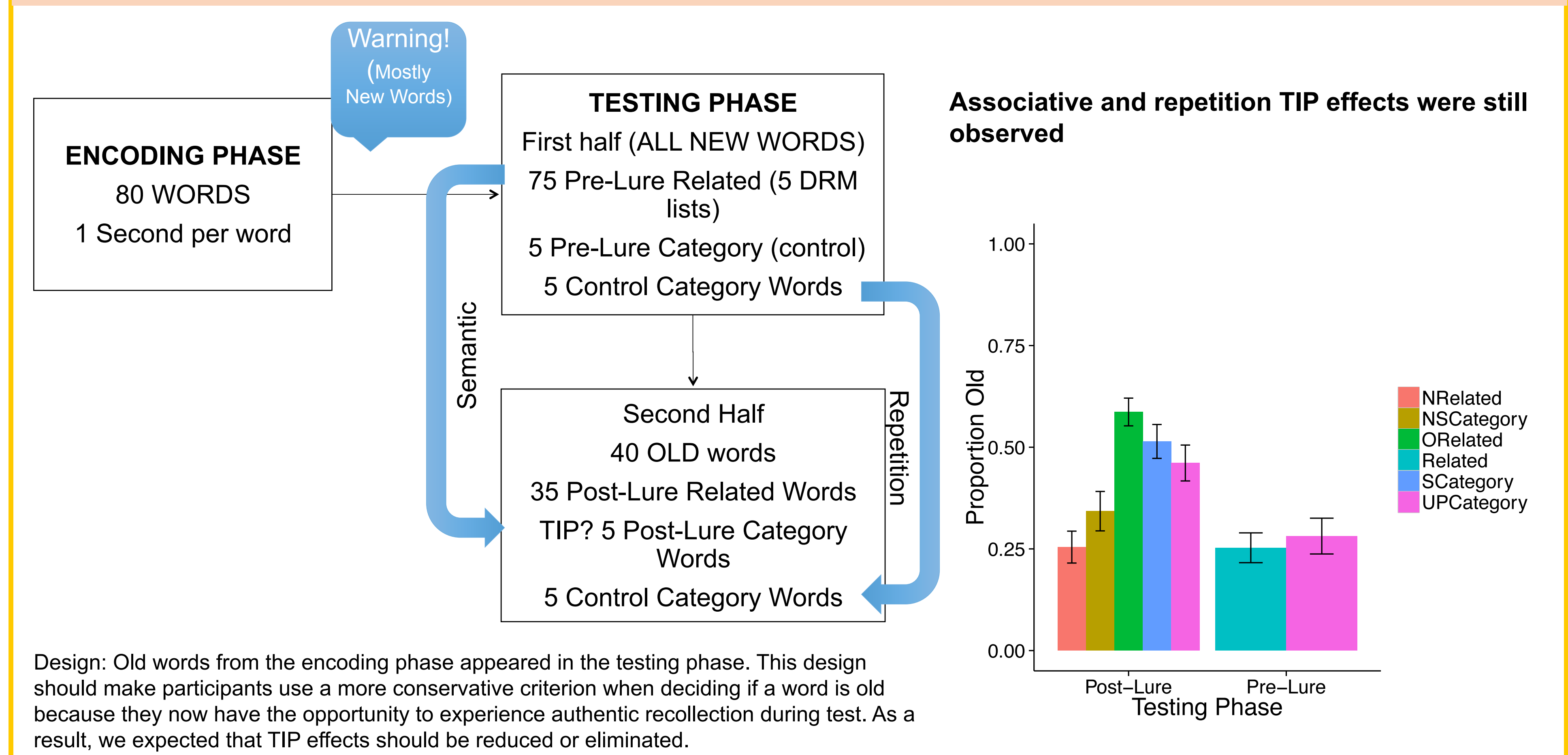
Experiment 3: E2 + Warning before test Warning= most of the words in the test are NEW WORDS



Experiment 5: E4 + comparing test-induced repetition vs. associative priming



Experiment 6: E5 + OLD words appear in the Test phase OLD words should raise criterion to endorse OLD



Take Home

1. Semantic and repetition based test-induced priming (TIP) effects were reliably measured across six experiments
2. Efforts to reduce TIP by increasing source-monitoring requirements (longer encoding, warning about mostly new words, inclusion of OLD words at test) were generally unsuccessful