

What types of weights do SAS, Stata and SPSS support?

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SAS, Stata, and SPSS are statistical software programs commonly used for data analysis. These programs support various types of weights, including frequency weights, sampling weights, and design weights. Frequency weights are used to account for unequal representation of cases in a dataset, while sampling weights are used to adjust for different probabilities of selection in a sample. Design weights are used to account for stratification and clustering effects in complex survey data. These programs also support custom weights, which allow for more specific adjustments based on the researcher's needs. Overall, SAS, Stata, and SPSS offer a range of weight options to accommodate different types of data and research designs.

What types of weights do SAS, Stata and SPSS support?

Types of weights

There are several types of weights that you might find or create in a data set.

In SAS

You need to read the documentation for the procedure (proc) that you are using to determine what kind of weight should be used with the weight statement.

The weight statement used in one proc might assume frequency weights

while another assumes probability weights. If you cannot tell from

the documentation which type of weight will be used,

you will either need to do some experimenting or contact SAS Technical Support.

In SPSS

All of the SPSS modules recognize only frequency weights, except the Complex Samples module, which recognizes sampling weights (AKA probability weights). If you weight your data with a different type of weight, SPSS may not issue an error message; however, you should be sure that you really want your weights to be treated as frequency weights. Note that if you specify probability weights with a weight command, some procedures SPSS will round the values of the weights to the nearest whole number and use them as frequency weights. In some cases, the nearest whole number may be zero, in which case you may get a message in your output about this. One exception to this is in the crosstabs procedure. If you click on the "Cells" button or use the count subcommand, you can choose between having the values of the weights rounded or truncated. You can learn more about weights in SPSS by reading the section in the SPSS Command Syntax Reference on the

WEIGHT command.

In Stata

Stata recognizes all four type of weights mentioned above. You can specify which type of weight you have by using the weight option after a command. Note that not all commands recognize all types of weights. If you use the svyset command, the weight that you specify must be a probability weight. You can find out more about using weights in Stata by seeing help weight.