



Bookmarks

- ▶ [Module 1: The Basics of R and Introduction to the Course](#)
- ▶ [Entrance Survey](#)
- ▶ [Module 2: Fundamentals of Probability, Random Variables, Distributions, and Joint Distributions](#)
- ▶ [Module 3: Gathering and Collecting Data, Ethics, and Kernel Density Estimates](#)
- ▶ [Module 4: Joint, Marginal, and Conditional Distributions &](#)

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

Stratification - Quiz

🔖 Bookmark this page

Question 1

1/1 point (graded)

What does it mean to use stratification in randomization?

- ☐ a. Dropping observations that do not take up the intervention
- ☐ b. Adding controls for individual characteristics into your regression
- ☐ c. Focusing on the individuals the intervention affected the most
- ☒ d. Randomizing among groups that are similar ex-ante (for pre-specified characteristics) ✓

Explanation

Stratification means you randomize among groups that are similar ex-ante. For example, you could split your sample by gender and then randomize only among females and only among males to insure that the treatment and control group had the same number of females and males.

Functions of Random 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

Submit

You have used 1 of 2 attempts

✓ Correct (1/1 point)

Question 2

1/1 point (graded)

Why would you use stratification?

- ☐ a. To target your intervention to the neediest
- ☐ b. Reduce spillover effects
- ☒ c. Help power by reducing variance in the outcome variable ✓
- ☐ d. Randomizing without strata is not possible


Explanation

Since stratification makes the treatment and control group similar ex-ante, there should be less random variation in the outcome variable (to the extent the variable we used to stratify to predict the outcome). With less random variation, the regressions will have more power to identify the variation caused by the intervention. So stratifying will increase your power by reducing variance for any given sample size.


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](#)

A is incorrect because randomization is a tool which you can use to assign a sample of individuals to different groups (although you could then decide to also change the probability of treatment within each strata). B is incorrect because if there are spillovers between your units of randomization, whether or not you randomized people within strata will not change whether or not there are spillovers. You always can randomize without strata, but you often should include strata because of the power benefits. Another benefit is that it signals ex-ante that these are potentially group of interest. In medicine stratifying ex-ante is a condition for reporting sub-group analysis.

[Submit](#)

You have used 1 of 2 attempts

✓ Correct (1/1 point)

Discussion

Topic: Module 12 / Stratification - Quiz

[Show Discussion](#)



© 2016 edX Inc. All rights reserved except where noted. EdX, Open edX and the edX and Open EdX logos are registered trademarks or trademarks of edX Inc.

