

MODULE III

SAMPLING

Need of sampling

Sometimes it is not feasible to study a whole group or an extremely large group. For example social work researcher may be interested in learning about the mentally challenged children, mentally ill, prison inmates, street children or some other large group of people.

It would be difficult or rather impossible to study all members of the groups. Here comes the process called sampling, which allows to study a manageable number of people from the large group to device inferences that are likely to be applicable to all the people of the large group.

Another reason why we would study a sample is that the results of obtained from the sample are more precise and correct than the results obtained from the study of the whole group.

Cost involved in studying all units of a large group is yet another factor which suggest to study a small group of people.

Associated with cost there are certain other factors such as time available for the study

Above all, the point to be kept in mind is if we can get almost same result by studying a carefully selected small group of people, why should we study the large group at all.

Some Technical terms

1. Population or Universe

Population or universe is the aggregate of all units possessing certain specified characteristics on which the sample seeks to draw inferences.

2. Frame :- The frame describes the population in terms of sampling units .It may be a geographical area. In essence a frame lists or maps elements of the universe.

3. Census :- Census denotes a total enumeration of individuals elements for units in defined population.

4. Sample : A Sample is composed of some fractions or part of the total number of elements or units in a defined population.

5. Design: The Designing means the method by which sample to chosen.

6. Random: A mathematical term 'Random' means that every element of the total population has a equally change of probability on being chosen for the sampling.

7. Unit: any population or universe should contain some specifications in terms of content units, extent and time for Eg: "A farmers household in a district in Punjab in 1975" There is a unit determination in a household and time destination of the population .

8. Parameter : Parameter is the value of a variable calculation from the population which is being studied.
9. Precision : Precision of a sample is designated by the computation of standard error.
10. Stratification: It makes which the segmentation of a sample. It is a number of data.
Characteristics of Good sample
 - a) Representativeness: A sample must be representative of the population. In measurement terms as well as in quality.
 - b) Accuracy: Accuracy is defined as the degree to which has to absent which sample.
 - c) Precision: The sample must yield precise estimate. Standard error should be minimized.
 - d) Size: A good sample must be adequate in size. It should not too small or too

big. Advantages of sampling

1. Sampling reduces time and cost of research studies.
2. Sampling saves labour
3. The quality of study is often better with sampling.
4. Sampling provides much quicker

results. Limitations

1. In the absence of a thorough knowledge, sampling methods the result option may be incorrect or misleading.
2. A complicated sampling may require more labour than a complete coverage.
3. A pure representation is impossible in most cases

Sampling Methods

Sampling methods may be classified into two types.

- a) Probability or Random sampling
- b) Non Probability or Non- Random sampling

Probability sampling is the following types:

- a) Simple Random sampling
- b) Stratified Random
- c) Systematic Random