

Chapter 1 - Variables, Research Problems and Questions Study Guide

OBJECTIVES:

The student will be able to:

1. Explain the difference between research problems, research hypotheses, and research questions.
2. Provide definitions for different types of variables.
3. Identify the research question, research hypothesis, and types of variables used in a study.
4. Determine if a research question is a difference research question, an associational research question, or a descriptive research question.
5. Explain the relationship between the type of independent variable used in a study and the type of research question that can be answered (difference, associational, descriptive).
6. Discuss how the type of research questions drives the selection of the type of statistic.
7. Utilize the SPSS data editor and variable view features to examine the variables of an existing dataset.

TERMINOLOGY:

- research problem
- variable
 - independent variable (active vs. attribute)
 - dependent variable
 - extraneous variable
- operational definition
- randomized experimental study
- quasi-experimental study
- non-experimental study
- factor
- grouping variable
- values (categories, levels, groups, samples)
- variable label
- value label
- research hypotheses
- research question
 - difference research question
 - associational research question
 - descriptive research question
 - complex research question (multivariate)

ASSIGNMENTS: See additional activities for assignment examples.