

Activity #4
“Statistical Relationships”

This final activity asks participants to conduct and evaluate statistical tests of the hypothesis that a specific policy intervention – converting Doha’s traffic circles to signal lights – changed Qatari’s perceptions of the causes of traffic accidents. This activity utilizes SESRI_Omnibus_2011_2014_combined_excerpt.dta. Students will be asked to formulate, estimate and compare several alternative statistical models.

1. Launch Stata
2. Create a log file
log using <filename.log> or use drop-down menu
3. Open SESRI_Omnibus_2011_2014_combined_excerpt4.dta
use <filename> or use drop-down menu
4. Open Data Browser
5. Inspect the data
6. Close Data Browser
7. Compute descriptive (one-way) statistics for *drivers_comit*
 - a. Tabulate the values for *drivers_comit* (weighted and unweighted)
tab <varname>
tab <varname> [aweight=wtg]
 - b. Calculate summary statistics (weighted and unweighted) for *drivers_comit*
sum <varname>
sum <varname> [aweight=wtg]
8. Explore the relationship between *drivers_comit* and *year*
tab <varname1> <varname2> [aweight=wtg]

corr <varname1> <varname2> [aweight=wtg]

ttest <varname1>, by(<varname2>)

reg <varname1> < varname2>

reg <varname1> <varname2> [aweight=wt]

9. Estimate a multivariate regression model (regress *drivers_comit* on *year*) controlling for household type (*household*)

reg <varname1> <varname2> <varname3> [aweight=wt]

10. Estimate a multivariate logit model (logit *change_behav_year*) controlling for household type (*household*)

logit <varname1> <varname2> <varname3>