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 using 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 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 β (the output of logistic regression) are significant if the associated p-value is greater than the specified significance level.

6. If the odds of 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.

Exercise 3

A public opinion survey explored the relationship between age and support for increasing the minimum wage. The results are summarized below in a two-way frequency table.

Age (in years)	Type of Support		
	Total number of people who are for	Total number of people who are against	Total number of people who have no opinion
21-40	25	20	5
41-60	20	35	20
Over 60	55	15	5

In the 21 to 40 age group, what is the percentage of respondents who supports increasing the minimum wage?

a) 12.5%
b) 20%
c) 25%
d) 50%
e) 75%

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.

Solutions to Exercise 3

The correct answer is (D). A total of 50 people in the 21 to 40 age group were surveyed. Of those, 25 were for increasing the minimum wage. Thus, half of the respondents in the 21 to 40 age group (50%) supported increasing the minimum wage.