SPSS Exercise
Crosstabs
Due:

Crosstabulations (aka crosstabs or contingency tables) are types of tables that compare the frequency distribution of two variables.

Objective:
There are four objectives to this assignment. The first two involve using SPSS and the second two are about what to do with the output from SPSS

1. Learn to make crosstabs using SPSS
2. Learn to read the output from SPSS
3. Learn to draw crosstab tables.
4. Learn to analyze crosstabs.

SPSS Procedure:

1. Open the data set
2. From the toolbar select Analyze->Descriptive Statistics->Crosstabs. See Figure 4.1. This will cause a window similar to that in Figure 4.2 to appear.
3. In the box that appears enter the independent variable (IV) in the Column(s) box and the dependent variable (DV) in the Row(s) box. See Figure 4.2.
4. Designate the information to appear in the crosstabs. Click on the Cells button and under Percentages select Columns. See Figure 4.3. Then click "Continue". On the next screen click "OK"

Reading the Output:
Figure 4.4 shows the output from the procedure above.

The data in the "Case Processing Summary" is of no use to us for this assignment but it does show the frequency and percentage of respondents in the analysis. The N of 2,811 means that, of all the respondents that participated in the survey 2,811 (rounded up to 100%) gave answers that could be used in the analysis. One person gave data that was not used and this person is labeled as "missing."

The second box provides the information we want.

1. Think of the second box (RECODED Labor Force Status*RESPONDENTS SEX Crosstabulation) as containing 6 columns. The first column on the left shows the DV (RECODED Labor Force Status) in the analysis. The bottom of the first column indicates that in that row column totals will be presented.
2. The second column contains the attributes of the DV (wrkstatR). The attributes are "Working" and "Not Working."
3. The third column indicates that on the cells to the left the frequency will be presented on top of the cell and the percent within RESPONDENTS SEX" will be presented in the bottom of the cell.
4. The top of columns 4 and 5 show the IV (SEX) and the attributes of the IV (MALE and FEMALE)

5. Column four and five present essentially the same data. They show the frequency and percent of each combination of IV and DV variables. For example, below "MALE" in column 4 "902" is displayed and below that "70.5%". This means that of all the men in the sample, 902 of them (or 70.5%) are working. Below "FEMALE" see "884" and "57.7%" are displayed. This means that of all the women in the sample 884 (or 57.7%) are working. At the bottom of the fourth column: "1279" and "100.0%". This means that 1,279 men answered that they were either "Working" or "Not Wokring." Another way of thinking of this is that there were 1279 men in the analysis
6. Column 6 presents some very important data. It shows how many men and women were working. In the second cell of column 6 under TOTAL notice the "1786" followed by "63.5". That means 1,786 (63.5%) were working. This is important because it helps put the data for the single attributes into context. If we know that on average 63.5% of respondents are working then we can see that women are slightly below that average and men are slightly above.

Displaying Data:

1. Output from SPSS cross tabs should be presented in a table that displays
    a. A table number
    b. A title for the table
    c. Cells that display the % of each attribute combination and the IV total
    d. The "n" or the number of respondents in the sample (it will always be 2,812 with this data set)
    e. The source of the date (it will always be 2004 General Social Survey)

See Table 4.1 for a model of how a table might look.

Analyzing the Table:

When analyzing data:

1. Reference the table by number and title.
2. As a rule of thumb, cite at least three data points.
3. Compare attribute combinations to the total of the IV. For example the % working men to the total % working
4. Provide one sentence to summarize the findings.

Assignment:

1. In one sentence describe what you think the relationship is between sex and gun ownership.
2. Produce a crosstab that compares "sex" and "owngun," where sex is the IV.
3. In once sentence describe what you think the relationship is between sex and alcohol consumption.
4. Produce a crosstab that compares "sex" and "hlth4," where sex is the IV.
5. Make tables to present the crosstab output.
6. Write a report with the following:
    a. Define a Crosstab

b. Analyze the tables. Include a section that discusses what the predicted relationship between the variables was going to be and what the data show.
c. Discuss any problems encountered and how they were surmounted.
d. Include tables and output.

