

Statistical Methods, part 1

Module 2: Latent Class Analysis of Survey Error

Models for measurement errors

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Interesting error

- $\hat{Y} - Y$
- That is, the difference between estimate and what you desire (truth, value obtained with the ideal method, population parameter, or however the desired aim is envisaged)
- Is this difference published?
- What is the established term for this difference?

Why in this course?

- Measurement errors can rarely be observed
- You have to draw conclusions (make inference) about something unobservable
- Models play a crucial role in this inference process
- Most quantitative research faces measurement errors

Scenarios

1. True values/gold standard values of a random subsample of sample
2. Independent measurements of a random subsample of sample
3. One sample with several variables with measurement error (most common and least favourable situation)