

EXAM 3 STUDY GUIDE

INTRODUCTION TO STATISTICS

Statistics vs. Parameters

Sample vs. Population

Sampling Procedures:

- Random
- Stratified
- Cluster
- Convenience
- Quota

Descriptive vs. Inferential statistics

Variables vs. Constructs

Operational definitions

Categorical vs. Continuous variables

Categorical vs. Discrete variables

Real vs. Apparent limits of numbers

Statistical notation

Order of mathematical operations

FREQUENCY DISTRIBUTIONS

Simple vs. Grouped frequency distributions

Obtaining Σx_i and the mean from a distribution

Proportions and percentages in distributions

Real limits and frequency distributions

Frequency distribution graphs (histograms)

How graphs can be misused

Shapes of frequency distributions

Positively vs. Negatively skewed

Percentiles and percentile ranks

- Definition
- Finding them in a frequency distribution
- Interpolating a percentile using formula

CENTRAL TENDENCY

Mode

- Definition
- Be able to report based on frequency

Median

- Definition
- Formula
- Be able to hand calculate

Mean

- Definition
- Formula
- Be able to hand calculate

When to use which measure of central tendency

Central tendency and the shape of distributions

Creating a two-group histogram

- Drawing normal curves for each group
- Interpreting mean differences