GUI Data Workshop

Information Sheet 3b: How to use weights in SPSS – 9 year data

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.

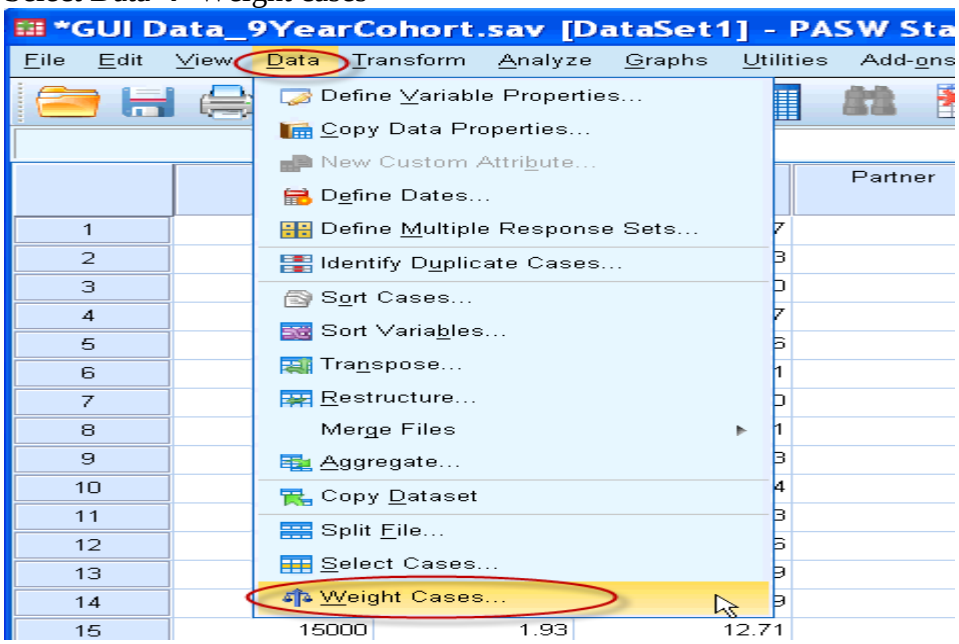
2) Which weight to use?
Each file has a weighting factor and a grossing factor. Both of these will give the same percentage breakdown as the population. The weighting factor will give the total N of cases of the sample. The grossing factor will give the total N of cases of the population.

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-year old children in Ireland with special educational needs. You should round this figure to the nearest, say, 100.

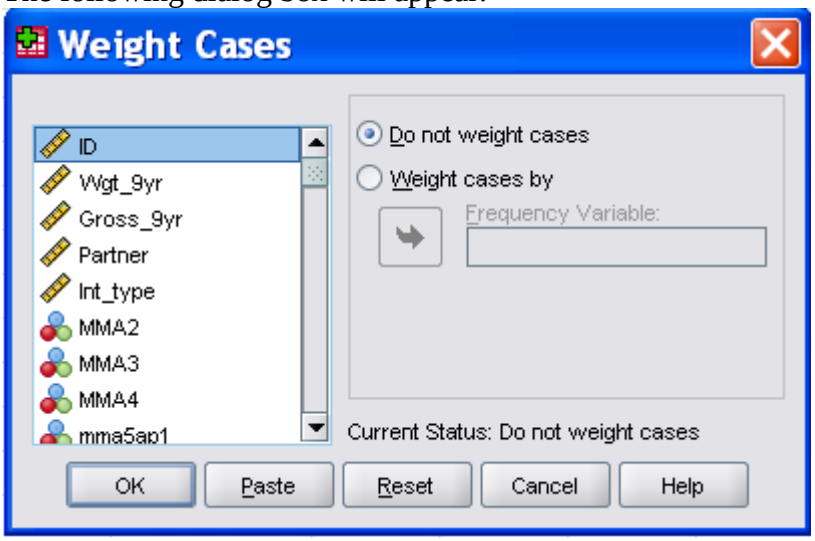
	9 month file	**9 year file**
Weighting factor	'wgt_9mth'	'wgt_9yr'
Grossing factor	'gross_9mth'	'gross_9yr'

3) How to use the weight?
The weight can be applied either using the drop down menus or using SPSS syntax.

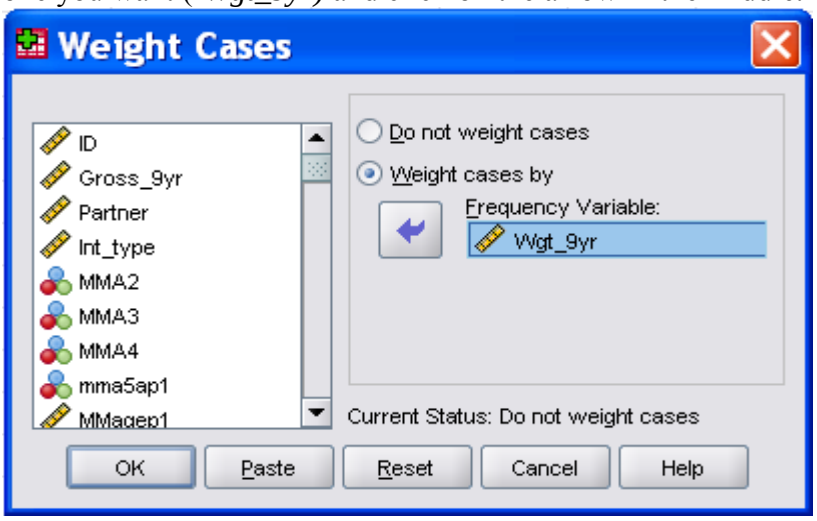
Drop down menus:
Select Data → Weight cases



The following dialog box will appear.

