

RESEARCH METHODOLOGY

SAMPLING

Created by
Dr. s. John Agnes Genevee
Assistant Professor

Department of Commerce
Bon Secours College for Women
Thanjavur

- * INTRODUCTION
- * SAMPLING/ SAMPLE
- * SAMPLE SIZE, FRAME AND
TECHNIQUE
- * SAMPLING DESIGN
- * TYPES OF SAMPLING
- * CONCLUSIONS

INTRODUCTION

“There is no discovery without a search, and there is no re-discovery without a research”.
- said by Benjamin.

Research means search for knowledge.

Methodology means that what the procedures followed by the researcher?

Research methodology is an art of scientific investigation. It is movement from unknown to known through the systematic manner.

SAMPLING (SAMPLE)

A sample is the sub-unit of the population involved in our research work.

Sampling means the process of selecting a part of the population or respondent. The selected part of the population is known as a sample.

SAMPLE SIZE:

The number of people in the selected sample is known as sample size.

SAMPLE FRAME:

It means the list of individual or people included in the same. It reflects to who will be included in the sample.

For making a sampling frame, the researcher has to make a list of names and details of all the items of the sample.

SAMPLING TECHNIQUE:

It refers to the technique or procedure used to select the members of the sample. There are various types of sampling techniques.

Sampling design

we want to do a survey of employee of the municipality of Thanjavur on how they use computer at work. If the total population is 2500 and if you want to work with a 95% confidence level, what will be the sample size?

$$n = \frac{N}{1 + Ne^2}$$

N - TOTAL POPULATION
e-ERROR

$$n = \frac{2500}{1 + (2500 * 0.05 * 0.05)}$$

$$n = \frac{2500}{1 + 6.25} = 344.8$$

Actual sample size is 345.

Types of sampling

Probability sampling

Non-probability sampling

Probability sampling

Simple Random Sampling

Stratified Random

Sampling

Systematic Sampling

Cluster Sampling

Multi-stage Sampling

Non-probability sampling

Purposive Sampling

Convenience Sampling

Snow-ball Sampling

Quota Sampling

Probability sampling

Simple Random Sampling:

Every member has an equal chance.

Stratified Random

Sampling:

Population divided into subgroups (strata) and members are randomly selected from each group.

Systematic Sampling:

Uses a specific system to select members such as every 10th person on an alphabetized list.

Cluster Random Sampling:

It divides the population into clusters, clusters are randomly selected and all members of the cluster selected are sampled.

Multi-stage Random

Sampling:

A combination of one or more of the above methods.

Non-probability Sampling

purposive Sampling:

Members of a particular group are purposefully sought after.

Convenience Sampling:

Members or units are selected based on availability.

Snow-ball Sampling:

Members are sampled and then asked to help identify other members to sample and this process continues until enough samples are collected.

Quota sampling:

Members are sampled until exact proportions of certain types of data obtained or until sufficient data in different categories is collected.

CONCLUSIONS

A number of factors such as research methodology, sampling, sample size, frame and technique, sampling design and types of sampling would influence the selection of particular method of sampling. Each and every method in sampling has its own specific nature.

The main considerations in choosing the method of sample are: a. It should be simple. b. It should avoid bias and error.

THANK YOU