Figure 4.1

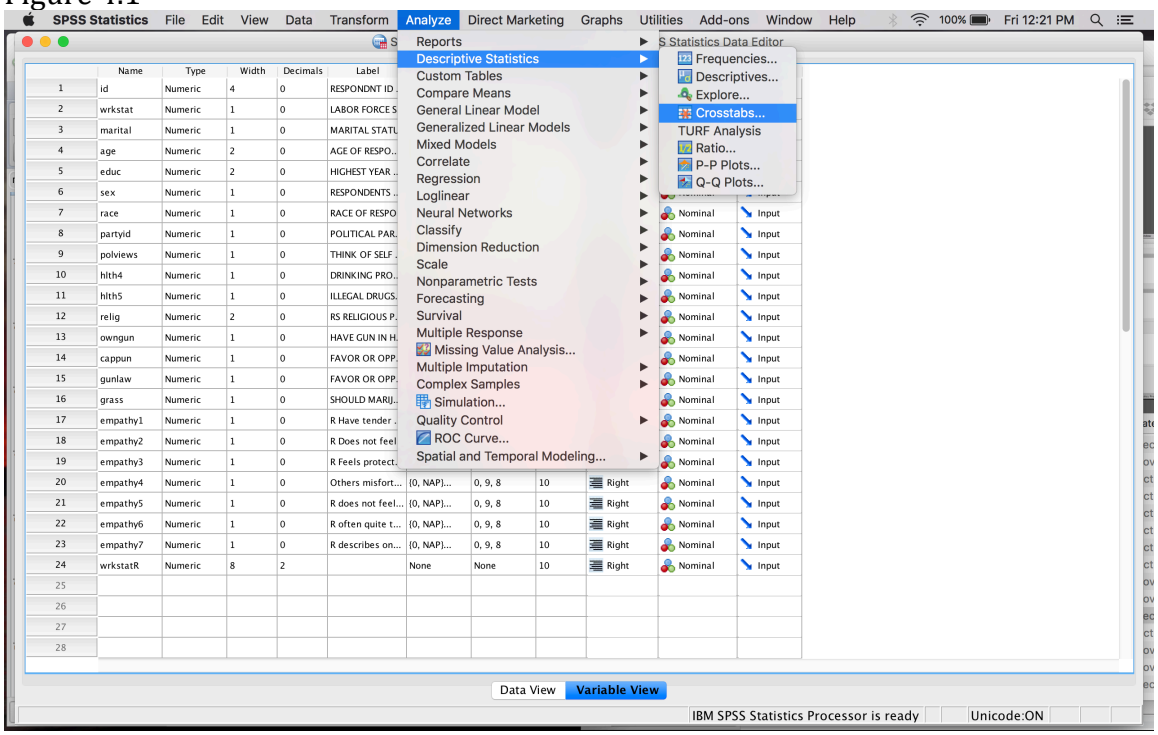

Figure 4.2

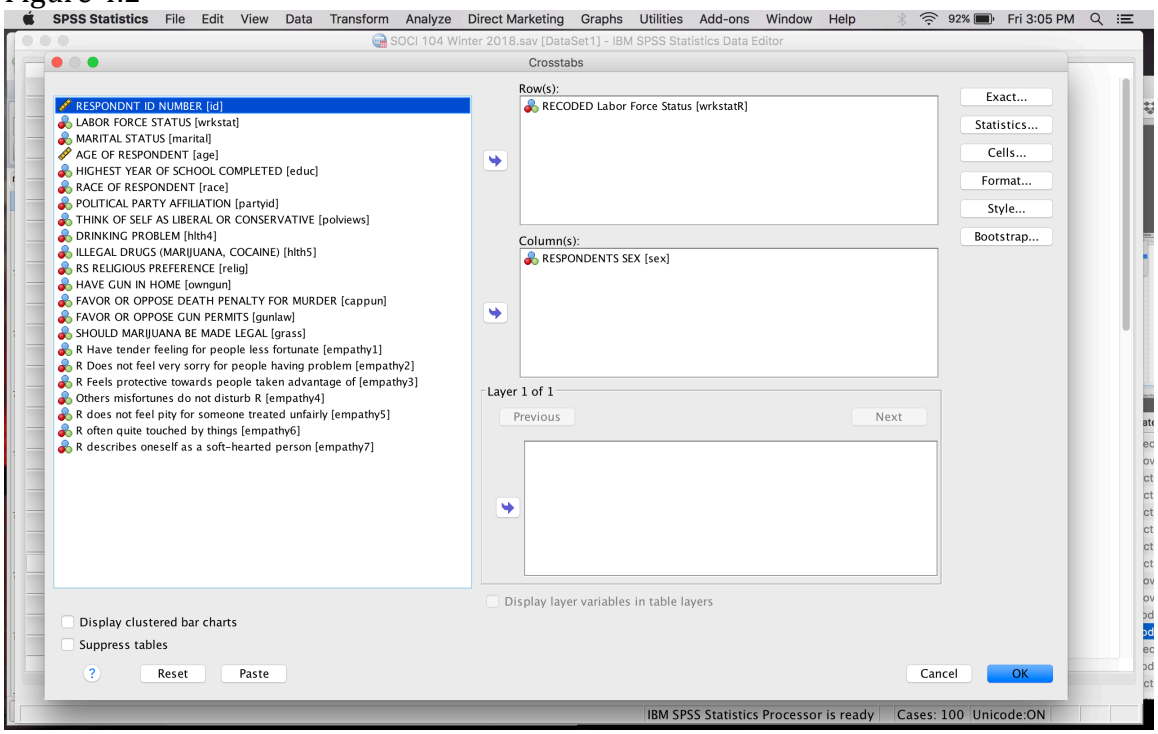

Figure 4.3

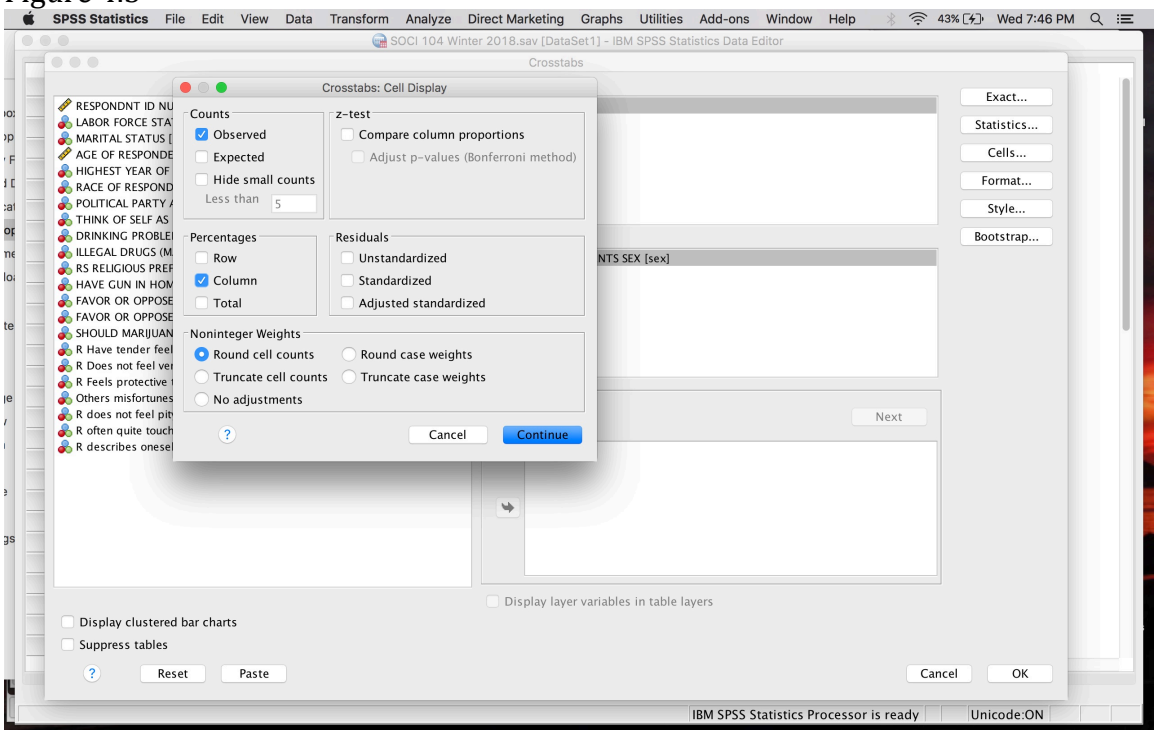