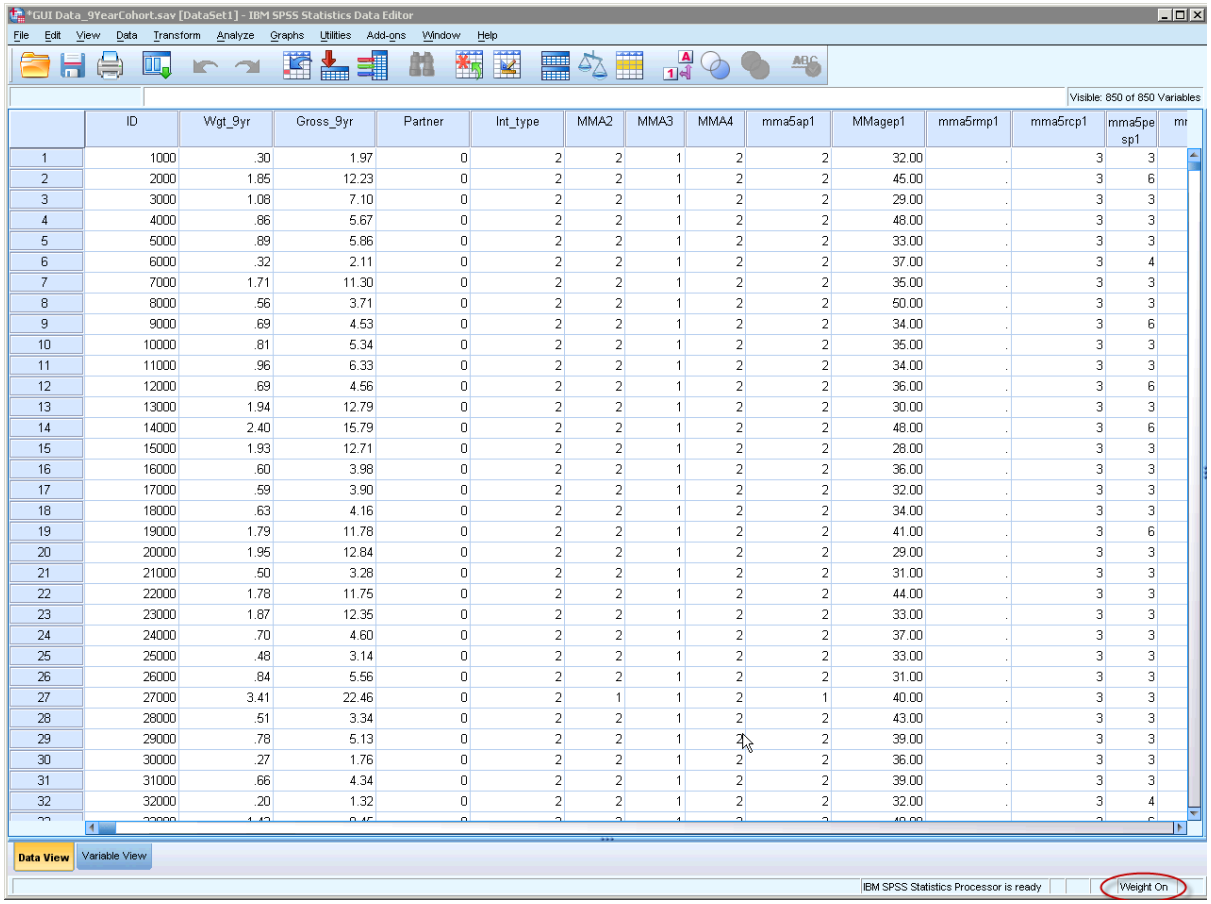


Click on 'Weight cases by'. Browse through the list of variables on the left and highlight the one you want ('*Wgt_9yr)* and click on the arrow in the middle. Click on 'OK'.



Syntax:
The syntax command is:
WEIGHT by Wgt_9yr.
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.



