

# *t*-tests in R

# Types of *t*-tests

# Single Sample $t$ -test

- Comparing a value to a group mean
- Compare a sample mean to the population mean

# Independent $t$ -test

- Compare the means of two separate groups

# Dependent $t$ -test

- Compare the means of two groups that are related
  - Same person/thing over time
  - Siblings, couples

# *t*-tests in R

# t.test()

- Same function, three tests!
- Single sample
  - $\mu =$
- Dependent
  - paired = TRUE
- Independent
  - paired = FALSE
  - (though not required)

# t.test()

- Independent / Dependent
  - alternative = "two.sided" : 2 tailed test
  - alternative = "greater" : 1 tailed, higher than the mean
  - alternative = "less" : 1 tailed, lower than the mean
- var.equal=FALSE
  - Default
  - For when your variance isn't equal
- var.equal=TRUE