

Practice Problems on Sample Surveys

1. What is the key feature of sample surveys that allow us to infer features of a large population (of, say, 200 million adult Americans) from only a small sample (of say 1,000 people)?
2. What is a probability sample? What is a simple random sample (SRS)? Is a SRS a probability sample?
3. What is quota sampling and why might it be a problem? Is it bad to have a sample that matches the population in specific ways? If not, why is quota sampling problematic?
4. What is a sampling frame? How is a sampling frame different from the population the researcher ultimately wants to learn about? Suppose we wanted to do a survey of adult US citizens and have \$10,000 to implement it. How would you create your sampling frame?
5. What is random digit dialing? What might be problematic about it?
6. SRS works great in theory, but it is hard in practice. What is a multi-state cluster sample? How does it resolve the difficulties of implementing a SRS?
7. What is non-response? How might it bias the results of a survey?
8. What about misreports? Come up with an example of a question that survey respondents are not likely to answer honestly.