**Extended Notes for Instructors for Exercise STAT4S\_SDA**

This is the third in a series of exercises for an introductory course in statistics in the social sciences.[[1]](#footnote-1) This series uses SDA (Survey Documentation and Analysis) which is an online statistical package written by the Survey Methods Program at UC Berkeley. SDA can be used without cost wherever one has an internet connection. Students can be shown how to use SDA in approximately ten minutes making it unnecessary to spend valuable class time on how to use the statistical package. There is also an extensive help menu available to users of SDA. I have prepared notes on using SDA which can be accessed by clicking here.

The data set used in this series of exercises is the General Social Survey’s 2014 Cumulative Data File (1972 to 2014) which is available without cost by click [here](http://sda.berkeley.edu/sdaweb/analysis/?dataset=gss14). For this exercise we will only be using the 2014 General Social Survey. The exercises show students how to select the 2014 survey from the cumulative data set. A weight variable is automatically applied to the data set so it better represents the population from which is sample was selected.

The General Social Survey is a large, national probability sample of adults (18 years and older) living in the United States conducted by the National Opinion Research Center (NORC) at the University of Chicago. The GSS started in 1972 and was conducted annually through 1994 and biannually since then. Many of the questions in the GSS have been repeated from previous years providing important trend data. The most recent GSS was 2014. The sample size for the 2014 survey was approximately 2,500.

More information about the GSS can be found on the [NORC - General Social Survey website](http://gss.norc.org/).[[2]](#footnote-2) At the website you will find the documentation for the survey, survey questionnaires, a bibliography, useful Frequently Asked Questions, and more. You can also download the complete GSS in either SPSS or Stata format. You can create a free account on the GSS Data Explorer where you can search the GSS by variable and topic.

In the exercise and the extended notes, variable names appear in italics and SDA commands are in all capitals to make them easily recognizable. You could modify this if you wish.

Since these exercises were written so each exercise was independent of the other exercises, there is some duplication from exercise to exercise. If you are using several exercises, you may want to remove some of that duplication.

The goal of this exercise is to explore different types of charts and graphs. The exercise also gives students practice in using FREQUENCIES in SDA. In the exercise students are asked to use CHART OPTIONS and get pie, bar, stacked bar, and line charts. Another option that is very useful is the QUESTION TEXT option which will display the question from the General Social Survey that the variable is based on.

SDA uses the term bar charts to describe one of the chart types. Typically in a bar chart the rectangles do not touch each other while in a histogram they do. SDA does not include histograms as an option. You may want to make the distinction between bar charts and histograms in class.

To avoid students overwriting the data file, it is important that you make the data file a read only file.

You have permission to use this exercise and to revise it to fit your needs. Feel free to revise the exercise in any way you want. Just recognize the source of the original exercise. Please send me a copy of the revised exercise so I can see how others are using it.

If you would like to contact me, please email me at [ednelson@csufresno.edu](mailto:ednelson@csufresno.edu). I’m Professor Emeritus at California State University, Fresno in the Sociology department. I taught research methods, statistics, and critical thinking before retiring and now teach a critical thinking course part time.

1. The first in the series used SPSS as the statistical package for the exercises. The second used PSPP as the statistical package. Both series of exercises are on the Social Science Research and Instructional Council’s [website](http://ssric.org/tr/onlinetextbooks). [↑](#footnote-ref-1)
2. It will ask you to log in when you click on the link. Wait several seconds and click on the X in the upper right and the site will open. [↑](#footnote-ref-2)