



## How To Conduct Proportional Weighting With Several Variables

### Problem

Several variables are to be used to construct a weight.

The weight is to be constructed such that, when the weight is applied, the proportions in the crosstab (or higher-dimensional table) of the variables used to construct the weight match those of a given crosstab containing the same variables. This given crosstab is the *target* crosstab.

When the target crosstab contains percentages this weighting procedure is called *proportional weighting*. When the target crosstab contains counts this weighting procedure is called *target weighting* (also known as *cell weighting*).

### Steps to solve

1. In the **Variables and Questions** tab, select all the variables that are to be used in the weighting.
2. Click your right mouse button and select **Insert Ready-Made Formula(s)** and **Questions -> Multiple Response – Binary with All Combinations**.
3. Click your right mouse button on the newly created variables and select **Insert Ready-Made Formula(s)** and **Multiple Response – Binary -> Single Response – Categorical**.
4. Insert a name and label for this new variable, which will be the weight.
5. Press the **Values** button (...) for the newly created variable.
6. Uncheck any selections in the **Missing Data** column.
7. Click **Show weights**.
8. Enter appropriate values in the **Population Target** column. These should be positive numbers that sum to 1.
9. Click the **Auto-update** button at the bottom of the dialog box.
10. Press **OK**.
11. Tag the variable for weighting ( **F W H** in the **Tags** column of the **Variables and Questions** tab).

The variable will now be available for weighting. Note that sample sizes (**n**, **Base n**, **Column n**, **Row n** and **Total n**) are always shown unweighted; view **Population** to see the weighted sample size.

### Additional reading

*How to Apply Multiple Weights to a Table; How to Apply Different Weights to Different Tables; How to Apply a weight Created by a Another Program; How To Conduct Target weighting with Several Variables.*

Terms shown in italics and bold can be found in the index of the *Q Reference Manual*, the *Q Quick Start Manual* and via the **Help** menu within Q.

### What to do if the problem is not solved

If these instructions are insufficient, please email us (**Help | Email Support...**) with a detailed description of what in the instructions is not working for you and we will either provide you with more comprehensive instructions, or, upon your request, we can do the analysis for you in your file (fees apply) .