

Introduction to SPSS

Module 2: Working with Variables

SLIDE 1, 2, 3

Module 2 will cover adding and moving variables, combining variables into new variables, reverse scoring, using formulas, and creating a subset. Materials: instructions, a sample data set, and a sample survey.

SLIDE 4

Add a variable: To add a variable, you first need to make space for it as SPSS will erase any data that is in the existing column.

1. Click on the grey portion of the column of the variable to the right of where you want to add the variable. Select **Data > Insert variable**.
2. Double click on the new temporary variable name to quickly switch to give the variable a name.

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Move a variable: To move a variable, you first need to create a new column then you can copy and paste the data to the new location.

1. Click on the grey portion of the column of the variable to the right of where you want to add the variable. Select **Data > Insert variable**.
2. Highlight the column for the variable that you want to move by clicking on the grey area at the top of the column.
3. Select **Edit > Copy**.
4. Highlight the target column, and select **Edit > Paste**.
5. Double click on the new temporary variable name to quickly switch to give the variable a name.

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Combine Variables: The *confidence* variable indicates students' responses to the statement "On the whole, I am satisfied with myself." To make a comparison of the participants who "agreed" (strongly agree and somewhat agree) and those who "disagreed" (strongly disagree and somewhat disagree), you can combine the two "agree" answers and the two "disagree" answers so that there are only two answers to the statement.

1. Select **Transform > Recode > Into Different Variables**. From the window called *Recode into Different Variables*, you will need to indicate whether you want to overwrite the old data or make a new variable. Usually, it is best to create a new variable so the old data is not lost.
2. Highlight the variable you want to recode, click on the small arrow to move this variable into the *Input Variable* box.
3. Name the new variable by typing its title in *Output Variable: Name*. Click on the **Change** button.
4. Click on **Old and New Values**.

5. Type in the old value in the *Old Value* box. This can be a single number or a range of numbers.
6. Type in the new value in the *New Value* box.
7. Click on **Add**. Repeat these steps until all values are included in the Old→New box.
8. Click on **Continue**. Then **OK**. The new variable will appear at the right hand side of your current variables.

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Reverse Scoring: Use the same procedure that you used to combine variables to reverse score variables (when a variable needs to be scored with values opposite of what is entered).

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Using formulas to create new variables: You can transform existing variables mathematically to create new variables. For example, you may want to combine the participant's math and written scores to get a total score.

1. Select **Transform > Compute**.
2. Build a formula by highlighting the first variable of your formula and moving it to the *Numeric Expression* box by clicking on the right arrow.
3. Click on the calculation that you want to perform and this will place it in the formula.
4. Highlight the next variable in your formula and move it to the *Numeric Expression* box.
5. Type the name of your new variable in the *Target Variable* box.
6. Click on **OK**.

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Create a Subset: You may want to create a subset of participants to analyze, such as only those who attended Community College.

1. Select **Data > Select Cases**.
2. Check *If condition is satisfied* and then select **If...**
3. Highlight variable and click to copy it to *Numeric Expression*.
4. Click on desired calculation, example: “=”
5. Complete logic formula, for example: school=1.
6. Click **Continue** and **OK**.

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Generate a data dictionary:

Select **File > Display Data File Information > Working File**. Your data dictionary will appear as an output window. When you generate an output window, this is a separate file and must be saved separately. As you generate more analyses, they will be added to your output file. Clean before you print.

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Recap and Next Modules