## Data Inquiry Lab: Introduction to R

## **Comprehension Check Exercises**

While these exercises are built around social and economic data, the fundamental concepts of using RStudio are applicable for anyone. With these exercises complete you should be good to go on your way exploring your own interests.

- 1. Edit your script file. Close it. Then open it again in R Studio.
- 2. Check the contents of your R workspace. With what function do you list objects you have created?
  - (a) After loading the 'poll' dataset from the first script file: under the RStudio menu Session, save your workspace. Clear your workspace, then Load it and check again the object contents of it.
  - (b) With the poll dataset, create a histogram using *base* package graphics of feelings toward 'the military'. (Find the military feeling thermometer with the function names (poll). Using the *lattice* package create another histogram of feelings toward the military. Key point in this exercise: different packages sometimes do the same thing, just styled differently. Function names in the packages could be similar or even identical.
- 3. From the plot.ly webpage https://plot.ly/r/, after we have installed and loaded the *plotly* package, copy and paste into RStudio lines for any graphic that captures your attention.
  - (a) Try altering components of the graphic commands to observe what changes occur in the graphic
  - (b) Where on the plotly webpage do you find documentation for the graphics functions in *plotly*?
- 4. Create an R data object called 'myWDIdata' containing two indicators from the World Bank on countries in the year 2000. Search for any two indicators of your choice. Create a scatterplot.
- 5. With multiple years of data, create a GoogleVis MotionChart.

From here, search the web and GVSU library for relevant resources. Check the CRAN task views for packages in your subject area.