

Using SPSS for Windows - Graduates
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SPSS for Windows is available in the computer lab (LB671-5) and in the Graduate room. The databases are available on these machines but check to see which ones are available on each machine.

These instructions are to help you to analyze the data sets which have been made available on the PC network. Codebooks for those data sets can be found via the Graduate course web site via the "Data and Codebooks" link. Be sure to have looked over the codebook for your data set before proceeding with the analysis.

When you are asked to "click" in the instructions below, this refers to the LEFT button on the mouse. Sequences separated by --> refer to a sequence of pointing, then clicking.

To begin the SPSS program

- C Point the arrow to Start icon in the lower left hand corner of the screen and click the left button once.
- C Point to Programs --> SPSS for Windows, then click the left button once.
- C The SPSS program should begin after a few seconds.

To select a database

- C If "Open an existing file" is marked, then click on OK.
- C Click once on the downward pointing triangle to the right of "Look in:" at the top of the window.
- C Click on the folder named "Reimer".
- C Click on the name of the file you would like to analyze

To examine the Frequency Distribution for one or more variables (nominal or ordinal)

- C Statistics --> Summarize --> Frequencies
- C Highlight a variable you wish to examine with a click, then click on the right-pointing triangle to the right of the variable list. You can repeat this for other variables if you wish. Only choose variables which are nominal or ordinal in nature.
- C Click on OK.

To Examine one or more continuous variables (interval or ratio)

- C Statistics --> Summarize --> Descriptives
- C Highlight the variable then click on the triangle. You may repeat this for other variables.
- C Click on OK.

To prepare a Crosstabulation Table

- C Statistics --> Summarize --> Crosstabs
- C Highlight the variable with categories to appear in the rows and click the triangle beside the appropriate box.
- C Highlight the variable with categories to appear in the columns and click the triangle beside the appropriate box.
- C Highlight the variable to be used as a control (if appropriate) and click the triangle beside the "Layer" box.
- C If you wish to have row or column %s calculated:
 - C click on "Cells"
 - C click on the rows or columns boxes as appropriate
 - C click on "Continue".
- C Click on OK.

To calculate a Simple Correlation

- C Statistics --> Correlate --> Bivariate
- C Highlight variable then click on the triangle. Repeat this for at least one other variable.
- C Click on 1-tailed or 2-tailed tests as you prefer.
- C Click on OK.

To calculate a Partial Correlation

- C Statistics --> Correlate --> Partial
- C Highlight the variable then click on the triangle. Repeat this for at least one other variable.
- C Highlight the control variable then click on the triangle beside the "Controlling for" box.
- C Click on OK.

To calculate a Simple Regression

- C Statistics --> Regression --> Linear
- C Highlight the dependent variable and click on the triangle beside the appropriate box.
- C Highlight the independent variable and click on the triangle beside the appropriate box.
- C Click on OK.

To Plot a Simple Regression

- C Statistics --> Regression --> Curve Estimation
- C Highlight the dependent variable and click on the triangle beside the appropriate box.
- C Highlight the independent variable and click on the triangle beside the appropriate box.
- C Click on OK.

To calculate a Multiple Regression

- C Statistics --> Regression --> Linear
- C Highlight the dependent variable and click on the triangle beside the appropriate box.
- C Highlight the independent variable and click on the triangle beside the appropriate box.
Repeat for the other independent variables.
- C Click on OK.

To Print out your results

- C Highlight the sections you want printed by clicking on the appropriate sections in the output viewer.
- C File --> Print --> OK

To exit from the SPSS program

- C File --> Exit
- C Answer "No" to all the questions about saving your material.
- C Click on Start
- C Click on Shutdown.
- C Click circle to the left of "Close all programs and log on a different user?".
- C Click on YES.

Some More Advanced Procedures

To RECODE the values of a variable into a different variable

- C Transform --> Recode --> Into Different Variables
- C select the variable to recode and click on the small triangle
- C Click in the Name box and give the variable a new name
- C Give the variable a label if you wish
- C Click on the box "Old and New Values"
- C Enter in the old values and the new values in the appropriate boxes. Note that if you wish to refer to a range of values, you must click in the small circle beside "range"
- C For each change you have entered, click on the 'add' button

- C When you have finished identifying all the recodes, click on the 'continue' rectangle and then the OK rectangle
- C Note that you can add conditions to your recodes by choosing the "if" rectangle.

