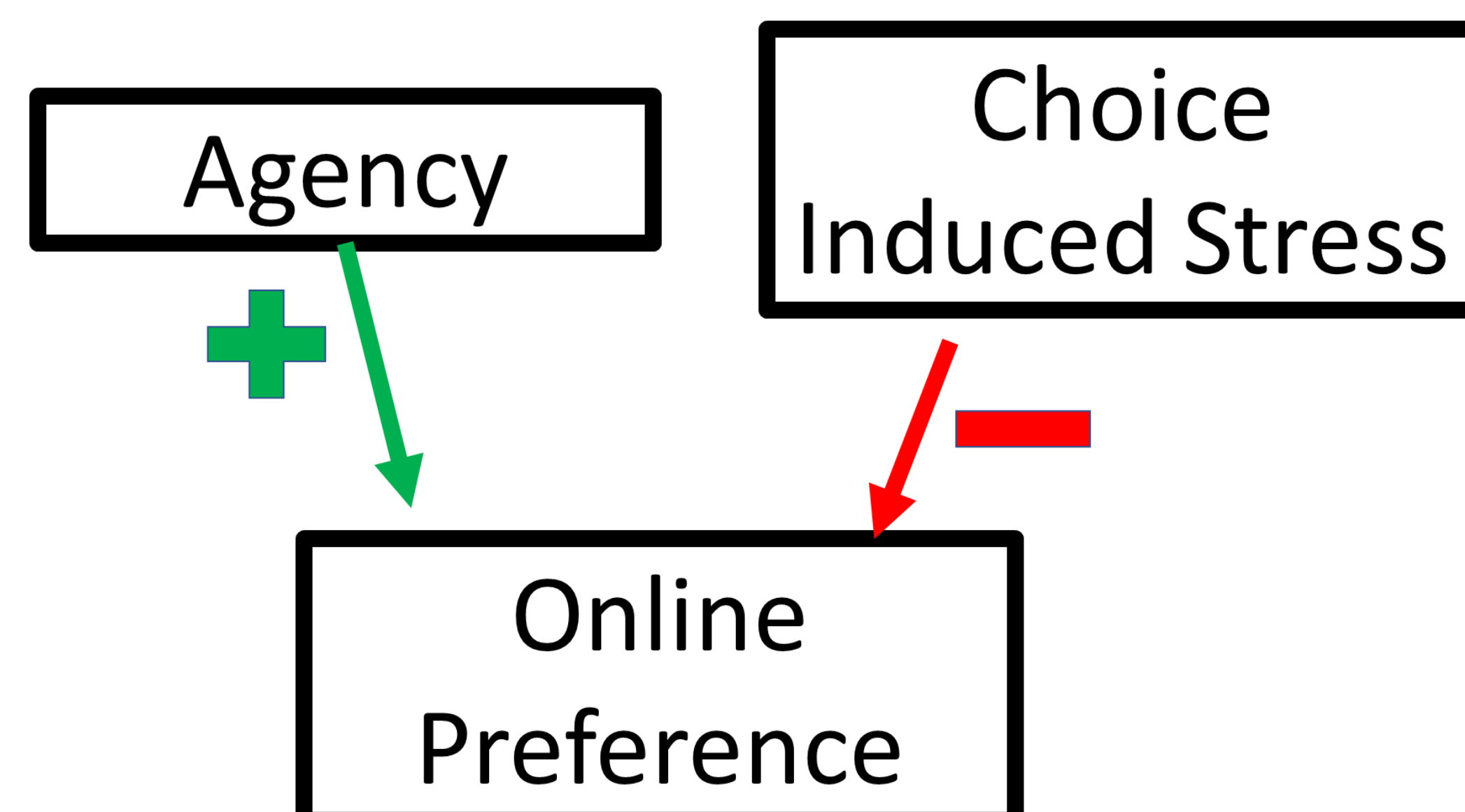


Introduction

- COVID-19 forced-remote learning has had mixed results, with some students preferring online classes^{1,2}.
- Content overload, or “decision paralysis”: Presenting an individual with too many options causes them to “freeze” and their later decisions to be less decisive³.
- Content overload may create stress, which at high rates would impact learning mechanisms⁴.



