

Test Bank for Applied Statistics Using Stata - A Guide for the Social Sciences 2nd Mehmetoglu

Testbank

Chapter 1: Research and statistics

1. When employing inferential statistics, which tradition within theory of science do we adhere to?

- a) Constructivism
- b) Positivism
- c) Hermeneutics
- d) Interpretivism

Ans: B

2. What is the positivist assumption?

- a) Observations and experience depend on the perspective of the observer
- b) The patterns of interest are a product of our own making
- c) The world consists of regularities that can be measured and explained
- d) You cannot acquire knowledge from studying the world

Ans: C

3. In a normal distribution, what percentage of the observations fall within 1.96 standard deviations from the mean?

- a) 90%
- b) 95%
- c) 97.5%
- d) 99%

Ans: B

4. Within probability theory, what does probability (or p -) values tell us?

- a) The probability of being wrong when we confirm a null hypothesis
- b) The probability of being correct when we reject a null hypothesis

- c) The probability of being mistaken when we reject a null hypothesis
- d) The probability of being right when we confirm a null hypothesis

Ans: C & D

5. When you are investigating a full population, you are generalizing within?

- a) Stochastic model theory
- b) Probability theory
- c) Statistical theory
- d) The law of large numbers

Ans: A

Chapter 2: Introduction to Stata

1. Which of the following do we use to type in commands in Stata?

- a) Command window
- b) Review window
- c) Variables window
- d) Do-file editor

Ans: A & D

2. Which of the following is the command to open a dataset?

- a) pwd
- b) describe
- c) use
- d) open

Ans: C

3. Which of the following is the command that will give us the mean of a variable?

- a) describe
- b) codebook
- c) sum
- d) mean

Ans: C

4. Which of the following codes are wrong?

- a) `gen age2==age*age`
- b) `gen age2=age*age`
- c) `keep if gender==2`
- d) `keep if gender=2`

Ans: A & D

5. Which of the following commands is used for combining datasets based on observations?

- a) `merge`
- b) `list`
- c) `reshape`
- d) `append`

Ans: D

Chapter 3: Simple (bivariate) regression

1. What does a simple linear regression analysis examine?

- a) The relationship between only two variables
- b) The relationship between one dependent and one independent variable
- c) The relationship between many variables
- d) The relationship between two dependent and one independent variable

Ans: A & C

2. Which of the following are correct?

- a) The intercept/constant (β_0) is the mean-Y when $X=0$
- b) The intercept is the amount of change in mean-Y when $X=0$
- c) The coefficient is the mean-Y at a certain value of X
- d) The coefficient (β) is the amount of change in mean-Y for every unit increase in X

Ans: A & D

3. What does the least squares method do exactly?

- a) Minimizes the distance between data points
- b) Finds the least problematic regression line
- c) Finds those (best) values of the intercept and slope that provide us with the smallest value of the residual sum of squares
- d) Finds those (best) values of the intercept and slope that provide us with the smallest value of the sum of residuals

Ans: C

4. Which of the following measures is optimal for comparing the goodness of the fit of competing regression models involving the same dependent variable?

- a) The intercept
- b) The coefficient
- c) *R*-square
- d) Standard deviation of the residuals

Ans: D

5. What does the following expression ($H_0 : \beta_1 = 0$) mean?

- a) Mean-*Y* changes as a result of a change in *X*
- b) Mean-*Y* does not change as a result of change in *X*
- c) Mean-*Y* value becomes 0 as a result of a change in *X*
- d) Mean-*Y* value is equal to 0 when $X = 0$

Ans: B

Chapter 4: Multiple regression

1. What does a multiple linear regression analysis examine?

- a) The relationship between more than one dependent and only one independent variable
- b) The relationship between one or more than one dependent and only one independent variable
- c) The relationship between one dependent and more than one independent variables
- d) The relationship between more than one independent variables