

# Basic Statistics & Plotting

# You've already learned *a lot!*

- Objects
- Classes
- Indexing 1-d vectors and 2-d data.frames
- Logical operators & functions
- How to look at the help documentation
- Installing/loading packages
- Making new script files
- Importing your data etc.
- Basic statistics
- Basics of `ggplot2`

# This time

- Lots of practice sets; letting it all come together
- Some random tidbits to make your life easier

# About the MIDUS dataset

Project Description: "The purpose of the study was to investigate the role of behavioral, psychological, and social factors in understanding age-related differences in physical and mental health." Variables available in this data file:

- **Demographic variables:** age, sex
- **Physical health variables:** self-rated physical health, heart problems, father had heart attack, BMI
- **Mental health variables:** self-rated mental health, self-esteem, life satisfaction (*life overall, work, health, relationship with spouse/partner, relationship with children*), hostility (*stress reactivity & aggression*)

# Statistical Analyses

You already know everything you need to run statistical analyses! All statistics in **R** are computed by using **functions**. If you know the type of analysis you want to run, find the corresponding function and go for it!

*Is there a difference in **hostility** between men and women in this sample?*

**Statistic: T-test**

# A note about