	ID	Wgt_9yr	Gross_9yr	Partner	Int_type	MMA2	MMA3	MMA4	mma5ap1	MMagep1	mma5rmp1	mma5rcp1	mma5pesp1	mr
1	1000	.30	1.97	0	2	2	1	2	2	32.00	.	3	3	
2	2000	1.85	12.23	0	2	2	1	2	2	45.00	.	3	6	
3	3000	1.08	7.10	0	2	2	1	2	2	29.00	.	3	3	
4	4000	.86	5.67	0	2	2	1	2	2	48.00	.	3	3	
5	5000	.89	5.86	0	2	2	1	2	2	33.00	.	3	3	
6	6000	.32	2.11	0	2	2	1	2	2	37.00	.	3	4	
7	7000	1.71	11.30	0	2	2	1	2	2	35.00	.	3	3	
8	8000	.56	3.71	0	2	2	1	2	2	50.00	.	3	3	
9	9000	.69	4.53	0	2	2	1	2	2	34.00	.	3	6	
10	10000	.81	5.34	0	2	2	1	2	2	35.00	.	3	3	
11	11000	.96	6.33	0	2	2	1	2	2	34.00	.	3	3	
12	12000	.69	4.56	0	2	2	1	2	2	36.00	.	3	6	
13	13000	1.94	12.79	0	2	2	1	2	2	30.00	.	3	3	
14	14000	2.40	15.79	0	2	2	1	2	2	48.00	.	3	6	
15	15000	1.93	12.71	0	2	2	1	2	2	28.00	.	3	3	
16	16000	.60	3.98	0	2	2	1	2	2	36.00	.	3	3	
17	17000	.59	3.90	0	2	2	1	2	2	32.00	.	3	3	
18	18000	.63	4.16	0	2	2	1	2	2	34.00	.	3	3	
19	19000	1.79	11.78	0	2	2	1	2	2	41.00	.	3	6	
20	20000	1.95	12.84	0	2	2	1	2	2	29.00	.	3	3	
21	21000	.50	3.28	0	2	2	1	2	2	31.00	.	3	3	
22	22000	1.78	11.75	0	2	2	1	2	2	44.00	.	3	3	
23	23000	1.87	12.35	0	2	2	1	2	2	33.00	.	3	3	
24	24000	.70	4.60	0	2	2	1	2	2	37.00	.	3	3	
25	25000	.48	3.14	0	2	2	1	2	2	33.00	.	3	3	
26	26000	.84	5.56	0	2	2	1	2	2	31.00	.	3	3	
27	27000	3.41	22.46	0	2	1	1	2	1	40.00	.	3	3	
28	28000	.51	3.34	0	2	2	1	2	2	43.00	.	3	3	
29	29000	.78	5.13	0	2	2	1	2	2	39.00	.	3	3	
30	30000	.27	1.76	0	2	2	1	2	2	36.00	.	3	3	
31	31000	.66	4.34	0	2	2	1	2	2	39.00	.	3	3	
32	32000	.20	1.32	0	2	2	1	2	2	32.00	.	3	4	

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 year old file. The sample was under-represented in the number of children living in one parent households.

Unweighted: 11.6 % of nine-year old children in the Growing Up in Ireland sample lived in one parent households (no partner in household).

Partner Partner in household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 No partner	991	11.6	11.6	11.6
	1 Has partner	7577	88.4	88.4	100.0
	Total	8568	100.0	100.0	

Weighting factor: 18.1% of nine-year old children lived in one parent households – this is representative of the population of nine-year old children in Ireland.

Partner Partner in household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 No partner	1554	18.1	18.1	18.1
	1 Has partner	7014	81.9	81.9	100.0
	Total	8568	100.0	100.0	

Grossing factor: 18.1% of nine-year old children lived in one parent households – this amounts to approximately 10,200 nine-year old children in Ireland.

Partner Partner in household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 No partner	10244	18.1	18.1	18.1
	1 Has partner	46253	81.9	81.9	100.0
	Total	56497	100.0	100.0	

The weights will have less of an impact on variables which are not directly used in calculating the weights (and even less on variables which are not related to any of the variables used in calculating the weights). The frequencies below represent whether the child is right or left handed.

Unweighted: 13.1% of nine-year old children in the Growing Up in Ireland sample were left-handed.

MMC19 C19. Study Child right or left handed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Right handed	7435	86.8	86.9	86.9
	2 Left handed	1123	13.1	13.1	100.0
	Total	8558	99.9	100.0	
Missing	9 Dontknow	10	.1		
Total		8568	100.0		

Weighting factor: 13.2% of nine-year old children were left-handed – this is representative of the population of nine-year old children in Ireland.

MMC19 C19. Study Child right or left handed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Right handed	7423	86.6	86.8	86.8
	2 Left handed	1133	13.2	13.2	100.0
	Total	8557	99.9	100.0	
Missing	9 Dontknow	11	.1		
Total		8568	100.0		

Grossing factor: 13.2% of nine-year old children were left-handed – this amounts to approximately 7,500 nine-year old children in Ireland.

MMC19 C19. Study Child right or left handed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Right handed	48950	86.6	86.8	86.8
	2 Left handed	7474	13.2	13.2	100.0
	Total	56424	99.9	100.0	
Missing	9 Dontknow	73	.1		
Total		56497	100.0		