

CONFIDENTIAL - FOR PEER-REVIEW ONLY**Research Methods class project: Within-subjects depth of processing February 2022 (#86653)**

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This is an anonymized copy (without author names) of the pre-registration. It was created by the author(s) to use during peer-review.
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1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

Will "deep" processing of words result in better memory than "shallow" processing?

3) Describe the key dependent variable(s) specifying how they will be measured.

The dependent variable is the number of words recalled for each type of processing.

4) How many and which conditions will participants be assigned to?

This study uses a within-subjects design. Each participant will be exposed to 24 words. Half of the words will be processed using a "deep" orienting task, and the other half will be processed using a "shallow" processing task. As a control for word recall difficulty, the words paired with the "deep" orienting task for half of the participants will be paired with the "shallow" tasks for the other participants.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

In addition to basic descriptive statistics and graphs, we will do a traditional paired-samples t-test for the main dependent variable. We will also do a Bayesian "t-test" using the default prior in JASP (version 0.16) to obtain a Bayes factor. We will also report the effect size along with its confidence interval. All other analyses will be labelled as exploratory.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We have no a priori plans for dealing with outliers. We will exclude results from any participant who does not complete all of the experimental tasks.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

This is a class research project. Each student in the class will test one participant, so we expect to test about 20 participants in all.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

We have nothing else to pre-register.