Hypothesis

1. Increasing presented workload will have detrimental effects on learning.
2. Remote learning preference -> better memory larger presented workloads. In-person learning preference -> better memory structured, condensed presented workload.

Methods

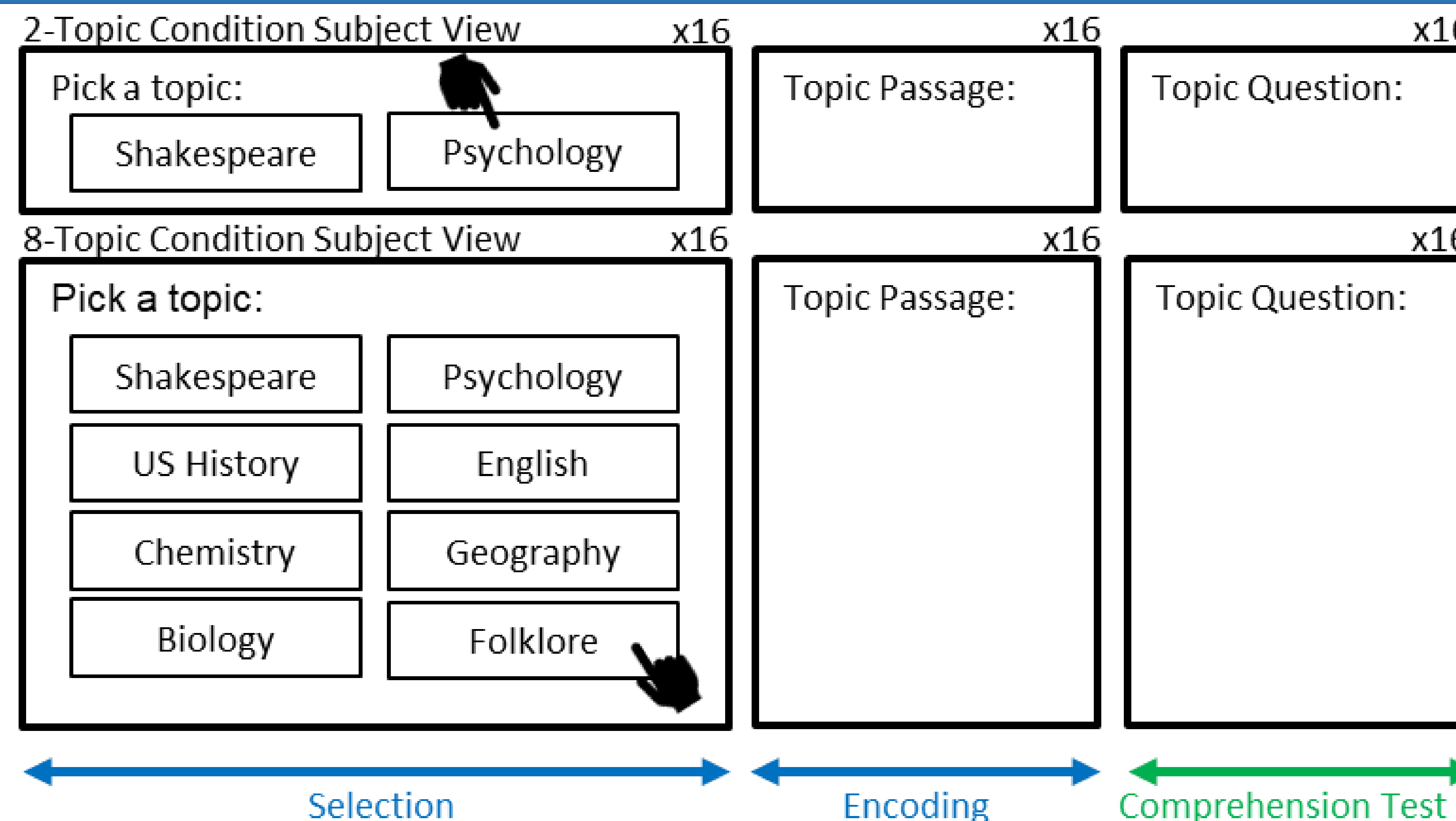


Figure 1a. Study Design outline. Day 1 activities shown in blue (Day 1 questionnaire not included in figure). 24 hours later: comprehension test - green (Day 2 questionnaire not included in figure).

