

Manipulating Data using SPSS

1. Reverse scoring negatively worded items

In some scales the wording of particular items will be reversed to help prevent response bias.

Negatively worded items need to be reversed before a total score can be calculated for that scale.

It is possible to rescore variables into the same variable name (e.g., SS2) and overwrite the existing data, however it is much safer to create a new variable for recoded items and keep the original data unchanged.

1. From the menu at the top of the screen, click on **Transform**, then click on **Recode Into Different Variables**.
2. Select the items you want to reverse and move these into the **Input Variable-Output Variable** box.
3. Click on the first variable and type a new name in the **Output Variable** section on the right-hand side of the screen and then click the **Change** button

Important: make sure you use a new variable name that is easy for you to decipher. Using the prefix **REV** or **RC** (reverse coded) can be useful.

4. Repeat for each of the other variables you wish to reverse.
5. Click on the **Old and New Values** button. This example will be shown for a 1-5 scale. In the **Old value** section, type 1 in the **Value** box.

In the **New value** section, type 5 in the **Value** box (this will change all scores that were originally score as 1 to a 5).
6. Click on **Add**. This will place the instruction (1 → 5) in the box labelled **Old > New**.
7. Repeat the same procedure for the remaining scores. For example: **Old value** – type in 2 **New value** – type in 4 **Add**

Old value – type in 3 **New value** – type in 3 **Add**
Old value – type in 4 **New value** – type in 2 **Add**
Old value – type in 5 **New value** – type in 1 **Add**

Always double check that you have entered the correct items in to be recoded and that all the old and new values are right.

8. Click on **Continue** and then **OK**. The new variables with reversed scores should be found at the end of the data file.

2. Calculating total scores

1. From the menu at the top of the screen, click on **Transform**, then click on **Compute Variable**.
2. In the **Target Variable** box, type in the new name you wish to give to the total scale scores (e.g., Total_SS).
Important: make sure you don't accidentally use a variable name that has already been used in the data set. Use the TOT prefix for totals to make things easier and make a note of variable names in your codebook.
3. From the list of variables on the left hand side, click on the first item in the scale.
Important: make sure you know which items belong in which scale if you are using separate subscales. Use your codebook.
4. Click on the arrow button to move the item into the **Numeric Expression** box and click on + on the calculator pad.
5. Repeat the process until you have moved scale items into the box.
Important: if you are using negatively scored items you will need to be sure you are including the correct item.
6. Double-check that all items are correct and that there are + signs in the right places. Click OK (or on **Paste** if you wish to paste this command to the Syntax Editor window). To execute it after pasting to the **Syntax Editor**, highlight the command and select Run from the menu.
7. This will create a new variable at the end of your data set called **Total_SS**.

3. Categorising continuous scores into groups

Once you have total scores, it may be required to categorise these further to use for analysis (e.g., if you need to categorise participants into low or high levels of a construct).

Before you can categorise any variables, you need to determine how many categories there are going to be, and how they will be categorised (e.g., are you going to just have low and high for a construct, or do you need to categorise age into more than two levels, such as 18-24, 25-31, and 32 or above).

To make this decision you need to engage with literature. If you are using something such as the AISS, it is a good idea to categorise participants based upon the sample mean. To do this, you first need to work out what the mean score of sensation seeking is.

Analyze → Descriptive Statistics → Descriptives. Move your variable across to the middle box and click OK.

1. From the menu at the top of the screen, click on **Transform**, then click on **Recode Into Different Variables**. (if you have used the recode option already, just click **Reset** at the bottom to clear your previous commands).
2. Select the item you want to categorise and move this into the **Input Variable-Output Variable** box.
3. Click on the variable and type a new name in the **Output Variable** section on the right-hand side of the screen and then click the **Change** button

Important: make sure you use a new variable name that is easy for you to decipher. If changing a total to groups, it is useful to use the suffix of **_Groups** to identify that this is a variable that has been grouped.

4. Click on the **Old and New Values** button. As we want to condense a range of scores into one 'group', you need to click on the **Range** option.

In the **Range** boxes, type in the lowest value for the variable in the top box and the mean score that you have now generated into the second box (should read as 0 through: X), in the **New Value** box on the right hand side, type in a 1 (this will change all scores that were originally between 0 and the mean score to a 1).

5. Click on **Add**. This will place the instruction in the box labelled **Old > New**.
6. Repeat the same procedure for any remaining groups you want to create.

Always double check that you have entered the correct items in to be recoded and that all the range and new values are right.

7. Click on **Continue** and then **OK**. The new variable with your categorised groups should be found at the end of the data file.

Tip: go to the variable view and amend the Values of this newly created variable. E.g., add the value of 1 to the label of low, and the value of 2 to the label of high.