A Very Short Introduction to Stata

The basic philosophy of Stata.

Andrew Grogan-Kaylor

2024-05-15

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

do_something to_variable(s), options

The general idea of most Stata commands is command variable(s), options. Often it is not necessary to use any options since the authors of Stata have done such a good job 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
Descriptive statistics	summarize x y
Frequencies	tabulate x
Correlation	corr x y
Regression	regress y x z
Logistic Regression	logit y x z, or 1
Ordinal Logistic Regression	ologit y x z, or 2
Multinomial Logistic Regression	mlogit y x z, rr 3
Multilevel Model	mixed y x z group: x
Structural Equation Modeling	sem (y <- $x m z$) ($m <- x z$)
Histogram	histogram x 4
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

¹Here we need to use the , or option to ask for *odds ratios* instead of *logit coefficients*.

²Here again we need to use the , or option to ask for *odds ratios* instead of *logit coefficients*.

³Here we need to use the , rr option to ask for risk ratios instead of logit coefficients.

⁴For 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").