To COMPUTE a new variable with values from one or more other variables

- C Transform --> Compute
- C Write in a name for the target variable you wish to create.
- C Select the old variable you wish to use as a condition and click the triangle to the right of the list of variables.
- C Click on the appropriate mathematical or logical expressions to create the formula for the new variable. You can also select other old variables, then click the triangle to add them to the expression, or simply type in the expression directly.
- C If you wish to have conditional transformations, you can click on the 'if' button, then on the 'Include if case satisfies the condition' button before adding in the conditions.
- C When completed, click on the 'continue' button if it is visible, then on the OK button.

To COUNT the number of variables that have particular values

- C Transform --> Count
- C Type in the name of the target variable you wish to create
- C Type in a label for the target variable if you wish
- C Select each variable you wish to consider by clicking it, then clicking the triangle to the right of the variable list
- C For each selected variable, you can identify particular values to count by clicking on the 'Define Values' box, identifying the values or value range, then clicking on the 'add' button.
- C If you wish to have conditional transformations, you can click on the 'if' button, then on the 'Include if case satisfies the condition' button before adding in the conditions.
- C When completed, click on the 'continue' box, then the 'OK' button

To SELECT particular cases under certain conditions

- C Data -> Select Cases
- C Click on the appropriate basis for selecting the cases (e.g. 'If condition is satisfied')
- C Click on the 'If' button, enter the conditions (cf. COMPUTE), and click on the 'continue' button.
- C Click on 'filtered' if you wish to select the cases only for some procedures, or click on 'deleted' if you wish the rejected cases to be deleted from the data file.
- C Click on the 'OK' button.

To SAVE the datafile

- C File --> Save (to save the updated file under the same name and in the same location), or
- C File -> Save As (to save the file with a new name or in a new location).
- C Note that your data file can also be saved as a Lotus or Excel formatted file.

To ANALYZE your data

- C Most of the analysis commands are in the 'Analyze' or 'Statistics' Menu (cf. the instructions above for particular procedures).
- C The results of your analysis will be presented in the 'Output' window (see the bottom of the screen to activate it).

To PRINT your results

- C Open the window that has the material you wish to print. In most cases this will be the 'Output' window.
- C Select the output you wish
- C File -> Print Preview (to check that you will print the output you wish)
- C Select Print and verify the Print Setup before Clicking on 'OK'

To have your SPSS commands included in the output

- C Edit --> Options -> Viewer
- C Click on the box to the left of the command 'Display commands in the log'.
- C Click on OK

To maintain a copy of the syntax commands you used to define variables or run procedures

- C The first time you conduct your analysis:
 - C When you redefine, recode, or compute your variables, click on the 'PASTE' box. This will paste the syntax command into a 'syntax file' which will be opened for you.
 - C go to File -> Save As then select a folder and a name for your syntax file before clicking on OK
 - C Highlight the lines of the commands you wish to run, then go to Run -> Selection to run the commands.
 - C Each time you construct a command and click on 'Paste', the command will be pasted into the syntax file.
 - C When you have completed your analysis, don't forget to go to File -> Save -> OK to save the syntax file.
- C Subsequent times you wish to continue the analysis:
 - C Go to File -> Open -> Syntax in order to open the syntax file you previously saved.
 - C Each time you construct a command and click on 'Paste', the command will be pasted into this syntax file so long as it's "!" is red at the bottom of the window.
 - C When you have completed your analysis, don't forget to go to File -> Save -> OK to save the syntax file.
- C NOTE1: This syntax file can be printed (File -> Print) or the content can be cut and pasted into word processing or other types of programs.
- C NOTE2: You can directly edit the commands in the syntax file if you are familiar with SPSS syntax.
- C STRATEGY: I find it useful to work with 2 types of syntax files:
 - C 'V' files (e.g. SyntaxVnn.SPS) in which I place all the variable definition and transformation commands with comments embedded and
 - C 'P' files (e.g. SyntaxPnn.SPS) in which I place all the procedures I run with comments embedded.
 - C Comments can be embedded by writing directly into the syntax files so long as you place a '*' at the beginning of the line and a '.' at the end of the comment.
 - C Typically, when I begin working on a previous analysis, I open both the 'V' file and the 'P' file. I run all of the commands in the 'V' file to reproduce the variable transformations (Run -> All), then I highlight the specific commands in the 'P' file before going to Run -> Selection to run the output.
 - C Don't forget to check that the '!' is in red on the syntax file you wish, before clicking on subsequent 'Paste' commands. They will be embedded at the end of the syntax file that is active. To make a particular syntax file active, open it, then click on the '!' in the toolbar.