Bias

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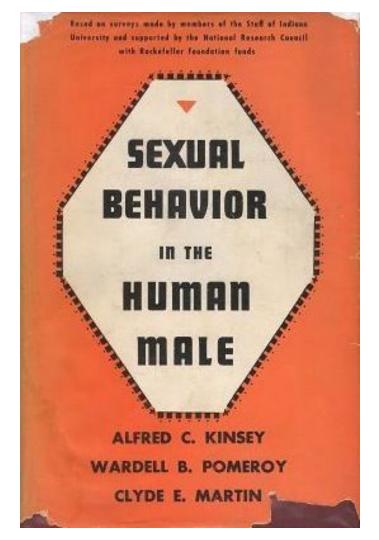
Randomization - using random assignment of a treatment to create balanced comparisons with high probability

A/B testing - implementation of randomization in an experiment

Causal Inference - trying to infer cause and effect using statistics

Statistical inference - the process of making conclusions about populations from a sample

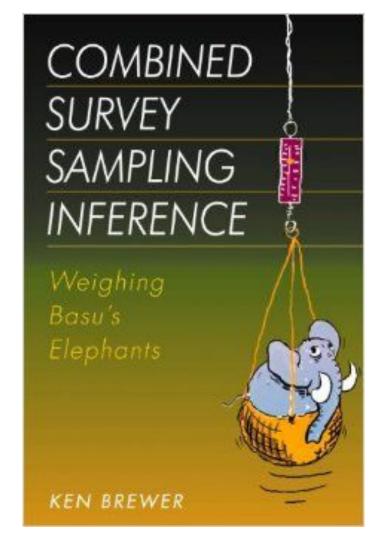




How do we combat sampling and other forms of bias?



http://commons.wikimedia.org/wiki/File:Maya_funerary_urn.jpg#/media/File:Maya_funerary_urn.jpg





Summary

- Bias comes in many forms to contaminate analyses
- Sampling bias is a particularly common one whereby your sample isn't indicative of the population you'd like to make inferences about
- Examples of strategies to combat sampling biases
 - Random sampling
 - Reweighting
 - Modeling