

Alcohol Exercise: Read Me File

I. Contents of the Replication Documentation

The replication documentation provided here for the Alcohol Exercise consists of a hierarchy of electronic folders and files that are organized as shown below:

Your-Name-Alcohol-Exercise (the main project folder)

read-me.pdf (a document in the top level of Your-Name-Alcohol-Exercise)

analysis.Rmd, which generates *analysis.html**

Data (a sub-folder of **Your-Name-Alcohol-Exercise**)

OriginalData (a sub-folder of **Data**)

04291-0001-Data.dta

Metadata (a sub-folder of **OriginalData**)

04291-0001-Codebook.pdf

AnalysisData (a sub-folder of **Data**)

analysis.RData

Scripts (a sub-folder of **Your-Name-Alcohol-Exercise**)

Processing (a sub-folder of **Scripts**)

processing.Rmd, which generates *processing.html**

DataAppendix (a sub-folder of **Scripts**)

data-appendix.Rmd, which generates *data-appendix.html**

**Note: The above .Rmd files generate .html files. You do not edit the html files directly.*

II. Using this documentation to replicate the exercise

To replicate the exercise, you will need access to a computer with a copy of RStudio and R installed. (The command files provided here were written in version 3.6 of R.)

The steps required for the replication are as follows:

- Copy the **Your-Name-Alcohol-Exercise** folder, and all of its contents, on to the computer you will be using. Be sure not to change the organization of the folders and the files they contain.
- Launch RStudio. Note: In order to be able to "knit" the documents, you will need the following.
 - RStudio (This project was created using Version 1.1)
 - R (This project was created using Version 3.5)
 - Within R, the following packages must be installed:
 - `tidyverse` (This project was created using Version 1.2)
 - `haven` (This project was created using Version 2.1)
 - `knitr` (This project was created using Version 1.22)
 - To install these packages (only necessary for the first use), type in R:

```
install.packages("tidyverse")
install.packages("haven")
install.packages("knitr")
```

- Open the **Scripts** folder, and then the **Processing** folder. Open *processing.Rmd*, and click "knit". Knitting *processing.Rmd* will:
 - Read the data from the original data file *04291-0001-Data.dta* (which is stored in the **OriginalData** folder).
 - Process the data as necessary to create the analysis data file that will be used to generate the figures for the exercise. Save the processed analysis data in a file named *analysis.RData*, stored in the **AnalysisData** folder. (If a previously generated version of these *analysis.RData* is already stored in the **AnalysisData** folder when you run *processing.Rmd*, it will be overwritten.)
 - The data processing is summarized in the generated file *processing.html*.
- Open the **Scripts** folder, and then the **DataAppendix** folder. *data-appendix.Rmd*, and click "knit". Knitting *data-appendix.Rmd* will:
 - Read the data from the analysis data file *analysis.RData* (which was created and saved in the **AnalysisData** folder when you ran *processing.Rmd*).

- Generate the Data Appendix (*data-appendix.html*), including graphs that show the frequency distribution of one of the variables in the analysis data file and additional output including tables and descriptive statistics.
- Open *analysis.Rmd*, and click "knit". Knitting *analysis.Rmd* will:
 - Read the data from the analysis data file *analysis.RData* (which was created and saved in the **AnalysisData** folder when you ran *processing.Rmd*).
 - Generate *analysis.pdf* including the narrative and six bar graphs.