

MITx: 14.310x Data Analysis for Social Scientists

Heli



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The Rubin Causal Model - Quiz

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Question 1

1/1 point (graded)

The Rubin-Causal model begins by outlining all possible _____ with associated _____.

- a. Actions (take pill, receive income assistance, etc.); outcomes
- b. Units (individuals, households, etc.); outcomes
- c. Action-unit pairs ; outcomes
- d. Action-unit pairs ; treatment-control designations

Explanation

The Rubin causal model provides a useful way for thinking about causality in the social sciences, in particular, for thinking about treatment effects in randomized controlled trials. Under this framework, the first step is to outline all possible action-unit pairs with associated outcomes.

- Module 5: Moments of a Random Variable,
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- Module 7: Assessing and Deriving Estimators -Confidence Intervals, and Hypothesis Testing
- Module 8: Causality,
 Analyzing Randomized
 Experiments, &
 Nonparametric
 Regression

Causality

due Nov 21, 2016 05:00 IST

<u>Analyzing Randomized</u> <u>Experiments</u>

due Nov 21, 2016 05:00 IST

Submit

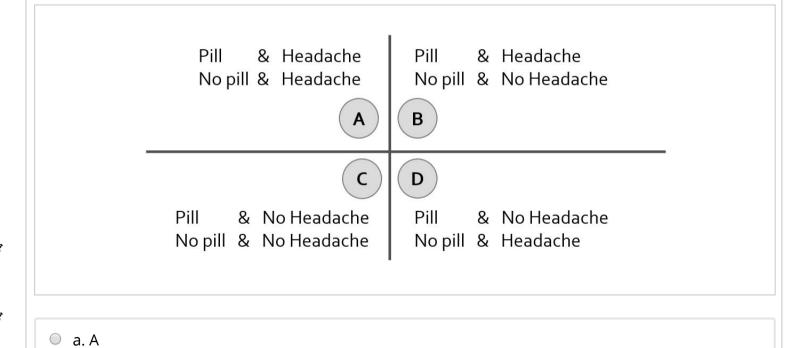
You have used 2 of 2 attempts

✓ Correct (1/1 point)

Question 2

1/1 point (graded)

In the headache-pill example, four potential action-unit pairs and associated outcomes are identified. Which represents the state of the world that would provide support for the notion that there is a causal relationship between taking a pill and not having a headache?



Use of Randomization and **Nonparametric Regression**

due Nov 21, 2016 05:00 IST

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

- Ø.
- Module 9: Single and Multivariate Linear Models
- Exit Survey



Explanation

D represents the set of action-unit pairs and associated outcomes which would be consistent with the notion that there is a causal relationship between taking a pill and not having a headache. In A, the state of the world is a headache regardless of whether you take a pill or not. In C, the state of the world is that you have no headache whether you take the pill or not. So, in both A and C, there is no impact of the pill. B represents the state of the world where the pill has the causal effect of causing a headache where there would be none in the absence of the pill. D represents the state of the world where you have a headache if you take no pill, but you have no headache if you take a pill.

Submit You have used 1 of 2 attempts Correct (1/1 point) Discussion **Show Discussion Topic:** Module 8 / The Rubin Causal Model - Quiz

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