GUI Data Workshop

Information Sheet 3a: How to use weights in SPSS – Infant Cohort

This information sheet provides a guide on how to use weights in SPSS. Please note this information sheet is based on SPSS Version 19.

1) Why use weights?

Due to differential response rates (those with higher education, higher social class, higher income and so on are more likely to respond to social surveys) the completed sample may not be fully representative of the population from which it is selected. Weights re-adjust the distribution of the sample to more accurately reflect the distribution of the population.

2) Which weight to use?

Each file has a weighting factor and a grossing factor. Both of these will give the same percentage breakdown as the population. The weighting factor will give the total N of cases of the sample. The grossing factor will give the total N of cases of the population.

You should use the weighting factor in all situations except if you would like to present the N of cases in the population. For e.g. there are X number of nine-month old infants in Ireland using non-parental childcare. You should round this figure to the nearest, say, 100.

| | Naming Convention A ¹ 'GUI Data_9MonthCohort' | Naming Convention B 'XGUI Data_9MonthCohort' |
|------------------|--|--|
| Weighting factor | 'wgt_9mth' | 'azwg01' |
| Grossing factor | 'gross_9mth' | 'azwg02' |

3) How to use the weight?

The weight can be applied either using the drop down menus or using SPSS syntax.

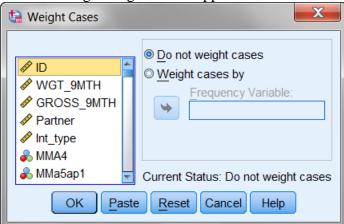
Drop down menus:

Select Data → Weight cases

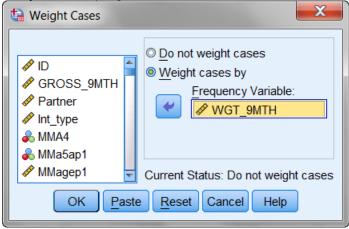
¹ See 'Variable naming and longitudinal data dictionary' document for more information on the naming conventions used

| GUI Data_9MonthCohort.sav [DataSet1] - IBM SPSS Statistics Data Editor | | | | | | | | |
|--|-------------------------------------|------------------------|-------------------|--------|-------------------|------------------|------------------|------|
| <u>F</u> ile <u>E</u> di | <u>V</u> iew | Data Transform | Analyze | Graphs | <u>U</u> tilities | Add- <u>o</u> ns | s <u>W</u> indow | Help |
| | | Define Variable | Properties | 3 | | * | | \$ |
| 4 | 3 Set Measurement Level for Unknown | | | | | | | |
| | | <u>I Copy</u> Data Pro | perties | | | MTH | Partner | - |
| | | New Custom A | ttri <u>b</u> ute | | | IVITI | Partilei | |
| 1 | | 🗟 Define Dates | | | | 4.92 | | .00 |
| 2 | | ⊞ Define Multiple | Response | Sets | | 4.55 | | 1.00 |
| 3 | | Bldentify Duplica | te Cases | | | 8.14 | | 1.00 |
| 4 | | Sort Cases | | | | 5.14 | | 1.00 |
| 5 | | Sort Variables | | | | 4.21 | | .00 |
| 6 | | | | | | 8.37 | | 1.00 |
| 7 | | Transpose | 6.51 | | 1.00 | | | |
| 8 | | Merge Files | | | P | 1.99 | | .00 |
| 9 | | Restructure | | | | 1.61 | | 1.00 |
| 10 | | Aggregate | | | | 2.32 | | 1.00 |
| 11 | | R Copy Dataset | | | | 1.05 | | .00 |
| 12 | | ⊞ Split <u>F</u> ile | | | | 8.41 | | 1.00 |
| 13 | | Select Cases | | | | 1.61 | | 1.00 |
| 14 | | Weight Cases. | | | | 1.38 | | 1.00 |
| 15 | | 1300.00 | | IJ | | .96 | | .00 |

The following dialog box will appear.



Click on 'Weight cases by'. Browse through the list of variables on the left and highlight the one you want ('Wgt_9mth) and click on the arrow in the middle. Click on 'OK'.



