

Tutorial 12: Using a Filter to Select Cases

Description

This tutorial focuses on the use of filters in Jamovi to select certain cases for analyses or to select cases to create new categories. Let's focus on the **Apology_cond** variable, which has three categories (No apology, half apology, full apology). In our dataset, we can create new categories based on manipulated variables. For example, we can re-group participants on the basis of no apology vs. full. So this tutorial will describe how to make the **Apology_cond** variable into a variable that only uses two categories instead of the 3 categories.

Content

1. Examine Descriptives
2. Create a Filter
3. Change the Filter

1. Examine Descriptives

- a. After opening the data set- go to the Analysis tab and you will see the 'Explore' option and place **Apology_cond** into the 'Variables' box. Keep in mind that it does not make sense to report a mean for this variable- it is categorical. Therefore, you want to look at the frequency data. So check off 'frequency tables'.
- b. The frequency table shows you how many categories are in the **Apology_cond** variable and how participants fall into each category.

The screenshot shows the SPSS interface with the 'Descriptives' dialog box open. The variable 'Apology_cond' is selected in the 'Variables' list. The 'Statistics' section is expanded, showing options for Sample Size (N, Missing), Percentile Values (Cut points for 4 equal groups, Percentiles 25,50,75), Dispersion (Std. deviation, Variance, Range, Minimum, Maximum, S. E. Mean), Central Tendency (Mean, Median, Mode, Sum), Distribution (Skewness, Kurtosis), and Normality. The 'Frequency tables' checkbox is checked. The output window shows the 'Descriptives' table for 'Apology_cond' with N=0 and Missing=0. Below it, the 'Frequencies' table is displayed:

| Frequencies of Apology_cond | | | |
|-----------------------------|--------|------------|--------------|
| Levels | Counts | % of Total | Cumulative % |
| None 1 | 61 | 33.9% | 33.9% |
| Half 2 | 59 | 32.8% | 66.7% |
| Full 3 | 60 | 33.3% | 100.0% |

2. Create the Filter

- Go to the Data tab
- Click on Filter icon
- In the formula box, click on the upside down triangle so you can specify variable and type in command.

The screenshot shows the SPSS Data tab with a 'Filter 1' dialog box open. The formula box contains the expression \neq e.g. Q1 != 'don't know'. The 'Functions' list includes Math, ABS, EXP, LN, and LOG10. The 'Variables' list includes k_maria, k_maria_7_TEXT, Apology_cond, MFQ1, MFQ2, and MFQ3. The 'Variable: Apology_cond' is selected, and a tooltip indicates 'This is a data variable.' Below the dialog box, a data table is visible with columns for ID, gender, age, religion, and Apology_cond. The 'Apology_cond' column shows values for 'None' and 'Half'. A bar chart to the right of the data table shows the distribution of 'Apology_cond' with bars for 'None' and 'Half'.

| ID | gender | age | religion | Apology_cond |
|----|--------|-----|-------------------|--------------|
| 1 | Female | 18 | Christian (in...) | -9% |
| 2 | Female | 19 | Muslim | -9% |
| 3 | Male | 20 | Christian (in...) | -9% |
| 4 | Female | 19 | No Religion | -9% |
| 5 | Male | 24 | No Religion | -9% |
| 6 | Female | 17 | No Religion | -9% |
| 7 | Female | 19 | Christian (in...) | -9% |
| 8 | Female | 18 | Muslim | -9% |
| 9 | Female | 18 | Jewish | -9% |
| 10 | Female | 19 | Christian (in...) | -9% |
| 11 | Male | 19 | No Religion | -9% |
| 12 | Female | 19 | No Religion | -9% |
| 13 | Male | 18 | Christian (in...) | -9% |
| 14 | Female | 21 | No Religion | -9% |
| 15 | Female | 18 | No Religion | -9% |

d. The 'OR' command will help you select the 2 conditions of interest.

Filter 1 active

$f_1 = \text{Apology_cond} == 1 \text{ or } \text{Apology_cond} == 2$

| Apology_cond | | | | | |
|--------------|-----|--|--|--|--|
| N | 120 | | | | |
| Missing | 0 | | | | |

| Frequencies of Apology_cond | | | |
|-----------------------------|--------|------------|--------------|
| Levels | Counts | % of Total | Cumulative % |
| None | 61 | 50.8% | 50.8% |
| Half | 59 | 49.2% | 100.0% |

e. Now you can select Apology_cond as a variable and it will only use No or Half apology in analyses

3. Change the Filter

- To change the filter so that you compare No apology to Full apology then first turn off the filter 1 by pressing the X on Filter 1 window.
- Then, start over and click on variable in filter window

Filter 1 active

$f_1 = \text{e.g. Q1} != \text{'don't know'}$

Variable: Apology_cond
This is a data variable.

| Apology_cond | | | |
|--------------|----|-------|--------|
| None | 61 | 50.8% | 50.8% |
| Half | 59 | 49.2% | 100.0% |

c. Notice we are now specifying 1 and 3 and now you can run analyses

The screenshot shows a software interface with a top menu bar (Data, Analyses, Edit) and a toolbar with icons for Paste, Edit, Setup, Compute, Transform, Add, Delete, Filters, and Rows. Below the toolbar is a 'ROW FILTERS' section containing a dialog box for 'Filter 1'. The dialog box has a search field with the text '= ApoLogy_cond==1 or ApoLogy_cond==3' and a dropdown menu showing 'No vs. Full'. The dialog is active, as indicated by a green toggle switch.

Below the filter dialog is a data table with columns: Filter 1, ID, gender, age, religion, and religion_7. The table contains 15 rows of data. Row 14 is highlighted. The 'Filter 1' column contains green checkmarks for rows 1, 2, 3, 8, 9, 10, 14, and 15, and red X marks for rows 4, 5, 6, 7, 11, 12, and 13.

To the right of the table is a plot of 'ApoLogy_cond' with two categories: 'None' and 'Full'. The y-axis ranges from 2.25 to 2.50. The 'None' category has a mean value of approximately 2.45, and the 'Full' category has a mean value of approximately 2.25.

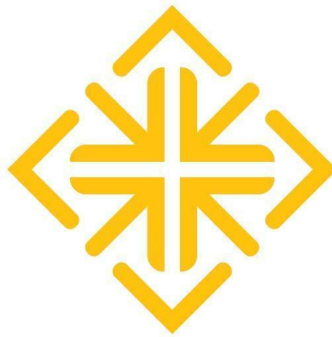
At the bottom of the interface, there is a status bar showing 'Ready', 'Filters 1', 'Row count 180', 'Filtered 59', 'Deleted 0', 'Added 61', and 'Cells edited 10455'. A 'References' link is also visible.

-----END TUTORIAL-----

**This Jamovi tutorial is a companion to a video tutorial and these materials were developed
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