Subject: To perform anova for count data in stata with survey weight
Posted by Nadia_n_n on Fri, 10 Aug 2018 07:00:45 GMT

Hi, I'm a new user

I want to perform anova for count data in stata with survey weight, primary sampling unit.
like my dependent variable is No. of antenatal visits and independent variable is Education level,
whenever I write the following code in stata,

svy: oneway no_of_antenatal_visits education_level

then it is showing error.

Can you please tell me the write way to perform anova in stata for count data, with survey weight?

Subject: Re: To perform anova for count data in stata with survey weight
Posted by Bridgette-DHS on Tue, 11 Sep 2018 00:39:37 GMT

Following is a response from Senior DHS Specialist, Tom Pullum:

Sorry for the delay in this response. You may already have solved the problem.

I don't see any obvious reason why you are getting an error message. Can you send a log file?

Personally, I would use Poisson regression and a model such as "poisson no_of_antenatal_visits i.education_level". With anova, you are treating the count as an interval-level outcome. The tests in anova assume that the errors are normally distributed and homoscedastic. Both of those assumptions are implausible for a count. Poisson (and negative binomial) models are more appropriate for an outcome that is a count.

I also recommend that other variables be included, such as the age and/or parity of the woman.