Chapter 6:

Indexes and Scales
(also includes Experiments)

What is an "index"?

How is an index created
and tested?

(hint: selection, testing variables,
scoring index, & validation)

Use a reliability test to
examine and score the items
and index
(item analysis)

Use external validation

What is a "scale"?

Provide an example.

(hint: Bogardus Social Distance Scale)

How is a scale different from
an index in terms of:

--interpretation?

--construction?

Why do some say that a
Likert scale is not really a
scale?

What is meant by a semantic differential format for questionnaire construction?

Rating something in terms of two opposites

Provide an example

If you wanted to evaluate team members perception of their work team:

FUN	very	somewhat	neither	somewhat	very	NOT FUN
ENJOY	very	somewhat	neither	somewhat	very	NOT ENJOY
HELPFUL	very	somewhat	neither	somewhat	very	NOT HELPFUL

What is meant by a Guttman scale format for questionnaire construction?

Anyone who agrees with a particular question would also agree with all the earlier questions

Provide an example

Borgardus Social Distance Scale

Chapter 8:

Experiments

What is the basic framework for a research project using an experimental design?

--create experimental and control groups

--randomly assign units into one or the other groups

--pretest both groups (Time 1)

--administer an intervention

--allow time for the intervention to have an effect

--post test

What is the advantage of having a control group if those in the control group don't receive the intervention?

What is the advantage of random sampling to create the experimental and control groups?

What is a placebo?

Who might it be administered within an experimental design?

What would be the advantage of using a placebo?
The disadvantage?

What is a double-blind experiment?

(hint: it is related to the placebo)

What are the dependent and independent variables in an experimental design?

(hint: what would the intervention be?)

What is a quasi-experimental design?

(hint: typically involves "matching")

What is the disadvantage of a "one-group pretest-posttest design"?

What is the disadvantage of a "static-group comparison" (i.e., no pre-test is done)?

How would random sampling help with this problem?

What is meant by "internal validity"?

Answers the questions: Are the effects really due to the intervention or due to something else?

How might each of the following reduce internal validity? How might an experimental design help?

- Historical events may occur during the course of the experiment.
- Testing and retesting can influence behavior.
- Instrumentation—using different questions in the pre and post test to measure the same thing

- Maturation of the subjects.
- Statistical regression
  --scores start out so low that the scores at time 2 can't get any lower and can only improve
- Selection biases
  --experimental and control groups are not similar
- Experimental mortality
  --subjects drop out of the study before it's completed

What is meant by "external validity"?

Answers the question: Can the effects found be generalized to the larger population (or are they only generalizable to an artificial setting)?