Advanced Psychological Statistics

PSYCH-UA.11 Department of Psychology Spring 2022

Cor

A command that completes a correlation on a set of x and y data

```
To use "cor" cor(y\sim x) – where y is the dependent variable and x is the independent variable
```

Data frame

A data frame is a table of varied data types in R

```
To create a data frame – df = data.frame(x,y,z...)
```

Install()

Installing a package (and set of functions/commands that exist outside of the installed R software) allows R to complete processes that are built-in to the package.

```
To install a package Install(package name)
```

This simply makes the package available to R, but doesn't make it active for the current session (see the "library() command)

Library()

This command installs a downloaded package (see "install()) into the current session of R. (If an external package is only installed its functions won't be available in R.)

```
To use library() (to activate a downloaded package) library(package name)
```

Multiple regression

Completing a multiple regression in R is similar to that of simple linear regression in that it uses the "lm" command –

```
lm(y\sim x+z+z1...)
```

Generally the above command is redirected into a variable

Pcor()

This is a function of the package "ppcor". This function is used to run a partial correlation.

```
To use pcor pcor(data frame)
```

Ppcor

This is a package available to R. When downloaded (with install()) and loaded into R with (library()), the function pcor can be run. This function completes a partial correlation

Summary

Prints out the values from different analyses and data structures. Using "summary" with

Summary(lm-variable) – where "lm-variable" is the stored output of the lm () command – displays on screen the results of a regression analysis