## GUI Data Workshop – 9 month and 3 year

## Worksheet 3a: Infant's Health

This document provides worked examples of some very basic commands which can be used to explore and analyse the GUI data using SPSS drop-down menus. It includes detailed screen shots of how the run the analysis using SPPS menus.

This worksheet is based on the matched 9 month and 3 year files – please see Information Sheet 4 for details on how to match the files.

Please note this worksheet is based on SPSS Version 19.

## Exercise 1: Infant's health at Wave 1 (at 9 months)

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1) First you will need to weight the data. Select Data  $\rightarrow$  Weight Cases

2) The following dialog box will appear.

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100000 × 🔊	Current Status: Do not weight cases
OK Paste	Reset Cancel Help

3) Click on 'Weight cases by'. Browse through the list of variables on the left and highlight the one you want ('*azwg01'*) and click on the arrow in the middle. Click on 'OK'.

😭 Weight Cases	×
<ul> <li>✓ adid05a</li> <li>✓ adid05b</li> <li>✓ adid05c</li> <li>✓ adid05c</li> <li>✓ adid05d</li> <li>✓ adid05e</li> <li>✓ adid05e</li> <li>✓ azwg02</li> <li>✓ aphc00</li> <li>✓ aphc01a</li> <li>✓ anhc01h</li> </ul>	Do not weight cases Weight cases by Frequency Variable: Prequency V

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4) To run the frequency, select Analyse  $\rightarrow$  Descriptive Statistics  $\rightarrow$  Frequencies

5) The following dialog box will appear:

Frequencies			×
Image: state stat	<b>&gt;</b>	<u>V</u> ariable(s): ↓	Statistics Charts Eormat
☑ Display frequency tables			
OK	Paste	Reset Cancel Help	

6) Browse through the list of variables on the left and highlight the one(s) you want ('apch01b' – child's current health) and click on the arrow in the middle.

ŧ,	Frequencies				×
				⊻ariable(s):	Statistics
	윩 apcb07h	-		💑 apch01b	
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	Display frequency	y tables			
	C	ок	Paste F	Reset Cancel Help	

7) Click 'OK' and the output will show you the frequency table for that variable.

		Frequenc		Valid	Cumulative
		у	Percent	Percent	Percent
Valid	1 Very healthy, no problems	9197	82.6	82.9	82.9
	2 Healthy, but a few minor problems	1769	15.9	15.9	98.9
	3 Sometimes quite ill	108	1.0	1.0	99.8
	4 Almost always unwell	19	.2	.2	100.0
	Total	11092	99.6	100.0	
Missing	9 Don't Know	38	.3		
	System	4	.0		
	Total	42	.4		
Total		11134	100.0		

apch01b H20. In general, how would you describe baby s current health?

## Exercise 2: Infant's health at Wave 2 (at 3 years)

First you will need to weight the data, using the Wave 2 weight this time. The Wave 1 weight was called 'azwg01' so we know that the corresponding Wave 2 variable will be the same except the first letter will be 'b' instead of 'a', i.e. '*bzwg01*'. Likewise, child's current health was '*apch01b*' at Wave 1 so it will be '*bpch01b*' at Wave 2.

- 1) Data  $\rightarrow$  Weight Cases  $\rightarrow$  bzwg01
- 2) Analyse  $\rightarrow$  Descriptive Statistics  $\rightarrow$  Frequencies

A weighted frequency of this will give us the following output:

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Very healthy, no problems	7312	74.7	74.7	74.7
	2 Healthy, but a few minor problems	2248	23.0	23.0	97.7
	3 Sometimes quite ill	198	2.0	2.0	99.7
	4 Almost always unwell	30	.3	.3	100.0
	Total	9787	99.9	100.0	
Missing	8 Refusal	0	.0		
	9 Don't Know	5	.1		
	Total	5	.1		
Total		9793	100.0		

#### bpch01b C1.In general, how would you describe <child's> current health?

Note that although this frequency is run on the full matched file of 11,134 cases, results are only shown for the 9,793 Wave 2 cases. You will see the following warning in the output window which refers to this (if you have set SPSS to display a log. To do this, click Edit  $\rightarrow$  Options  $\rightarrow$  Viewer  $\rightarrow$  Item  $\rightarrow$  Log  $\rightarrow$  Contents are initially Shown):

## >Warning # 3211

On at least one case, the value of the weight variable was zero, negative, or missing. Such cases are invisible to statistical procedures and graphs which need positively weighted cases, but remain on the file and are processed by non-statistical facilities such as LIST and SAVE.

