

Preregistration

Reproducibility mini project: Alberta trees

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Data collection

Yes, we already collected the data.

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

It's complicated. We have already collected some data but explain in Question 8 why readers may consider this a valid **pre**-registration nevertheless.

Hypothesis

Example: A month-long academic summer program for disadvantaged kids will reduce the drop in academic performance that occurs during the summer.

**Dependent
variable**

Example: Simple average GPA across all courses during the first semester after the intervention.

Conditions

Example 1: Two conditions: Offering summer program: yes vs no.

Example 2: 12 conditions in a mixed design lab study. Participants will be assigned to one of four conditions: math training, verbal training, memory task, or control (4 between-subject conditions). Each participant will complete a math test, a verbal test, and a memory test (3 within-subject conditions).

Analyses

Example: Linear regression predicting the simple average GPA in the semester after the intervention with a dummy variable indicating whether the participant was offered the summer program or not (intention-to-treat analysis). We will also conduct the same regression controlling for simple average GPA during the semester before the intervention, gender, & household income (an 8-point scale ranging from 1 = below \$20,000 and 8 = above \$150,000).

**Outliers and
exclusions**

Example 1: We will compute the overall mean and standard deviation across all conditions, and winsorize at 2.5 SD above/below the mean.

Example 2: We will exclude participants who incorrectly answer at least 2 of our 3 attention check questions. Example 3: We will exclude any participants who complete the survey in less than 30 seconds.

Sample size

Example: We will offer the program until 500 people have agreed to participate in it or until June 30, 2016 (whichever comes first).

Other

Example: We will include a battery of questions for exploratory purposes, including life satisfaction, amount of videogame playing, and family activity. We will also provide an additional survey with 24 questions assessing achievement orientation. We will not report the results of those analyses for the project being pre-registered. NOTE: If you leave this blank it will read 'Nothing else to pre-register.'

Study type Finally. For record keeping purposes, please tell us the type of study you are pre-registering.

- Class project or assignment: reproducibility

References

Hesketh, A., Loesberg, J., Bledsoe, E., Karst, J., & Macdonald, E. (2021). Seasonal and annual dynamics of western Canadian boreal forest plant communities: A legacy dataset spanning four decades [Data set]. Scholars Portal Dataverse. <https://doi.org/10.5683/SP3/PZCAVE>
