PSY 222 Research Methods Class Research Study (spring 2024)
Source of preregistration questions: aspredicted.org
Preregistration: February 9, 2024

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?
Does deep processing of complex images improve memory for the images?

3) Describe the key dependent variable(s) specifying how they will be measured.
The main dependent variable is the number of images correctly identified on a 16-item multiple-choice test that will be administered immediately after the images are presented.

4) How many and which conditions will participants be assigned to?
Approximately 30 participants will be randomly assigned to one of two conditions (15 per condition):
(1) Control condition: participants will be asked to try to remember each image.
(2) Deep-processing condition: participants will be asked to rate how much they like each image.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
The main analysis will be a comparison of test scores in the two conditions. We will (1) present descriptive statistics and graphics (e.g., a rain cloud plot, or a bar graph), (2) do a traditional two-tailed t-test using an alpha level of .05, and (3) do a Bayesian t-test using the default prior in JASP to obtain a Bayes factor.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We plan to include all scores in the analysis. All decisions about any outliers will be done post hoc, and will be identified as such.

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.
Each student in PSY 222 will be asked to test one participant in each condition, which will give us about 15 participants per group.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
No. Any additional analyses will be identified as exploratory.