

MITx: 14.310x Data Analysis for Social Scientists

Help



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"The Bubble" and Encouragement Designs - Quiz

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Question 1

1/1 point (graded)

Which of the following is true about randomization in a "bubble" (around a cutoff)? (Select all that apply)

- a. Everyone above the cutoff must be included in the randomization
- b. You only randomize among the people just above and below a cutoff
- c. The people above and below the cutoff must have the same probability of being assigned to the treatment group.
- d. Everyone below the cutoff must be included in the randomization



Explanation

<u>Functions of Random</u> Variable

- Module 5: Moments of a Random Variable,
 Applications to
 Auctions, & Intro to
 Regression
- Module 6: Special
 Distributions, the
 Sample Mean, the
 Central Limit Theorem,
 and Estimation
- Module 7: Assessing and Deriving Estimators
 Confidence Intervals, and Hypothesis Testing
- Module 8: Causality,
 Analyzing Randomized
 Experiments, &
 Nonparametric
 Regression
- Module 9: Single and Multivariate Linear

Randomization in a "bubble" means you randomize just above and below a cutoff, which can be useful with organizations that do not want to significantly vary their inclusion criteria. You do not include everyone above the cutoff in the randomization, because the organization will want to treat those far above the cutoff. You do not need to assign the same probability of being treated to people above and below the cutoff as long as you are randomizing within the just below and the just above the cutoff groups. You do not include everyone below the cutoff because the organization will not want to treat those far below the cutoff.

Submit

You have used 1 of 2 attempts

Correct (1/1 point)

Question 2

1/1 point (graded)

Which of the following is true about encouragement design? (Select all that apply)

- a. The intervention is used as an instrument for the effect of the program
- b. The Ghana scholarship intervention is an example
- c. All the treated individuals must take up the program
- ☑ d. The intervention should not directly affect the outcomes of interest

Models

- Module 10: Practical Issues in Running Regressions, and Omitted Variable Bias
- Module 11: Intro to
 Machine Learning and
 Data Visualization
- Module 12:

 Endogeneity,
 Instrumental
 Variables, and
 Experimental Design

Endogeneity and Instrumental Variables

Finger Exercises due Dec 14, 2016 05:00 IST

Experimental Design

Finger Exercises due Dec 14, 2016 05:00 IST

Module 12: Homework

Homework due Dec 12, 2016 05:00 IST

Exit Survey



Explanation

Since encouragement designs only change the probability that one is treated, participation offer is often used as an instrument for the effect of the program. In this case, your intervention is just to offer individuals to participate in a given program (not the program itself). The scholarship in the Ghana example encouraged individuals enroll in secondary high school. To be an effective instrument, the encouragement only needs to create some variation in take-up between the treatment and the control, so it does not need all treated individuals to take up the program. Since the intervention is used as an instrument, it should not directly affect the outcome because of the exclusion restriction.

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You have used 1 of 2 attempts

✓ Correct (1/1 point)

Discussion

Topic: Module 12 / "The Bubble" and Encouragement Designs - Quiz

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