

Second Examination

Multiple Choice (one point each)

1. A composite variable consisting of more than one empirical dimension is called a(n):
 - a. hypothetical construct
 - b. index
 - c. scale
 - d. none of the above
2. Indicators articulate the measurement unit in creating variables.
 - a. true
 - b. false
3. One's income is an example of what level of measurement:
 - a. nominal
 - b. ordinal
 - c. interval
 - d. ratio
4. Reliability tests the relationship between our measure and that of another.
 - a. true
 - b. false
5. The measure best assessing consistency of a composite variable is:
 - a. test-retest reliability
 - b. split-half reliability
 - c. construct validity
 - d. concurrent validity
6. Item-scale analysis is the technique applied to "face" validity.
 - a. true
 - b. false
7. What in experiments hedges for unknown exogenous variables:
 - a. at least two groups
 - b. random assignment of subjects to conditions
 - c. an outcome measure
 - d. none of the above
8. A Solomon four group design allows for a test of the pretest effect.
 - a. true
 - b. false
9. A complex experimental design implies which of the following:
 - a. at least two independent variables
 - b. at least four treatment conditions
 - c. at least three F-values
 - d. all of the above

10. In a 2x3 split-plot design, there are as many conditions as the product of the numbers.
 - a. true
 - b. false
11. Which of the following threats to validity does a "latin square" design imply:
 - a. history
 - b. maturation
 - c. testing
 - d. mortality
12. A quasi-experimental design typically lacks random assignment to conditions.
 - a. true
 - b. false
13. Which of the following is the concrete, empirical, concept.
 - a. a universe
 - b. an infinite population
 - c. a sampling frame
 - d. none of the above
14. All random samples are probability samples, but not all probability samples are random samples.
 - a. true
 - b. false
15. Which of the following sampling procedures is more likely to be used in explanatory research.
 - a. convenience
 - b. quota
 - c. area
 - d. referral

Definitions (two points each)

1. Guttman Scale:
2. Nominal Definition:
3. MANOVA:
4. Infinite Population:
5. Snowball Sample:

Short Answer (five points each)

1. Describe the five step process by which an event becomes a variable.
2. Differentiate the concepts of reliability and validity, giving an example of each.
3. What are the three F-values generated in a two factor CRD and what are they based on?

4. When populations are large, what techniques do we employ beyond simple random sampling?

5. State the three components of, and their relationship to, sample size.