

MITx: 14.310x Data Analysis for Social Scientists

Heli



- 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 > Analyzing Randomized Experiments > Estimating Tau and Sigma - Quiz

Estimating Tau and Sigma - Quiz

☐ Bookmark this page

Question 1

1.0 point possible (graded)

One way to proceed with power calculations is to use $\alpha, \beta, \tau, \sigma$, and γ , and using these inputs, calculate the sample size needed to detect a significant treatment effect. α refers to the significance level of the test, and $1-\beta$ is power. τ refers to ______, σ refers to _____, and γ refers to

- a. The actual measured average treatment effect; the actual measured standard deviation; the fraction of the sample in the treatment group
- ullet b. The target average treatment effect; an estimate of standard deviation of the outcome; the fraction of the sample in the treatment group \checkmark
- c. The target average treatment effect; the desired level of significance of the test; the fraction of the sample in the treatment group
- d. The target average treatment effect; the desired level of significance of the test; a representative estimate of the variance

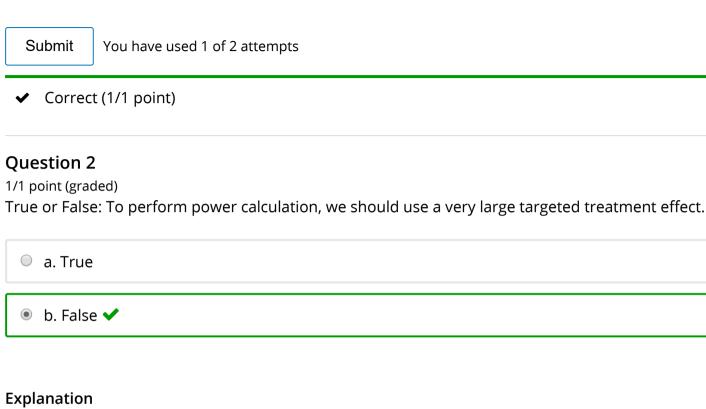
- Module 5: Moments of a Random Variable. Applications to Auctions, & Intro to Regression
- Module 6: Special Distributions, the Sample Mean, the Central Limit Theorem, and Estimation
- Module 7: Assessing and **Deriving Estimators -**Confidence Intervals, and Hypothesis Testing
- Module 8: Causality,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

Causality

due Nov 21, 2016 05:00 IST

Analyzing Randomized Experiments

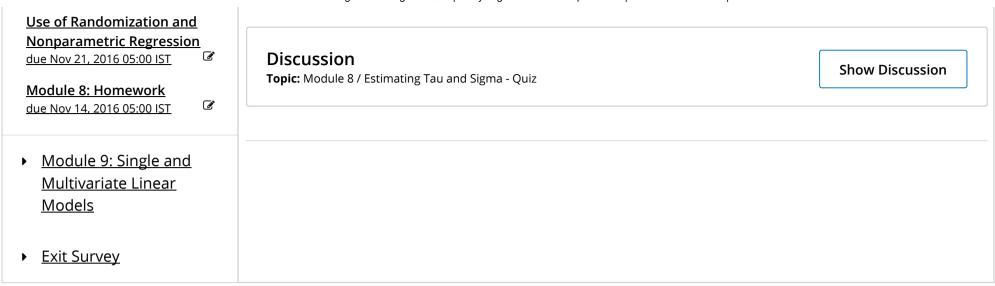
due Nov 21, 2016 05:00 IST



False: if we use a very large number for τ , we will only require a small sample, but then we will fail to reject the null even if the true treatment effect was positive, but smaller than what we targeted.

Submit You have used 1 of 1 attempt

Correct (1/1 point)



© 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.



















