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Estimating Tau and Sigma - Quiz

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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
- b. The target average treatment effect ; an estimate of standard deviation of the outcome ; the fraction of the sample in the treatment group ✔
- 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

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

Question 2

1/1 point (graded)

True or False: To perform power calculation, we should use a very large targeted treatment effect.

a. True

b. False ✔

Explanation

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)

Discussion

Topic: Module 8 / Estimating Tau and Sigma - Quiz

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