

Weight Cases

Weight Cases gives cases different weights (by simulated replication) **for statistical analysis.**

- **The values of the weighting variable should indicate the number of observations represented by single cases in your data file.**
- Cases with zero, negative, or missing values for the weighting variable are excluded from analysis.
- Fractional values are valid and some procedures, such as Frequencies, Crosstabs, and Custom Tables, will use fractional weight values. However, most procedures treat the weighting variable as a replication weight and will simply round fractional weights to the nearest integer. Some procedures ignore the weighting variable completely, and this limitation is noted in the procedure-specific documentation.

Once you apply a weight variable, it remains in effect until you select another weight variable or turn off weighting. If you save a weighted data file, weighting information is saved with the data file. You can turn off weighting at any time, even after the file has been saved in weighted form.

Weights in Crosstabs.

The Crosstabs procedure has several options for handling case weights.

Weights in scatterplots and histograms.

Scatterplots and histograms have an option for turning case weights on and off, but this does not affect cases with a zero, negative, or missing value for the weight variable. These cases remain excluded from the chart even if you turn weighting off from within the chart.

To Weight Cases

▶ **From the menus choose: Data > Weight Cases...**

▶ **Select Weight cases by.**

▶ **Select a frequency variable.**

The values of the frequency variable are used as case weights. For example, a case with a value of 3 for the frequency variable will represent three cases in the weighted data file.

Crosstabs cell display

To help you uncover patterns in the data that contribute to a significant chi-square test, the Crosstabs procedure displays expected frequencies and three types of residuals (deviates) that measure the difference between observed and expected frequencies. Each cell of the table can contain any combination of counts, percentages, and residuals selected.

Counts.

The number of cases actually observed and the number of cases expected if the row and column variables are independent of each other. You can choose to hide counts that are less than a specified integer. Hidden values will be displayed as <N, where N is the specified integer. The specified integer must be greater than or equal to 2, although the value 0 is permitted and specifies that no counts are hidden.

Compare column proportions.

This option computes pairwise comparisons of column proportions and indicates which pairs of columns (for a given row) are significantly different. Significant differences are indicated in the crosstabulation table with APA-style formatting using subscript letters and are calculated at the 0.05 significance level. Note: If this option is specified without selecting observed counts or column percentages, then observed counts are included in the crosstabulation table, with the APA-style subscript letters indicating the results of the column proportions tests.

- Adjust p-values (Bonferroni method)

Pairwise comparisons of column proportions make use of the Bonferroni correction, which adjusts the observed significance level for the fact that multiple comparisons are made.

Percentages.

The percentages can add up across the rows or down the columns. The percentages of the total number of cases represented in the table (one layer) are also available. Note: If Hide small counts is selected in the Counts group, then percentages associated with hidden counts are also hidden.

Residuals.

Raw unstandardized residuals give the difference between the observed and expected values. Standardized and adjusted standardized residuals are also available.

Noninteger Weights.

Cell counts are normally integer values, since they represent the number of cases in each cell. But if the data file is currently weighted by a weight variable with fractional values (for example, 1.25), cell counts can also be fractional values. You can truncate or round either before or after calculating the cell counts or use fractional cell counts for both table display and statistical calculations.