GUI Data Workshop – 9 year

Worksheet 1: Frequency and Crosstabs Exercises Using SPSS Syntax

This document provides worked examples of some very basic commands which can be used to explore and analyse the GUI data using SPSS syntax commands (please see GUI Data Workshop – Information Sheet 2: Tips on using SPSS syntax for an introductory guide on using SPSS syntax). This worksheet should be used in conjunction with the SPSS syntax file "Worksheet 1 Syntax.sps". Please note this worksheet is based on SPSS Version 17.

Exercise 1: Weighted frequencies
Frequencies are a very quick and simple way to obtain a descriptive overview of single or multiple variables allowing an assessment of the distribution of responses across the population

E.g. 1 – What proportion of nine-year-old children were living in lone parent families?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES partner.
EXECUTE .

The output should be:

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	

E.g. 2 – What proportion of nine-year-old children were breastfed when they were infants?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES MMB8.
EXECUTE .

The output should be:

MMB8 B8. Was Study Child ever breastfed,

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	3750	43.8	44.4	44.4
	2 no	4697	54.8	55.6	100.0
	Total	8447	98.6	100.0	
Missing	System	121	1.4		
Total		8568	100.0		

E.g. 3 – What proportion of nine-year-old children brushed their teeth at least once a day?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES MMC8.
EXECUTE .

The output should be:

MMC8 C8. Study Child brush teeth at least once daily

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 yes	8068	94.2	94.3	94.3
	2 no	486	5.7	5.7	100.0
	Total	8554	99.8	100.0	
Missing	9 Dontknow	14	.2		
Total		8568	100.0		

E.g. 4 – How did the primary caregivers of nine-year-old children describe their current health?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES MME1.
EXECUTE .

The output should be:

MME1 E1. Your current health

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Excellent	2648	30.9	30.9	30.9
	2 Very good	3443	40.2	40.2	71.1
	3 Good	1879	21.9	21.9	93.0
	4 Fair	513	6.0	6.0	99.0
	5 Poor	85	1.0	1.0	100.0
	Total	8568	100.0	100.0	

E.g. 5 – How many hours per day did nine-year-old children spend watching television, videos or DVDs?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES MMG1.
EXECUTE .

The output should be:

MMG1 G1. Average day - hours watching tv/videos/DVD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 None	181	2.1	2.1	2.1
	2 Less than an hour	1832	21.4	21.4	23.5
	3 1 hour to less than 3 hours	5633	65.7	65.7	89.2
	4 3 hours to less than 5 hours	741	8.6	8.6	97.9
	5 5 hours to less than 7 hours	104	1.2	1.2	99.1
	6 7 hours or more	77	.9	.9	100.0
	Total	8568	100.0	100.0	

E.g. 6 – How did the secondary caregivers of nine-year-old children describe their current health?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES FB1.

EXECUTE .

The output should be:

FB1 B1. Your current health

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Excellent	2203	25.7	33.7	33.7
	2 Very good	2639	30.8	40.4	74.1
	3 Good	1315	15.3	20.1	94.2
	4 Fair	320	3.7	4.9	99.1
	5 Poor	56	.6	.9	100.0
	Total	6532	76.2	100.0	
Missing	9 Dontknow	2	.0		
	System	2033	23.7		
	Total	2036	23.8		
Total		8568	100.0		

E.g. 7 – What proportion of nine-year-old children liked Maths?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES CQ3a.
EXECUTE .

The output should be:

CQ3a Q3a. Like: Maths

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Always like it	4021	46.9	47.3	47.3
	2 Sometimes like it	3624	42.3	42.6	89.9
	3 Never like it	858	10.0	10.1	100.0
	Total	8503	99.2	100.0	
Missing	9 Dontknow	2	.0		
	System	63	.7		
	Total	65	.8		
Total		8568	100.0		

E.g. 8 – What proportion of nine-year-old children had a male school Principal?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES P1.
EXECUTE .

