Chapter 11* Outline

I. Population
   A. Experimentally Accessible Population
   B. Target Population

II. Sample
   A. Simple Random Sampling
   B. Sampling Error
   C. Bias

*Part of Chapter 11
(Methods Section)
“The sample consisted of 270 ninth grade students from a Midwestern community of mixed social and ethnic background. One-half of the students were randomly assigned to the experimental group and one-half to a control group.”

(Results Section)
“The findings of this study suggest that the results of the standardized achievement testing were related to the motivational and teaching activities that were carried out prior to testing.” ...

...”This study points out that improved test results are obtainable when students become personally involved in, motivated by, and interested in the testing program. All schools are interested in improving their rank on standardized tests, but more important, they must be interested in the individual students and their development.”
Populations

Experimentally Accessible Population – The population from which you sample

Target Population – The population to which you want to generalize
Research areas where EAP & TP is often a problem

1. Learning experiments with undergraduate students
2. Methods studies in education
3. Polls
4. Medical studies with animals
Simple Random Sampling – A method of selecting a sample of a given size from a given population in such a way that all possible samples that could be drawn from the population have the same probability of selection.

**Sampling Error**

\[ E = T - \theta \]

\( E = \) sample mean – population mean

**Bias** – Some type of random selection was not done.

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