

Learning Guide: Basics of Sampling

I know that there are a lot of questions here. Sampling is complicated, important, and hard to understand. I apologize for the extensive list of questions, but I start with the assumption that this is your introduction to all concepts in sampling. Some of these questions will be easy for those of you who have previous knowledge and experience, but I would rather include them than cause people to miss important concepts. I have not included the normal list of questions you should be able to answer after class in this guide because we will spend time clarifying confusing ideas or concepts that you raise and discussing. You should be able to answer these questions after completing the required readings and my summary of Sample Types.

1. What is the difference between a sample and a census?
2. What is the difference between a population and a sample?
3. Students sometimes use the phrase "sample population." What's wrong with using this phrase?
4. Define the terms theoretical population, accessible population, and sampling frame.
5. From a practical perspective, researchers almost always sample from the accessible population rather than the theoretical population. What must the researcher do to establish that the accessible population is a valid choice?
6. What is the fundamental difference between a random sample and a non-random sample?
7. Should you always use a completely random sample? Why or why not?
8. What must you know in order to decide whether to stratify a sample or not? Put another way, what is wrong with this logic? "Size of church congregation *might* make a difference in religiosity of the parishioners so I'll stratify by size of congregation. I have not seen any indication that size of congregation affects religiosity, but who knows, it might matter."
9. Give an example of when you would need to use a multi-stage cluster sample in some study that you might want to conduct.
10. What can a low response rate mean?
11. What are the strengths of the convenience or haphazard sample?
12. What is systematic bias?
13. How does systematic bias affect internal validity, external validity and explanatory power?
14. What are some of the ways that systematic bias enters into a sample?
15. Is systematic bias more apt to occur in a random or a non-random sample?
16. What kinds of biases can be introduced into a sample when you have to replace many potential respondents due to low response?