



Doing a Survey

There are many things you need to consider when doing a survey. Let's have a look at some of these issues.

Errors in Sampling

Sometimes errors are introduced in sampling. These errors fall into two categories - nonsampling errors and sampling errors.

Nonsampling Errors

Nonsampling errors occur in the survey process. Some of these problems and their solutions are discussed below.

- (i) **Problem:** The frame, the complete list of people in a population, is inaccurate
Solution: It is often difficult to get a complete list of the population. However, you should ensure that your frame is as accurate as possible.
- (ii) **Problem:** Individuals do not respond to the survey
Solutions: If you send out a survey and some individuals do not respond, you can use call backs. Call backs mean telephoning someone if they do not respond to the initial survey. Or calling again if someone isn't in when you first conduct the survey. You could also offer rewards or incentives to get people to take the survey.
- (iii) **Problem:** Individuals provide inaccurate responses
Solution: You could use a well-trained interviewer to ask questions.
- (iv) **Problems:** Questions are worded poorly
Solution: Reread your questions to make sure they make sense and ask for the information you require. Ask someone else to read them and see how they would respond to the questions.
- (v) **Problem:** There is bias in the selection of participants (i.e. when you choose participants because

you think they will give you the answers you want to hear.

Solution: Think carefully about your population and how you will obtain a sample from this population.

(vi) **Problem:** People lie on the survey. Sometimes people don't want to tell the truth on a survey – they might lie about their age or their salary.

Solution: Try to weed out these inaccurate answers if possible.

(vii) **Problem:** Collected data is entered incorrectly into the computer.

Solution: Make sure you check the data at each stage in the process.

Sampling Errors

Sampling errors occur when there is a difference between the results a researcher gets from a sample and the results they would get if they surveyed the entire population. Because your sample does not include the whole population, you will not get exactly the same result as if you surveyed the whole population.

Exercise



In each of the following paragraphs there searcher has made an error. Can you identify the errors in each paragraph?

1. A college vice-president wants to conduct a study regarding the achievement of undergraduate students. He selects the first 50 students who enter the building on a given day and administers his survey.
2. The town of Oak Lawn wishes to conduct a study regarding the income level of households within the town. The town manager selects 10 homes in the southwest corner of the town and sends an interviewer to the homes to determine household income.

3. An antigun advocate wants to estimate the percentage of people who favour stricter gun laws. He conducts a nationwide survey of 1,203 randomly selected adults 18 years old and older. The interviewer asks the respondents, "Do you favour harsher penalties for individuals who sell guns illegally?"
4. Suppose you are conducting a survey regarding students' study habits. From a list of full-time registered students, you obtain a simple random sample of 90 students. One survey question is "How many hours do you study?"

Designing a Survey

When designing a survey you should bear the following points in mind.

- 1. Decide what information you want to gather from the survey.** Keep it short.
- 2. Ensure the questions are easy enough for almost anyone to understand.**
- 3. Use multiple-choice questions/boxes whenever possible.**
- 4. Avoid personal questions.**
- 5. Use open and closed questions**

An **open question** allows the respondent to freely choose their response,
I.e. what is your favourite ice-cream?

A **closed question** is a yes or no question or a question that provides a list of predetermined responses, i.e. what is your favourite ice-cream flavour: chocolate, cookie dough, vanilla, strawberry.

Closed questions are easier to analyse than open questions. It is a good idea to write your question in a way that limits the number of responses you get. Or, you can do a pilot survey

first that asks an open question. The most popular answers to this open questions are then used in the final survey.

6. Avoid biased questions

7. Order your questions so that one question does not affect the responses to another question.

Sometimes, researchers ask the same question in different ways to see if they get the same response.

Exercise

1. Offering rewards or incentives is one way of attempting to increase response rates. Discuss a possible disadvantage of such a practice.
2. Write a question that is worded very strongly and the same question written in a more tempered way.
3. An article in the *Los Angeles Times* (Sept.21, 1996) reported that results of Bosnian elections the previous week were suspect because an independent watchdog agency, International Crisis Group, estimated that voter turnout was 106.7%. Why do you think the agency was concerned?
4. Comment on this question: A magazine is conducting a study on the effects of infidelity in a marriage. The editors randomly select 400 women whose husbands were unfaithful and ask, "Do you believe a marriage can survive when the husband destroys the trust that must exist between husband and wife?"
5. To determine public opinion of the police department, the police chief obtains a cluster sample of 15 census tracts within his jurisdiction and samples all households in the randomly selected tracts. Uniformed police officers go door to door to conduct the survey.