Lab: SPSS Basics and Descriptive Statistics
(SPSS)

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I.　　Starting and Exiting SPSS

　　　Turn on your computer
　　　　　Login:
　　　　　Password:

　　　Starting SPSS: SPSS can be started in a few ways, depending on your computer

- Click **Start, Programs, Social Work, SPSS for Windows**

OR

- Look for the SPSS icon on the desktop and double-click

　　　An "SPSS for Windows" dialogue box will appear. Click **Cancel** for now… later we will learn some other options to use when the program first initiates.

　　　Exiting SPSS:
- Click **File, Exit**

OR

- Click on the close ⊠ icon in the top right corner of the SPSS program window.

II.　　My First Data File (Same as Chapter 6 in Kirkpatrick and Feeney)

- To start a new file, click File, New, Data.

Student	Gender	Score
1	1	87
2	1	53
3	1	92
4	1	70
5	1	78
6	1	73
7	1	91
8	1	60
9	1	77
10	1	82
11	1	85
12	1	33
13	1	88
14	1	98
15	1	88
16	2	89
17	2	73
18	2	91
19	2	76
20	2	75
21	2	89
22	2	81
23	2	83
24	2	68
25	2	86
26	2	55
27	2	89
28	2	89
29	2	70
30	2	93

- How many variables do we have? What type of variables are they?

- When we enter data, it is important to convert our categorical information into numbers whenever possible. In this case, our "Gender" variable will use the following **values** and **value labels**:

  1 = Male

  2 = Female

  The numbers you assign do not matter—as long as you know (and SPSS knows) what they mean

- Type in your data (just the numbers; ignore the column headings for now) first in the "Data View" part of the SPSS Data Editor found by clicking the "Data View" tab at the bottom of the SPSS screen. The "Data View" is a primitive spread sheet.

- We will design our variables using the "Variable View" part of the SPSS Data Editor found by clicking the "Variable View" tab at the bottom of the SPSS screen.

Designing the variables can be done all on the Variable View screen:

Name	Click on the first box under "Name". Here, you type in the name of the first variable "Student"
Type	Click on the first box under "Type". Click on the gray square that appears just to the right, and a "Variable Type" dialogue box will open. Select "Numeric" and keep the "Width" and "Decimal" settings as is.
Width	Here you can adjust the width of your data columns. Leave as is for now.
Decimals	Here you can adjust the number of decimals needed for your data. Leave as is for now.
Label	Click on the first box under "Label". Here, you type in the label or very short description of the first variable… something like "Student ID#"
Values	For the first variable "Student" you will not have any **value labels** because it is not a categorical variable.
	But for categorical variables you will need value labels. For example, for "Gender" you will use the labels assigned above (1 = male and 2 = female). To do this, click on the appropriate box under "Values". Click on the gray square that appears just to the right, and a "Value Labels" dialogue box will open. Click to the Value box and type in the value 1, click on the Value label box and type in male. Click the **Add** button. Do the same procedure for female. Click **OK**.
Missing	Here you can assign codes for **missing values**. Leave as is for now.
Columns	Here you can adjust the size of your data column. Leave as is for now.
Align	Here you can adjust the alignment of the data appearance. Leave as is for now.
Measure	Here you assign the level of measurement: scale (which is the same as any continuous type variable), ordinal, or nominal. To assign the correct type, click on the appropriate box under "Measure". Click on the gray down arrow that appears just to the right, and a list will appear. Select the correct type.

- Follow these basic instructions and design our three SPSS variables.

III. Producing Frequencies and Descriptive Statistics (See Output below)

IV. Saving Data Files

- You can save the
- Click **File, Save As,** and a "Save Data As" dialogue box appears. In the **Save In:** box select 3½ Floppy (A:) or other media. In the **File Name** box give the file the name *Chapter 6 Data*.

Then click **Save.**

Exit the program. You do not need to save the output. Congratulations, you have just been initiated into the SPSS Club!

*** Comments about practicing SPSS on your own

*** Comments about Lab Rules and Guidelines

V.   Want to practice one on your own? SPSS comes with sample datasets. One of them, "GSS93 subset" contains data from the 1993 General Social Survey, a national survey done by the National Opinion Research Center at the University of Chicago. The file comes with SPSS, and is most often located in the main Program Folder of SPSS.

Find the file called *GSS93 subset* (the location of files may vary by computer)
- Click **File, Open, Data.** An "Open File" dialogue box will appear.
- Look for the *GSS93 subset* file. Click on it and then click **Open**.

- First, locate the Variable View screen and scan the variables—their names, how they are defined ("Label" column), the values or attributes of the variable ("Values" column).

Let's produce some basic statistics using this data set
- Click **[Analyze, Descriptive Statistics, Frequencies].** A dialogue box named "Frequencies" should appear
- Select the desired variables listed on the left window listing. You can click on MARITAL, AGE, EDUC, SEX, and RACE while holding down the **Ctrl** key on the keyboard to select these all concurrently.
- Click the arrow button in the middle of the dialogue box. The variables you selected should move over to the right window listing
- Click on the **Statistics** button at the bottom middle of the dialogue box
- Click to select Std. Deviation, Variance, Range, Minimum, Maximum, Mean, Median, and Mode
- Click **Continue** and then **OK**
- Your SPSS "Output" viewer screen should then appear with your results
- Find a ratio variable, and run the **[Analyze, Descriptive Statistics, Descriptives** command]

Output for My First Data Set

[Analyze, Descriptives, Descriptives command]

Statistics

		STUDENT	GENDER	SCORE
N	Valid	30	30	30
	Missing	0	0	0
Mean		15.5000	1.5000	78.7333
Median		15.5000	1.5000	82.5000
Mode		1.00ᵃ	1.00ᵃ	89.00
Std. Deviation		8.80341	.50855	14.22221
Variance		77.50000	.25862	202.27126
Range		29.00	1.00	65.00
Minimum		1.00	1.00	33.00
Maximum		30.00	2.00	98.00

a. Multiple modes exist. The smallest value is shown

Does it make sense to do the descriptives analysis for "student" and "gender"?

[Analyze, Descriptives, Frequencies command]
Frequency Table

Gender of particpant

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	15	50.0	50.0	50.0
	female	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

What would happen if you clicked frequencies for the variables "age" and "score"? Try it…