**Lab 3: Monitoring the Future Study**

**Part I: Continuing Data Preparation**

For this lab, you will begin working with the Monitoring the Future data for 2016, the most current year for which data are available. The 2017 will not be available until October.

1. Read your newly created csv file into RStudio and name it DataLab3. Check that you have done this correctly with head(DataLab3). For now, the variable values are all numeric. Next, you will use the Codebook and give the numeric values labels. (How did you handle the missing values?) Note: DataLab3 is a data frame. When you want to apply a command to any variable in this data frame, you need to preface the variable name with DataLab3$.

2. Look back at how you coded the variables int$Sex and int$Int\_Rate. Use the codebook to add labels to the numeric data values in your DataLab3 data frame. After you complete this step, you will be ready to move on to Part II, Analysis

**Part II: Analysis**

4. What percentage of the respondents were Male? Female?

5. Look at Race. What are the categories for which you are allowed to view the data? Why do you think some categories are blocked?

6. Make a table that would help you answer the following question: Are males or females more likely to have gotten tickets?

7. a. Make a two-way table for Drive and Ticket.

b. Is there an association between how far students drive and their getting tickets?

c. Make table of the distribution of tickets for each level of driving distance.

d. Make a graphic display for part c.

**Part III: About the MTF Study**

7. Spend some time conducting some research via Codebook and the Internet on the MTF study. Describe some of your findings in one or two **well-written** paragraphs. Put some effort into these paragraphs. You may be able to use them in your final technical report.

In particular, you will have a section called Methodology. In that section, you will need to describe your data source and say something about how the data were collected. Watch the video from Unit 17 *Samples and Surveys* from [www.learner.org/courses/againstallodds](http://www.learner.org/courses/againstallodds). This will provide a background on sampling designs.