The output should be:

p1 1. Are you Male or Female

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Male	4472	52.2	53.2	53.2
	2 Female	3936	45.9	46.8	100.0
	Total	8408	98.1	100.0	
Missing	System	160	1.9		
Total		8568	100.0		

E.g. 9 – What proportion of nine-year-old children had a male school teacher?

The syntax command is:
WEIGHT by Wgt_9yr.
FREQUENCIES TS1.
EXECUTE .

The output should be:

TS1 1. Are you male or female?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 male	1172	13.7	14.4	14.4
	2 female	6962	81.3	85.6	100.0
	Total	8134	94.9	100.0	
Missing	9 Dontknow	18	.2		
	System	416	4.9		
	Total	433	5.1		
Total		8568	100.0		

E.g. 10 – What proportion of nine-year-old children regularly arrived at school with homework not completed (as reported by their school teacher)?

The syntax command is:

WEIGHT by Wgt_9yr.
FREQUENCIES TC8.
EXECUTE .

The output should be:

TC8 8. How often homework not completed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never, - homework always or almost alway	5891	68.8	71.5	71.5
	2 Occasionally not completed	1887	22.0	22.9	94.4
	3 Regularly not completed	425	5.0	5.2	99.6
	4 Not applicable, Study Child never/rarely	35	.4	.4	100.0
	Total	8237	96.1	100.0	
Missing	9 Dontknow	40	.5		
	System	290	3.4		
	Total	331	3.9		
Total		8568	100.0		

Exercise 2: Weighted crosstabulations
Crosstabulations are another quick and simple way to get descriptive results from the data. Crosstabs permit the comparison of responses across different groups of children or families.

E.g. 1 – How did the health status of nine-year-old children vary across family income groups?.
The syntax command is:
WEIGHT by Wgt_9yr.
CROSSTABS MMB10 by Eincquin / cell count col.
EXECUTE .

The output should be:

MMB10 B10. Study Childs health past year * EIncQuin Equivalised Household Annual Income - Quintiles Crosstabulation

			EIncQuin Equivalised Household Annual Income - Quintiles					
			1.00 Lowest	2.00 2nd	3.00 3rd	4.00 4th	5.00 Highest	Total
MMB10 B10. Study Childs health past year	1 Very healthy, no problems	Count	1094	1123	1146	1205	1275	5843
		% within EIncQuin Equivalised Household Annual Income - Quintiles	68.5%	69.9%	71.3%	75.6%	79.6%	73.0%
	2 Healthy, but a few minor problems	Count	468	444	438	368	313	2031
		% within EIncQuin Equivalised Household Annual Income - Quintiles	29.3%	27.6%	27.3%	23.1%	19.6%	25.4%
	3 Sometimes quite ill/Almost always unwell	Count	36	40	23	20	13	132
		% within EIncQuin Equivalised Household Annual Income - Quintiles	2.3%	2.5%	1.4%	1.3%	.8%	1.6%
Total		Count	1598	1607	1607	1593	1601	8006
		% within EIncQuin Equivalised Household Annual Income - Quintiles	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

E.g. 2 – How did nine-year-old children's attitude to school vary across the gender of the Study Child?.
The syntax command is:
WEIGHT by Wgt_9yr.
CROSSTABS CQ1 by mma5ap2 / cell count col.
EXECUTE .

The output should be:

CQ1 Q1. What do you think about school * mma5ap2 Gender P2 Crosstabulation

			mma5ap2 Gender P2		
			1 male	2 female	Total
CQ1 Q1. What do you think about school	1 Always like it	Count	845	1423	2268
		% within mma5ap2 Gender P2	19.4%	34.3%	26.7%
	2 Sometimes like it	Count	3087	2572	5659
		% within mma5ap2 Gender P2	70.9%	62.0%	66.5%
	3 Never like it	Count	421	156	577
		% within mma5ap2 Gender P2	9.7%	3.8%	6.8%
Total		Count	4353	4151	8504
		% within mma5ap2 Gender P2	100.0%	100.0%	100.0%

E.g. 3 – How did the number of books in the home vary by family social class?.
The syntax command is:
WEIGHT by Wgt_9yr.
CROSSTABS MMJ25 by xhsdclass / cell count col.
EXECUTE .

