Exercise IV: Selecting a sample

TEMPLATE OF EXERCISE IV

The accuracy of what you find out through your research endeavour, among many other things, depends upon the way you select your sample, the people who are going to provide you with the information you need.

The underlying premise in sampling is that a small number of respondents, if selected correctly, can provide, to a sufficiently high degree of confidence, a reasonably accurate estimate of what you are trying to ascertain in the study population.

For details on sampling designs, refer to Chapter 12.

For quantitative studies

The basic objective of a sampling design in quantitative research is to minimise, within a given cost, any difference between the values obtained from your sample and those actually prevalent in the study population. Sampling theory in quantitative research is thus guided by two principles:

1 the avoidance of bias in the selection of a sample;
2 the attainment of maximum precision for a given outlay of resources.

In quantitative research you can select your sample with any of the probability or non-probability sampling designs. Both have advantages and disadvantages and both are appropriate for certain situations. But whatever sampling design you choose, make sure you take steps to avoid introducing your bias in the selection of sampling units. When selecting a sample in quantitative studies you need to decide on two things: the sample size you plan to select; and how to select the required sampling units. You also need to think about your reasons for deciding the size and choosing the sampling strategy.

This exercise is designed for you to think through the issues which are important in helping you to develop your sampling strategy.

Step I Answer the following about your sampling design.

1 What is the total size of your study population?_____ ☐
_____ Unknown ☐

2 Do you want to select a sample?
Yes ☐ No ☐

(a) If yes, what will your sample size be? _____
(b) What are your reasons for choosing this sample size? _____
_____
_____
_____
_____

3 How will you select your sample? (What sampling design are you proposing?)

4 Why did you select this sampling design? (What are its strengths?)
5 What are the limitations of this design?

Step II On the basis of the answers to the above questions, write about your sampling design, detailing the process and your justification for using it (consult Chapter 12 for details).

For qualitative studies

In qualitative research your aim is not to select a random or unbiased sample but one which can provide you, as far as possible, with the detailed, accurate and complete information that you are looking for. Hence, you are predominantly guided by your convenience and judgement in the selection of your respondents.

In qualitative research you can only use non-probability designs. You can select your sample in two ways: (i) in the light of financial constraints decide from how many respondents you can collect data; or (ii) you decide to be guided by the saturation point in data collection. If you decide to be guided by the attainment of the saturation point, you do not specify your sample but the bases that will determine the saturation point.

You also need to decide who are going to be your respondents and how they are going to be identified. You need to think about the determinants on which you are going to base your judgement as to the suitability of your respondents for being your respondents.

Answers to the following questions will help you to think through the issues you are likely to face while developing a sampling strategy for your study.

A: What factors would you keep in mind when selecting a respondent?

B: How would you identify your potential respondents?

C: How would you determine whether you have reached the saturation point in your data collection?