Topic: Psychology – Read the following description of the speech areas of the brain:

Broca’s area, located in the frontal lobe of the brain, is responsible for...

What signs would a patient with a damaged Broca’s area exhibit?

- a) Blindness
- b) Inability to comprehend words
- c) Inability to speak, but can comprehend

Figure 1b. Example topic selection passage and question.

Predicted Results

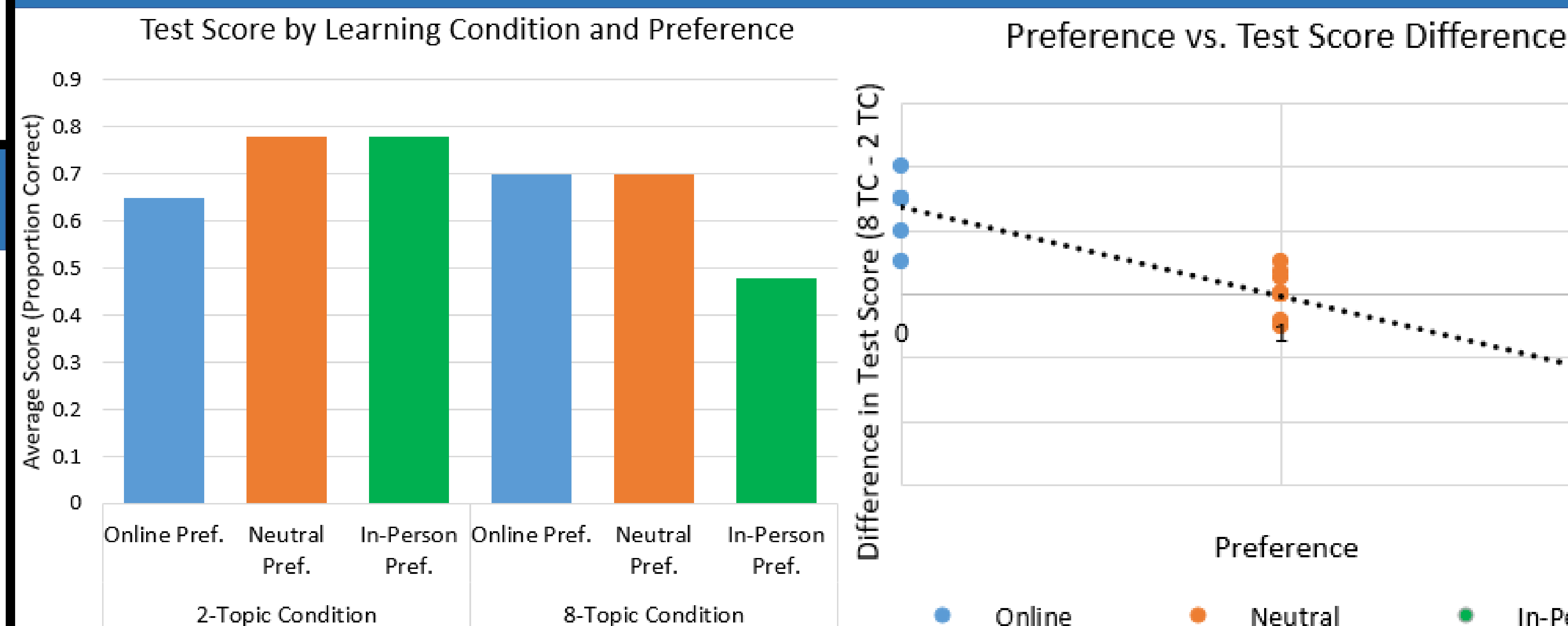


Figure 2. # of Topic Conditions (and preference) vs. Average Test Score. Predicted negative effect of increased workload

Figure 3. Preference vs. Difference in Score (8 Topic – 2 Topic). Predicted negative cost of topic presentation number for in-person preference.

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