The output should be:

MMJ25 J25. How many childrens books does SC have access to in your home * xhsdclass hsd class - 3 categories Crosstabulation

			xhsdclass hsd class - 3 categories			
			1.00 Prof Manag	2.00 Oth non man/Skilled Man	3.00 Semi unskilled man	Total
MMJ25 J25. How many childrens books does SC have access to in your home	1 None	Count	7	28	12	47
		% within xhsdclass hsd class - 3 categories	.2%	.9%	1.3%	.6%
	2 Less than 10	Count	174	307	152	633
		% within xhsdclass hsd class - 3 categories	4.9%	10.1%	16.2%	8.4%
	3 10 to 20	Count	498	643	236	1377
		% within xhsdclass hsd class - 3 categories	14.0%	21.2%	25.1%	18.3%
	4 21 to 30	Count	505	468	128	1101
		% within xhsdclass hsd class - 3 categories	14.2%	15.4%	13.6%	14.6%
	5 More than 30	Count	2372	1584	413	4369
		% within xhsdclass hsd class - 3 categories	66.7%	52.3%	43.9%	58.0%
Total		Count	3556	3030	941	7527
		% within xhsdclass hsd class - 3 categories	100.0%	100.0%	100.0%	100.0%

E.g. 4 – How did the incidence of the nine-year-old child having a TV in his/her bedroom vary across the level of education of the primary caregivers?.
The syntax command is:
WEIGHT by Wgt_9yr.
CROSSTABS MMG5a by MML37 / cell count col.
EXECUTE .

The output should be:

MMG5a G5a. In Study Childs bedroom - TV * MML37 L37 What is the highest level of education you have completed to date Crosstabulation

			MML37 L37 What is the highest level of education you have completed to date						
			1.00 NOne or primary	2.00 Lower Sec	3.00 HiSec/TechVoc/UppSec+Tech/Voc	4.00 Non Degree	5.00 Primary	6.00 Postgrad	Total
MMG5a G5a. In Study Childs bedroom - TV	1 yes	Count	396	1318	1330	481	237	61	3823
		% within MML37 L37 What is the highest level of education you have completed to date	72.1%	64.8%	42.3%	35.3%	24.6%	11.9%	44.6%
	2 no	Count	153	717	1815	881	725	453	4744
		% within MML37 L37 What is the highest level of education you have completed to date	27.9%	35.2%	57.7%	64.7%	75.4%	88.1%	55.4%
Total		Count	549	2035	3145	1362	962	514	8567
		% within MML37 L37 What is the highest level of education you have completed to date	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

E.g. 5 – How did the primary caregiver's rating of how safe it was to walk alone in their area after dark vary by urban/rural classification?.
The syntax command is:
WEIGHT by Wgt_9yr.
CROSSTABS MMM3a by region / cell count col.
EXECUTE .

The output should be:

MMM3a M3. Safe to walk alone in this area after dark * Region Region Crosstabulation

			Region Region		
			1 Urban	2 Rural	Total
MMM3a M3. Safe to walk alone in this area after dark	1 Strongly agree	Count	571	1036	1607
		% within Region Region	14.9%	22.0%	18.8%
	2 Agree	Count	1902	2257	4159
		% within Region Region	49.8%	47.9%	48.7%
	3 Disagree	Count	1084	1090	2174
		% within Region Region	28.4%	23.1%	25.5%
	4 Strongly disagree	Count	266	327	593
		% within Region Region	7.0%	6.9%	6.9%
Total		Count	3823	4710	8533
		% within Region Region	100.0%	100.0%	100.0%