

# Simulating Data in R

- So far we've looked at wrangling, visualising, and modelling data using R.
- Now we're going to look at creating or simulating data using R and looking at some programming in R.

# Why?

- Data simulation allows you to do a number of things:
  - Determine whether your design supports the kinds of analyses you are planning to do (especially important if you pre-registered your analysis plan on OSF).
  - Determine whether the sample size and number of observations you are collecting is sufficient for you to detect the magnitude of the effect you are predicting with a reasonable level of precision.
  - Write your analysis script before you've even collected your data thus making everything more efficient.