Syntax:

The syntax command is:

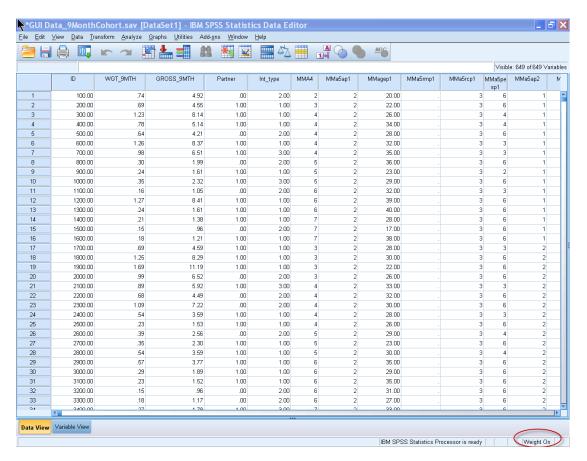
WEIGHT by Wgt_9mth.

This will apply the weight to all subsequent analysis (you only need to apply it once). To turn off the weight and run unweighted analysis, the syntax command is:

WEIGHT off.

How to check if your weights are applied:

On the Data View or Variable View screen, look to the bottom right corner of the screen. When the weights are applied it will say 'Weight On' here, otherwise it will be blank.



4) What difference do weights make?

Weights will have more of an impact on any variables which are used in calculating the weights. For example, whether the child lives with one parent or two parents is one of the variables used in the weights for the 9 month old file. The sample was under-represented in the number of children living in one parent households.

Unweighted: 12.2% of nine-month old children in the Growing Up in Ireland sample lived in one parent households (no partner in household).

Partner Partner in household

| | | | | | Cumulative |
|-------|------------------|-----------|---------|---------------|------------|
| | | Frequency | Percent | Valid Percent | Percent |
| Valid | .00 No partner | 1359 | 12.2 | 12.2 | 12.2 |
| | 1.00 Has partner | 9775 | 87.8 | 87.8 | 100.0 |
| | Total | 11134 | 100.0 | 100.0 | |

Weighting factor: 14.4% of nine-month old children lived in one parent households – this is representative of the population of nine-month old children in Ireland.

Partner Partner in household

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------------|-----------|---------|---------------|-----------------------|
| Valid | .00 No partner | 1645 | 14.8 | 14.8 | 14.8 |
| | 1.00 Has partner | 9489 | 85.2 | 85.2 | 100.0 |
| | Total | 11134 | 100.0 | 100.0 | |

Grossing factor: 14.4% of nine-month old children lived in one parent households – this amounts to approximately 10,800 nine-month old children in Ireland.

Partner Partner in household

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------------|-----------|---------|---------------|-----------------------|
| Valid | .00 No partner | 10885 | 14.8 | 14.8 | 14.8 |
| | 1.00 Has partner | 62778 | 85.2 | 85.2 | 100.0 |
| | Total | 73662 | 100.0 | 100.0 | |

The weights will have less of an impact on variables which are not directly used in calculating the weights. The frequencies below represent whether or not the child is currently using some form of childcare.

Unweighted: 39.7% of nine-month old children in the Growing Up in Ireland sample were using childcare.

MME1 E1. Is baby currently being minded by someone else

| | | Eroguanav | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|----------|----------------|-----------------------|
| | _ | Frequency | reiceiii | vallu Felcelli | reiteiit |
| Valid | 1 Yes | 4420 | 39.7 | 39.7 | 39.7 |
| | 2 No | 6714 | 60.3 | 60.3 | 100.0 |
| | Total | 11134 | 100.0 | 100.0 | |

Weighting factor: 39.0% of nine-month old children were using childcare – this is representative of the population of nine-month old children in Ireland.

MME1 E1. Is baby currently being minded by someone else

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|------------|-----------|-----------------|-----------------------|
| | - | rrequericy | 1 GIGGIII | valid i eldelit | i Giociii |
| Valid | 1 Yes | 4338 | 39.0 | 39.0 | 39.0 |
| | 2 No | 6796 | 61.0 | 61.0 | 100.0 |
| | Total | 11134 | 100.0 | 100.0 | |

Grossing factor: 39.0% of nine-month old children were using childcare – this amounts to approximately 28,700 nine-month old children in Ireland.

MME1 E1. Is baby currently being minded by someone else

| | | | | | Cumulative |
|-------|-------|-----------|---------|---------------|------------|
| | | Frequency | Percent | Valid Percent | Percent |
| Valid | 1 Yes | 28700 | 39.0 | 39.0 | 39.0 |
| | 2 No | 44962 | 61.0 | 61.0 | 100.0 |
| | Total | 73662 | 100.0 | 100.0 | |