

Cognitive reflection and test results (#29588)

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1) Have any data been collected for this study already?

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

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

Are the grades of those students considered as reflective and who were under optimal conditions at the time of taking the first econometrics exam better?

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

Our dependent variable is to analyze the results of the first partial of econometrics of 2019-2

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

Three additional variables will be collected from those already in the database.

1. Partial results
2. Sick / not sick in the partial week
3. Number of partials assigned for that week

The last two will be collected on the same sample (The three econometrics groups of the Universidad del Rosario) through a survey.

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

A linear regression will be carried out to analyze if a person who is considered more reflective can obtain better results in the Econometrics test based on the fact that he / she was in optimal conditions (not being sick and a softer academic load). The main dependent variable are the test results and the control variables include sick / non-sick (Dummie), cognitive reflection test results, academic load and neurocytism.

Initially the Breusch pagan test will be applied. And in addition to this the standard errors will be calculated by robust standard errors and standard errors per cluster depending on the number of partials presented that week (variable representing the academic load of the students).

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

They are not considered exclusions for pre-registration.

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.

The number of observations corresponds to approximately 90 students, the same ones who participated in the 5-week tests for the data collection carried out by the professors of the subject.

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

For the additional variables to be collected, such as the original sample, it is first necessary for each student to use his code again and answer three questions: What was his grade in the first set? Was he sick that week? And how many partials did he have that week? The use of the code will guarantee the anonymity of the students.