

Possible Discussion Questions for Test 2
(several of these questions will appear on the test
and question #8 will definitely be on the test)

1. Differentiate index from scale by definition and example. What are the advantages and disadvantages of using a single question to measure a concept?
2. When developing an index, what two decisions must be made? Describe each. What is the purpose of item analysis when constructing an index?
3. What is an attribute? When developing attributes for a variable, what must be considered?
4. Define reliability and compare these strategies for improving the reliability of measures: test-retest method, split-half method, using established measures, and reliability of research workers.
5. Describe the tension between reliability and validity. Be sure to define and give an example of each as part of your explanation.
6. What are the advantages and disadvantages of nonprobability sampling? Of probability sampling? Which would you prefer to use and why?
7. According to probability theory, what characteristics about the population and the sample affect how accurately the sample will estimate the population.
8. According to probability theory, we can determine a confidence interval around a sample statistic that will give us a range of error when comparing the sample statistic to the population statistic. We can also determine how much confidence we have in our range of error.

Explain this in more detail. What is a confidence interval and how does it relate to probability theory? How would it be calculated if you were using a dichotomous variable? Use an example to help explain your answer.

What do we mean by confidence level and how does it relate to probability theory? How can we be at least 95% confident that our confidence interval is correct. Again, use an example to help explain.

