## For users with SPSS experience

Svend Juul, July 2008

Below, ishr2 section numbers refer to An Introduction to Stata for Health Researchers.<sup>1</sup>

Stata and SPSS have many similarities, both using a rectangular data structure with variables and observations (cases in SPSS terminology). Among the differences are:

- Stata is case-sensitive; this applies both to command names and to variable names. The official command names are in lowercase: list is a valid command name, List is not. sex, Sex, and SEX are different variable names. See ishr2 section 4.1.
- In SPSS, a period terminates each command. Stata has no command terminator; a command, by default, ends when the line ends. On solutions for long commands, see *ishr2* section 4.8.
- In SPSS you can define any numeric code as a missing value, Stata's user-defined missing values are special codes; see *ishr*2 section 5.3.
- Stata's missing values are high-end numbers, and they are treated as such in logical expressions. This may lead to mistakes if you are not careful; see ishr2 section 5.3.
- SPSS executes all transformation commands up to a procedure command, one case at a time; Stata performs each command for the entire data set before proceeding to the next command. This may lead to different behaviour when combining selections (keep if; drop if) with observation numbers ([\_n]).
- Stata has two kinds of equal signs. The assignment equal sign is = as in: generate bmi = weight/(height^2)

```
In logical expressions, the relational equal sign is == as in:
```

generate y = 2 if sex == 1

In the following table I show selected SPSS commands with their (sometimes approximate) Stata counterpart. You find a more extensive description at the UCLA website:

http://www.ats.ucla.edu/stat/stata/faq/spss\_command\_to\_stata.htm.

Juul S. *An Introduction to Stata for Health Researchers*, 2nd ed. College Station, TX: Stata Press, 2008. See <a href="http://www.stata-press.com/books/ishr2.html">http://www.stata-press.com/books/ishr2.html</a>.

SPSS command	Similar Stata command	ishr2 section
Data management commands		
TEMPORARY. SELECT IF (sex=1).	command if sex==1	4.4
WEIGHT	Weights can be included in most commands.	4.5
SPLIT FILE	by:	4.7
COMMENT; *	* or //	4.8
FORMAT sex (F1.0).	format sex %1.0f	5.2
GET FILE	use	6.1
SAVE OUTFILE	save	6.1
DATA LIST	infile; infix; insheet	6.3
VARIABLE LABEL	label variable	7.1
VALUE LABEL	label define followed by label values	7.1
DOCUMENT	note	7.1
COMPUTE	generate; replace; egen	8.1
IF (sex=1) y=2.	generate y=2 if sex==1	8.1
RECODE a (5 thru 9=5) INTO agr.	recode a (5/9=5) , generate(agr)	8.4
SELECT IF	keep if; drop if	9.2
SAMPLE 0.1.	sample 10	9.2
SORT CASES BY	sort	9.4
ADD FILES	append	9.5
MATCH FILES	merge	9.5
AGGREGATE	collapse; contract	9.6
DO REPEAT END REPEAT	foreach; forvalues	17.4
Analysis commands		
DISPLAY DICTIONARY	describe; codebook	10.1
DESCRIPTIVES	summarize	10.1
LIST	list	10.2
FREQUENCIES	tab1	10.3
CROSSTABS	tab2	10.3
MEANS bmi BY agegrp.	oneway bmi agegrp , tabulate	10.4
T-TEST	ttest	10.4

http://www.ats.ucla.edu/stat/stata/faq/spss\_command\_to\_stata.htm