

MITx: 14.310x Data Analysis for Social Scientists

Help



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Module 12: Endogeneity, Instrumental Variables, and Experimental Design > Experimental Design > Phase-in Design - Quiz

## Phase-in Design - Quiz

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### **Question 1**

1/1 point (graded)

If an NGO says they cannot contact individuals without ever providing them the intervention, then a \_\_\_\_\_ approach could allow for randomization:

- a. Stratification
- b. Clustering
- c. Phase-in
- d. You cannot randomize if you are going to treat everybody eventually

### **Explanation**

The phase-in approach creates random variation in the timing of the intervention, while ensuring that all individuals will receive the intervention eventually. So it would enable you to promise that everyone will get treated, whilst still allowing you to use randomization to estimate the causal impact of your treatment.

<u>Functions of Random</u> Variable

- Module 5: Moments of a Random Variable,
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- Module 6: Special
   <u>Distributions, the</u>

   <u>Sample Mean, the</u>
   <u>Central Limit Theorem,</u>
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- Module 8: Causality,
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   Experiments, &
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   Regression
- Module 9: Single and Multivariate Linear

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You have used 1 of 2 attempts

✓ Correct (1/1 point)

### **Question 2**

1/1 point (graded)

What are the problems with phase-in randomization relative to simple randomization? (Select all that apply)

- a. Spillover effects
- b. Long-run effects are more difficult to measure
- c. Anticipation of receiving treatment may change the behavior of the control group (during the implementation of the experiment)
- d. Attrition bias



### **Explanation**

Long-run effects are more difficult to measure, because the control group receives the treatment in the long-run. For anticipation, the control group often knows it will receive the treatment soon, which may change their behavior. Spillover effects and attrition bias should not be any worse than in simple

# 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

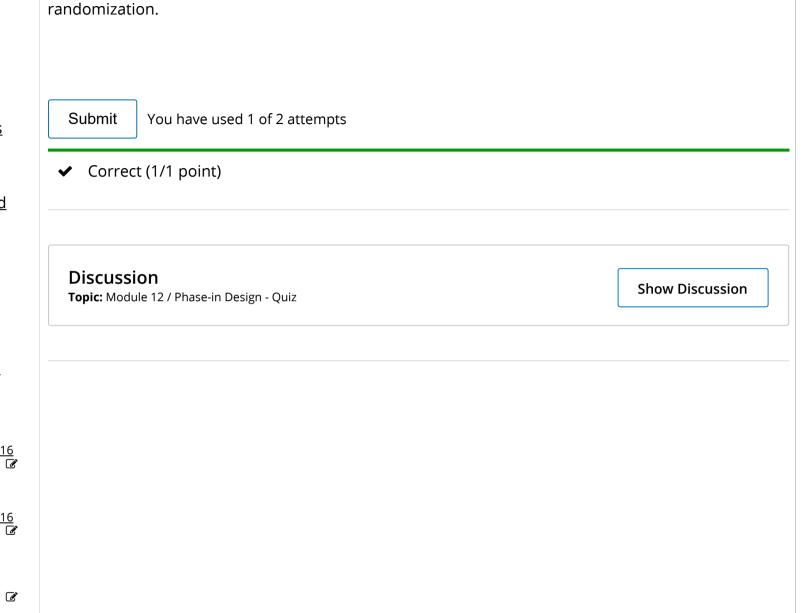
### **Experimental Design**

Finger Exercises due Dec 14, 2016 05:00 IST

### Module 12: Homework

<u>Homework due Dec 12, 2016</u> 05:00 IST

Exit Survey



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