

Sampling Theory Exercise

Due: Tuesday October 19 (or earlier) in class

Reading: Glicken, "Sampling" and Lecture notes

This exercise is worth 4% of your grade. It is a small "thought" exercise to verify that you understand the basic sampling concepts that are otherwise not tested in this course. You will show your understanding of these concepts by giving simple examples of them. Do **NOT** write long involved explanations; one or two sentences examples for each term are plenty. In your examples of specific sample types, be sure to indicate whether choices at each step are made randomly or nonrandomly.

SUBMIT TWO (2) COPIES OF THIS EXERCISE. I will return the original with comments and save the photocopy. This exercise may be re-done to raise your grade, but you will have to invent new examples. I will also confirm that you have not merely copied the examples of someone else who previously received a better grade.

In developing your examples, it is ok to use one possible theoretical population (eg. Elementary school students in Madison) for the whole exercise and structure your answers in terms of different possible ways to sample from that population.

1. Give an example that clearly shows the meaning of and relationship among the population of theoretical or substantive interest, the sampling frame, the sample, and the actual population to which generalizations may be made. (12 points)
2. Give examples that clearly illustrate the difference between haphazard or accidental sampling and random or probability sampling. (6 points)
3. Give examples of simple random sampling and systematic random sampling from the same population or sampling frame, emphasizing their similarities and differences. (6 points)
4. Give related examples that clearly illustrate the similarities and differences between stratified random sampling and random cluster sampling, including a discussion of the circumstances for which each is appropriate. (6 points)
5. Give an example of multistage stratified cluster sampling which clearly illustrates the key features of this approach and when it is appropriate. (6 points)
6. Give an example of simple quota sampling that clearly illustrates how it differs from a related example of stratified random sampling. (6 points)
7. Give an example of a non-random purposive sample for a case in which a purposive sample would be appropriate and contrast it with an example of a mere convenience sample. (6 points)