Figure 4.4

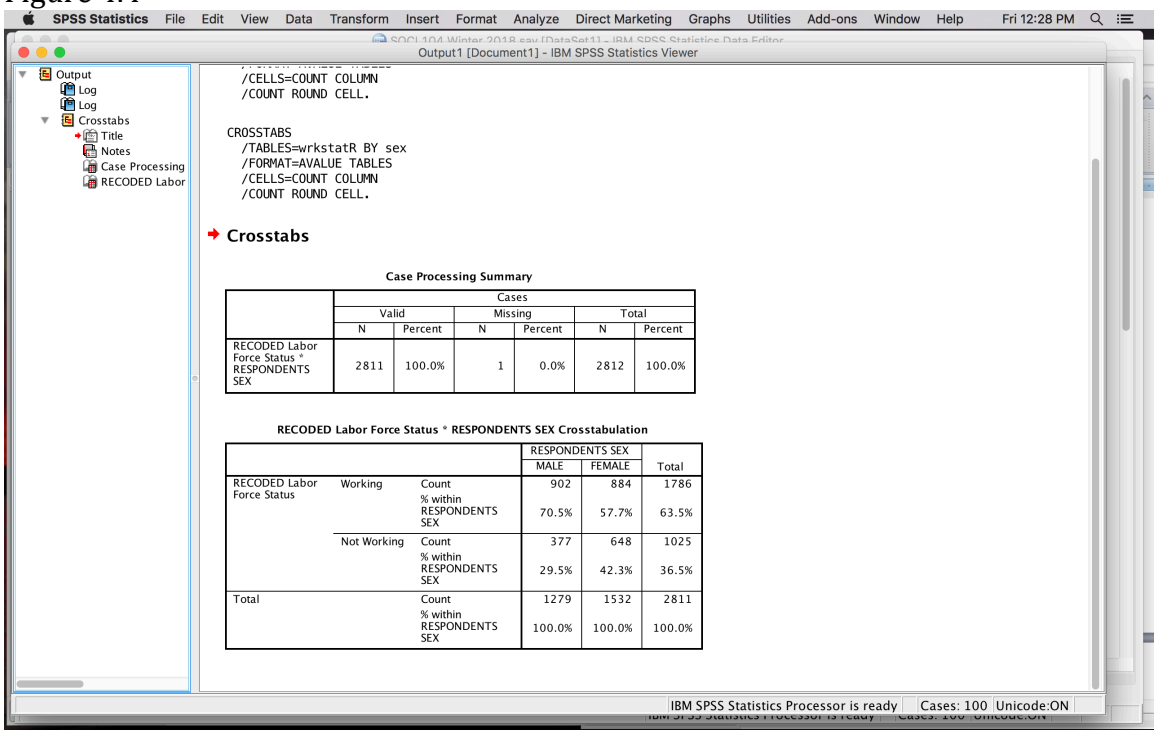

Table 4.1. Cross tabulation for Sex and Respondents' Labor Force Participation

	Male	Female	Total
Working	70.5% (902)	57.7% (884)	63.5% (1786)
Not Working	29.5% (377)	42.3% (648)	36.5% (1025)
Total	100% (1279)	100% 1532	100% 2811

Source: 2004 General Social Survey
n=2812