

Confidence Intervals Quiz

Mallick Hossain

University of Pennsylvania

Class Logistics

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 - I will not have office hours the Tuesday or Wednesday of Thanksgiving week and no office hours on the Tuesday following Thanksgiving. To make up, I will hold office hours from 9-11 on Monday of Thanksgiving week to answer any questions you have before the holidays.

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 - Formally, this is a t-distribution.
 - As long as m and n are large enough, we can approximate with a Normal distribution. $N(\mu_X - \mu_Y, \frac{s_X^2}{n} + \frac{s_Y^2}{m})$

3. What is the distribution of $\bar{X}_n - \bar{Y}_m$ if the variances are unknown, and X and Y are from an unknown distribution and independent of each other?

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 - We can approximate this with a normal distribution, but the variance is changed because of the dependence of the two populations. You must add in the $2\text{Cov}(\bar{X}, \bar{Y})$ term.

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8. Ready for the next lecture?

