**Name: Lab Assignment**

**Yeager Data**

We’ll tell you more about this data in a little bit. For now focus on the underlined variables. Do you think any of these psychological characteristics are related to one another?

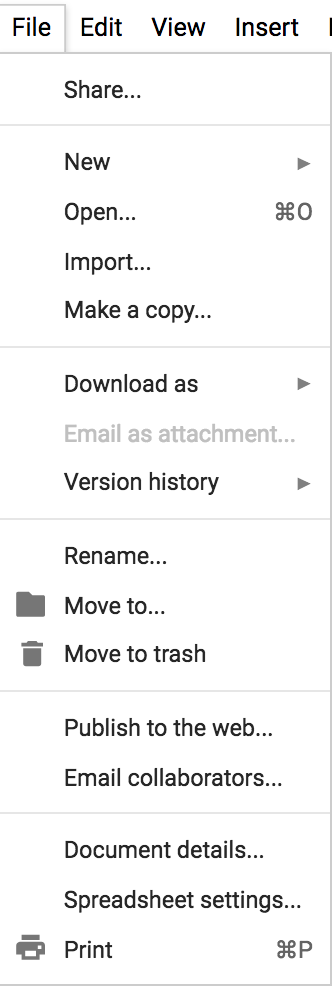
Data Information

The data in each row corresponds to a single individual in the study.

Column descriptions

|  |  |
| --- | --- |
| **subject** | ID for the participant. |
| **respect\_condition** | Whether the participant was spoken to respectfully (1) or not 0) |
| **testosterone** | The measure of the testosterone via the saliva sample |
| **spoon1\_before** | The mass (grams) of the vegemite in the 1st spoon before it was given. |
| **spoon1\_after** | The mass (grams) of the vegemite in the 1st spoon after it was given. |
| **spoon2\_before** | The mass (grams) of the vegemite in the 2nd spoon before it was given. |
| **spoon2\_after** | The mass (grams) of the vegemite in the 2nd spoon after it was given. |
| **ravens\_correct** | Number of items answered correctly in a Standardized Progressive Matrix |
| **openness** | Score from the Big Five personality test (OCEAN), 1 (low) - 7 (high) |
| **conscientious** | Score from the Big Five personality test (OCEAN), 1 (low) - 7 (high) |
| **extraversion** | Score from the Big Five personality test (OCEAN), 1 (low) - 7 (high) |
| **agreeable** | Score from the Big Five personality test (OCEAN), 1 (low) - 7 (high) |
| **narcissism** | Score from the Big Five personality test (OCEAN), 1 (low) - 7 (high) |
| **emotion\_stability** | Average score from questions regarding emotional stability, 1 (low) - 7 (high) |
| **reactance** | Average score from questions regarding reactance, 1 (low) - 7 (high) |
| **subjective\_power** | Average score from questions regarding subjective power, 1 (low) - 7 (high) |
| **aggressive\_right\_now** | “How aggressive are you feeling right now?”, 1 (low) - 7 (high) |
| **sex\_drive\_right\_now** | “How high is your sex drive right now?”, 1 (low) - 7 (high) |
| **campus\_greek** | Are you in a fraternity or sorority? |
| **status** | Average score from questions regarding personal status, 1 (low) - 7 (high) |
| **competent** | Average score from questions regarding self-competence, 1 (low) - 7 (high) |
| **autonomous** | Average score from questions regarding autonomy, 1 (low) - 7 (high) |
| **respectful** | Measure of how respectful they felt the researcher was, 1 (low) - 7 (high) |

1. What variable might explain the variation in another variable? What is *your* story of the DGP? We will call this “*your hypothesis*.”
2. Now let’s make this data available in DataCamp Sandbox. Get a google drive account and put the YeagerData excel file in and publish as a .csv file. Write down the directions here.



1. Here is some general information about how to get a published .csv file into DataCamp Sandbox. Where should you put the url?

# use the function **read\_csv** from the **readr** package

library(readr)

some\_data <- read\_csv(url(“**import url for the data goes here in quotes**”))

1. Now let’s go back to *your* hypothesis.
   1. **Explore variation.** Explore the variation in your outcome variable. Then make a plot or graph that would explore your hypothesis. From eyeballing, what would you say about your hypothesis?
   2. **Model variation**. Create the best fitting model and write it down here. Interpret your model’s estimates here.
   3. **Evaluate model**.
      1. Which part of the DGP are we interested in: or ?
      2. If we created some kind of random DGP, what would the be?
      3. Could a random DGP produce our sample ?
      4. Could a DGP where the was 0 possibly produce our sample ? If you created such a DGP, how many of the s would be more extreme than the one you got?
      5. What are the range of possible s that could have produced our sample?

Draw a picture of iv using the distribution triad.

Draw a picture of v using the distribution triad.