**Week 4 Descriptive Statistics**

Review all documents in the Week 4 tab. The SPSS output is provided so you can check your answers. Turn in this document with the title: WkAssn\_LastnameFirstInitial\_DATE. Do not submit as a paper, no APA ciattions or refernce list is required. Do not submitt SPSS output (tables) as answers to the questions.

**Part I**

Using the Polit2SetA data set, run descriptive statistics on the following variables: respondent’s age (*age*) and highest school grade completed (*higrade*). Create a frequency distribution for the variables: race and ethnicity (*racethn*) and currently employed (*worknow*). Create a table, example given, (in APA format) summarizing the results, using the below table shell as a model. The numbers in the table below are “dummy varaibles” and should be replaced with the numbers from the SPSS ouput. Write a paragraph summarizing the information in the table.

Table 1. Demographic Data (*N* = 30)

*n* % M (SD)

Age (in years) 30 15(2.4)

Highest School Grade Completed 29 11(1.2)

Race and Ethnicity

Black, Not Hispanic 14 (46.67)

Hispanic 8 (26.67)

White, Not Hispanic 6 (20.0)

Other 2 (6.66)

Currently Employed

Yes 27 (90)

No 3 (10)

*Note.* Differences in sample size are due to missing data.

Follow these steps when using SPSS:

1. Open Polit2SetA data set.
2. Click on **Analyze,** then click on **Descriptives Statistics**, then **Descriptives**.
3. Click on the first continuous variable you wish to obtain descriptives for (respondent’s age), and then click on the arrow button and move it into the Variables box. Then click on **highest school grade completed** and then click on the arrow button and move it into the Variables box.
4. Click on the **Options** button in the upper-right corner. Click on **mean**, **standard deviation**, **minimum**, **maximum**, and **skewness**.
5. Click on **Continue** and then click on **OK**.

To run the frequency distribution in SPSS, do the following:

1. Click on **Analyze**, then click on **Descriptive Statistics**, then **Frequencies**.
2. Click on the first categorical variable you wish to obtain a frequency for (race and ethnicity), and then click on the arrow button and move it into the Variables box. Then click on **currently employed,** and then click on the arrow button and move it into the Variables box. Click on the **Statistics** button in the upper-right corner, then in the Dispersion box click on **Minimum and Maximum**.
3. Click on **Continue** and then click on **OK**.
4. Check your work with the SPSS Week 4 Descriptive Statistics SPSS Output document.

**Assignment:** Create a table (in APA format) summarizing the results, using the below table shell as a model. Write a paragraph summarizing the information in the table.

**Part II**

For the variables respondent’s age (*age*) and highest school grade completed (*higrade*) create a histogram with a normal curve displayed over the histogram. Do not submit the SPSS output (tables) as the answer.

To create a histogram for respondent’s age in SPSS, do the following:

1. Click on **Graphs**, then on **Legacy Dialogs**, then **Histogram**.
2. Click on the variable **respondent’s age** and then click on the arrow button and move it into the Variables box. Click on the **Display Normal Curve** button, which is right below the Variables box.
3. Click on **OK**.

To create a histogram for highest school grade completed in SPSS, do the following:

1. Click on **Graphs**, then on **Legacy Dialogs**, then **Histogram**.
2. Click on **respondent’s age** in the Variable box and click the arrow to move it back to the box on the left that contains all the variables.
3. Click on the variable **highest school grade completed** and then click the arrow button and move it into the Variables box. The **Display Normal Curve** button should alredy be on.
4. Click on **OK**.
5. Check your work with the SPSS Week 4 Descriptive Statistics SPSS Output document.

**Assignment:** Using the data obtained when you ran the descriptives and the histograms, determine whether the data skewed. If so, is it a positive, negative or neutral skew?

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ skew

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ skew

**Part III**

Using the Polit2SetA data set, run descriptive statistics on the variable “Family Income Prior Month, all sources” (Income).

Follow these steps when using SPSS:

1. Click on **Analyze**, then click on **Descriptives Statistics**, then **Descriptives**.
2. Click on **Family Income Prior Month, all sources**, and then click on the arrow button and move it into the Variables box.
3. Click on the **Options** button in the upper-right corner. Click on **mean**, **standard deviation**, **minimum**, **maximum**, **S.E. Mean** (standard error of the mean), and **skewness**.
4. Click on **Continue** and then click on **OK**.
5. Check your work with the SPSS Week 4 Descriptive Statistics SPSS Output document.

**Assignment:** Using the descriptive statistics for Family Income Prior Month, all sources (Income), answer the following questions:

1. What is the mean income in this sample?
2. What is the standard deviation (SD)?
3. What is the standard error of the mean?
4. Compute a 95% confidence interval around the mean. (Use 1.96 for the 95% CI and get the standard error from the descriptive statistics table). You should get a range (2 numbers) for the salary. The formula is as follows:

95% CI = [mean ± (1.96 × SE)]

1. Compute a 99% confidence interval around the mean. (Use 2.58 for the 99% CI and get the standard error from the descriptive statistics table). You should get a range (2 numbers) for the salary. The formula is as follows:

99% CI = [mean ± (2.58 × SE)]

1. Which interval is wider? Explain.

***Review the corresponding Week 4 Descriptive Statistics Exercises SPSS Output document that has the SPSS output for the above problems. Compare your output with the output in the file.***