A Very Short Introduction to Stata

The basic philosophy of Stata.

Andrew Grogan-Kaylor

2025-03-15

The basic philosophy of Stata—"Stata in one sentence"—is:

do_something to_variable(s), options

Often it is not necessary to use any options since the authors of Stata have done such a good job of creating an intuitive language, and of thinking about the defaults. Commands that you actually type are represented in monospace font. x and y refer to variables in your data.

Task	Command
Open data	use mydata.dta
Look for or find	lookfor thing $^{\mathrm{1}}$
Descriptive statistics	summarize x y
Frequencies	tabulate x
Cross-Tabulation.	tabulate x y 2
Recode	recode x (old = new)(),
	$\mathtt{generate}(\mathtt{xR})^3$
Rename	rename x z
Keep	keep x y z
Drop	drop x y z
Correlation	corr x y
Regression	regress y x z
Logistic Regression	logit y x z, or 4
Ordinal Logistic Regression	ologit y x z, or 5

¹lookfor thing looks for any variable with thing in the variable name or variable label. lookfor somethingelse looks for any variable with somethingelse in the variable name or variable label. It is often useful to lookfor abbreviations e.g. lookfor anx instead of lookfor anxiety.

 $^{^2\}mathrm{After}$ the , the \mathtt{row} and \mathtt{col} options can be helpful to generate row and column percentages.

 $^{^3}$ It is usually best practice, but not required, to **recode** values of a variable (e.g. x) into a *new* variable (e.g. xR), leaving the original variable untouched.

⁴Here we need to use the , or option to ask for *odds ratios* instead of *logit coefficients*.

⁵Here again we need to use the , or option to ask for *odds ratios* instead of *logit coefficients*.

Task	Command
Multinomial Logistic Regression	mlogit y x z, rr ⁶
Multilevel Model	mixed y x z group: x
Structural Equation Modeling	$sem (y \leftarrow x m z) (m \leftarrow x z)$
Histogram	histogram x 7
Bar Graph	<pre>graph bar, over(x)</pre>
Bar Graph (of means)	<pre>graph bar y, over(x)</pre>
Pie Chart	<pre>graph pie, over(x)</pre>
Scatterplot	twoway scatter y x

 $^{^6\}mathrm{Here}$ we need to use the , rr option to ask for risk ratios instead of logit coefficients.

⁷For graphing commands, you can often add options after a ,. e.g. title("title of the graph"), xtitle("title of the x axis"), ytitle("title of the y axis").