March 21, 2024

This is the first Stage 1 review I have done, but I read the guidelines and suggestions provided, and hope I followed them here adequately.

I think this experiment is a neat idea conceptually, but I have some questions before the authors dive into data collection.

On page 14, the authors discuss the difference between redundancy and congruency. I’m not sure I understand the difference as it’s explained. It appears that the current experimental design uses redundant (same words read/written and spoken), not congruent (semantically similar words read and spoken), stimuli. This should be clarified, as the stated experimental goal is to test congruent stimuli.

In several places, beginning with the Hypotheses section, ‘multisensory’ and ‘audiovisual’ are used interchangeably. Please choose one and stick to it.

H1a “Multisensory engagement will enhance recognition of target items during generation tasks.” Perhaps add ‘compared to targets that are read’

H2 refers to confidence ratings, but these aren’t reviewed anywhere in the introduction. In H2b , why should confidence increase under audiovisual conditions compared to visual or audio alone?

Where will the word pairs come from? Will the lures used in the recognition test be matched to the target in terms of word frequency? I doubt the Kucera & Francis (1967) norms are current, but there should be something relevant to today’s undergraduate students.

Perhaps the audio condition should play words pre-recorded by the researcher to improve standardization.

I don’t know enough about auditory processing to speculate, but in the auditory generation test condition, could the fact that the first letter of the target word spoken by the researcher as a cue might match the sound of the target first phoneme differently? e.g., if the target is ‘Chilly’ would saying the letter ‘C’ as an auditory cue create error variance compared to a target word of ‘Cat’?

In the Procedure subsection, assuming the within subject design described, will the read/generate items be displayed in blocked form or randomized form? It seems to matter. Additionally, the design is described in this section is as Task type manipulated within subjects, but in the Proposed Analysis section is described as between subjects. This matters also in terms of the sample size needed, as the effect sizes for these two types of manipulations are very different.

Please also plan to include the effect sizes that you find in your analyses, and of course, report the power for any non-statistically significant findings.

In addition, looking forward to a full manuscript submission down the road, the literature review was much too heavy on the background and multiple theoretical explanations (and problems) of multisensory facilitation, and too brief on the ins and outs of the generation effect.



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