



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 & Functions of Random Variable](#)

Module 8: Causality, Analyzing Randomized Experiments, & Nonparametric Regression > Causality > An Introduction to Causality - Quiz

An Introduction to Causality - Quiz

🔖 Bookmark this page

Question 1

0/1 point (graded)

Which of the following are true about the meaning of the counterfactual? (Select all that apply.)

- ☒ a. The counterfactual cannot be directly observed
- ☒ b. The counterfactual refers to facts that surround a causal statement, in other words, the assumptions or facts that we keep in the back of our minds when thinking of possible chains of causality
- ☐ c. Sometimes the counterfactual occurs, sometimes it does not occur
- ☒ d. By definition, the counterfactual did not occur, since it refers to the state of the world that we would have observed absent a specific cause or program or condition



Explanation

- ▶ [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](#)

Causality

due Nov 21, 2016 05:00 IST

**Analyzing Randomized Experiments**

due Nov 21, 2016 05:00 IST



The counterfactual refers to the state or the world that did not occur, in other words, the state of the world that would have been observed absent the cause or program or policy or condition of interest. We cannot directly observe this state of the world. For example, if you are curious whether a tutoring program increased learning outcomes for a group of students, the relevant counterfactual outcome would be learning outcomes for the students in the state of the world where they did not receive tutoring, which is the state of the world that did not occur (since the group children received tutoring), and hence cannot be directly observed.

[Submit](#)

You have used 2 of 2 attempts

✘ Incorrect (0/1 point)

Question 2

1.0/1.0 point (graded)

One helpful way to think about causality is as _____, where we find a strategy to compare _____ with _____.

- ☐ a. The effect of manipulating a cause ; estimates from before the cause ; estimates from after the cause
- ☒ b. The effect of manipulating a cause ; (our best approximation of) what would have happened absent that cause ; what actually did happen ✓
- ☐ c. A theoretical construct ; what we think we know about the world ; what we directly observe

**Use of Randomization and
Nonparametric Regression**

due Nov 21, 2016 05:00 IST



Module 8: Homework

due Nov 14, 2016 05:00 IST



- ▶ [Module 9: Single and
Multivariate Linear
Models](#)

- ▶ [Exit Survey](#)

- ☐ d. A theoretical construct ; predictions or theories about what will happen from a range fields or disciplines ; what actually did happen

Submit

You have used 1 of 2 attempts

Discussion

Topic: Module 8 / An Introduction to Causality - Quiz

Hide Discussion

Add a Post

Not sure of the answer Q1

discussion posted 11 days ago by **daniel_arbol**



I can actually think in cases where the counterfactual can be directly observed, so please I'd like you to check the answer because I don't think it is completely accurate.

This post is visible to everyone.

Add A Response

1 response

Satizabal

11 days ago



Agreed. What about an RCT? What about an intervention that can be added, then removed, and then added and where you see the effects change with intervention or without? (e.g., level of pain for a chronic condition with an experimental drug vs. without experimental drug even with the same patient?)

Thanks.

No, the counterfactual is never observed. If a person is treated then we are



— Collapse discussion

© All Rights Reserved



© 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.

