An Introduction to the Regression Analysis - Quiz

Question 1

1/1 point (graded)

In this lecture segment, we learned about the simple linear regression equation:

$$Y_i = \alpha + \beta X_i + \epsilon_i$$

In cases where it is appropriate to think of the relationship as a causal relationship, the impact of changing X on outcomes of Y is captured by:

- $\alpha + \beta$
- β ✔
- α
- $\alpha + \beta + \epsilon$

Explanation
Imagine an experiment where all other factors in the world are kept unchanged but X is varied. The causal impact of changing X on outcomes of Y is given by β.

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

Question 2

1/1 point (graded)

True or False: In order to interpret a regression equation as representing a causal relationship, we need to include as control variables any variables that might impact both X and Y.

- a. True ✔
- b. False

Explanation
True. If there exist any variables that are correlated with X and also effect Y, then we would need to include those variables as control variables in any regression equation that seeks to measure the causal relationship between X and Y, otherwise we will get omitted variable bias (which we will discuss in further detail later in the semester).

Use of Randomization and Nonparametric Regression
Finger Exercises due Nov 21, 2016 at 05:00 IST

Module 8: Homework
Homework due Nov 14, 2016 at 05:00 IST

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Discussion
Topic: Module 8 / An Introduction to the Regression Analysis - Quiz

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