

EPIB 613

November 29, 2012

Exercise #9

Answer the following questions using the dataset `lbw1.dta` from the course website:

1. Generate two local macros that store the 5th and 95th percentiles of the variable `lwt` (weight at last menstrual period). Determine the mean age of mothers whose `lwt` values fall between the 5th and 95th percentile. Now obtain an odds ratio and 95% CI for the association between low birth weight and mother's smoking status for babies born to mothers whose `lwt` falls between the 5th and 95th percentile.
2. Execute the following commands within a `foreach` loop for the continuous variables `age`, `lwt`, and `bwt`: 1) summarize each variable 2) generate new variables named `age_c`, `lwt_c`, `bwt_c` that contain centered values for each variable (i.e., each individual's value minus the overall mean) 3) summarize each of the centered variables.
3. Execute a `forvalues` loop to summarize birthweight over values of `ftv` (number of physician visits). Before each summarize output display the number of physician visits.
4. Generate a new variable named `visits` that categorized the number of physician visits into categories 0, 1, 2, 3+ visits. Using `statsby`, create a dataset that contains the mean birthweight and lower and upper values of the 95% confidence interval for each category of `visits`. Plot the mean and 95% CI using twoway graph types `scatter` for the mean and `rcap` for the CIs (see page 293 of the Juul & Frydenbyrg for more details). Appropriately label the legend and axes.