# Exercise 3: Changes in infant's health from Wave 1 (at 9 months) to Wave 2 (at 3 years)

The analyses above, show the proportions of children in each health status category for each Wave. For example, 82.9% of 9 month olds were 'Very healthy, no problems' and 74.7% of 3 year old children were 'Very healthy, no problems'.

However, these are two separate analyses and do not tell us anything about changes in health status of individual children from Wave 1 to Wave 2.

To look at this we need to do a crosstabulation of the two variables. In order to do this, we will be analysing only the 9,973 cases who responded in both Wave 1 and Wave 2, and using the Wave 2 weight. The Wave 2 weight adjusts the data to make it representative of all children who were resident in Ireland at Wave 1 and who continue to be resident in Ireland at Wave 2.

- 1) Data  $\rightarrow$  Weight Cases  $\rightarrow$  bzwg01
- 2) Analyse  $\rightarrow$  Descriptive Statistics  $\rightarrow$  Crosstabs

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3) The following dialog box will appear.

Crosstabs	Row(s):	X Statistics Cells Format
<ul> <li>ophcU1a</li> <li>ophc01b</li> <li>ophc01c</li> <li>■ Display clustered bar charts</li> <li>■ Suppress tables</li> </ul>	Display layer variables in table layers          Paste       Reset       Cancel       Help	

4) Browse and highlight the variables you want to cross-reference and move them to the row and column boxes as applicable

ta Crosstabs	1.00 2.00	X
<ul> <li>bphc06c</li> <li>bphc06d</li> <li>bphc06e</li> <li>bphc07a</li> <li>bphc07b</li> <li>bphc07c</li> <li>bphc07d</li> <li>bphc07d</li> <li>bphc07e</li> <li>bphc20a</li> <li>bphc34a</li> <li>bphc34b</li> <li>bphc03</li> </ul>	Row(s): apch01b Column(s): Column(s): Layer 1 of 1 Previous Next	Statistics C <u>e</u> lls Format
Display clustered <u>b</u> ar charts     Suppress <u>t</u> ables     OK	Display layer variables in table layer	S

5) Select 'Cells' and the following dialog box will appear



### 6) Under 'Percentages', click row and total

ta Cross	Crosstabs: Cell Display	
	Counts       z-test         Observed       Compare column p         Expected       Adjust p-values (         Hide small counts       Less than 5	proportions Bonferroni method)
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[			bpch01b C1.In general, how would you describe <child's> current</child's>				
		1	1 Very healthy, no problems	2 Healthy, but a few minor problems	3 Sometimes quite ill	4 Almost always unwell	Total
apch01b H20. In general, how would you describe baby s current health?	1 Very healthy, no problems	Count	2 6394	1557	101	17	8069
		% within apch01b H20. In general, how would you describe baby s current health?	79.2%	19.3%	1.3%	.2%	100.0%
		% of Total	65.6%	16.0%	1.0%	.2%	82.8%
	2 Healthy, but a few minor problems	Count	843	635	78	12	1568
		% within apch01b H20. In general, how would you describe baby s current health?	53.8%	40.5%	5.0%	.8%	100.0%
		% of Total	8.6%	6.5%	.8%	.1%	16.1%
	3 Sometimes quite ill	Count	35	46	12	0	93
		% within apch01b H20. In general, how would you describe baby s current health?	37.6%	49.5%	12.9%	.0%	100.0%
		% of Total	.4%	.5%	.1%	.0%	1.0%
	4 Almost always unwell	Count	8	5	6	0	19
		% within apch01b H20. In general, how would you describe baby s current health?	3 42.1%	26.3%	31.6%	.0%	100.0%
		% of Total	4 .1%	.1%	.1%	.0%	.2%
Total		Count	7280	2243	197	29	9749
		% within apch01b H20. In general, how would you describe baby s current health?	74.7%	23.0%	2.0%	.3%	100.0%
		% of Total	74.7%	23.0%	2.0%	.3%	100.0%

#### 7) Click 'Continue' and then 'OK' and you will get the following output:

Note:

- 1. This analysis is based on 9,749 cases (9,793 Wave 2 cases minus those with missing values in either variable)
- The first row of information shows the number of children in each of the cells. For e.g. 6,394 children were very healthy at Wave 1 and also very healthy at Wave 2
- 3. The second row of information shows the percentage of children in each health status category at Wave 1 who are in each of the Wave 2 health status categories. For e.g. 42.1% of children who were almost always unwell at Wave 1 were very healthy at Wave 2.
- 4. The third row of information shows the percentage of all children in each of the cells. For e.g. the category of children who were almost always unwell at Wave 1 and were very healthy at Wave 2 accounts for just 0.1% of all children.