

# MODULE 6

## ANALYZING MICRODATA WITH A GENDER ANGLE

### EXERCISES

#### Curriculum on Gender Statistics Training

This product was developed under the guidance of the Subgroup on Gender Statistics Training, within the Asia-Pacific Network of Statistical Training Institutes.

## Exercise 1

Please select 'True' or 'False' for each of these statements:

1. When performing statistical analysis to sample household survey data, the data must be weighted to calculate the population estimates. This is because the overall probability of selection of each household is not a constant.
2. Utilizing sample weights is sufficient to ensure the representativeness of results for any statistical analysis that involves estimation of standard errors, confidence intervals or significance testing.
3. The correlation between any two variables ranges from 0 to 1.
4. Logistic regression analysis is applicable when the dependent variable is continuous.
5. The estimated coefficients  $\beta$  (the output of logistic regression) are significant if the associated p-value is greater than the specified significance level.
6. If the odds of a winning a soccer game are 4 to 1 and the odds of winning a baseball game are 1 to 4, the odds of winning a baseball game are higher than the odds of winning a soccer game.

## Exercise 2

Download microdata of your interest from the MICS website and perform the logistic regression to find women or men's attitude towards domestic violence on a set of independent variables of your choice. Interpret the results of the coefficients in your logistic regression output.

## Solutions to Exercise 1

1. True
2. False; it is necessary to also consider sample design parameters such PSUs and stratification variables
3. False; it ranges from -1 to 1
4. False; when the dependent variable is categorical
5. False; if the p-value is less than the specified significance level
6. False; the odds of winning a soccer game are higher than the odds of winning a baseball game

## Solutions to Exercise 2

Trainees are expected to duplicate the statistical analysis of this module using other dataset and independent variables of their choice.