

SAMPLING



Probability
Sampling

Non-Probability
Sampling

Simple Random Sampling

01

CONCEPT

Systematic Sampling

02

ADVANTAGES

Stratified Sampling

03

PURPOSE

Cluster Sampling

04

ADVANTAGES

Sampling and Sampling Methods

In this presentation, we will explore the purpose and importance of sampling in research. We'll also dive into various types of sampling methods, their advantages, disadvantages, and considerations for choosing the right method.

 by Aanchal Aggarwal

Introduction

Sampling is a vital process in research that allows us to make inferences about a population based on a subset of data. It saves time, resources, and provides practical insights.

Types of Sampling Methods

Simple Random Sampling

A basic sampling method where every individual in the population has an equal chance of being selected for the sample.

Stratified Random Sampling

Divides the population into distinct groups or strata, then randomly selects individuals from each stratum, ensuring representation from all groups.

Systematic Sampling

Selects every n th individual from the population after a random starting point, offering a balance between simplicity and randomness.

Cluster Sampling

Divides the population into clusters, randomly selects a few clusters, and includes all individuals within the selected clusters in the sample.

Advantages and Disadvantages

1 Simple Random Sampling

- + Easy to use and understand
- Potential for underrepresentation or overrepresentation

3 Systematic Sampling

- + Provides a representative sample
- Vulnerable to periodic patterns and selection bias

2 Stratified Random Sampling

- + Ensures representation from each stratum
- Requires prior knowledge of population characteristics

4 Cluster Sampling

- + Efficient for large and geographically dispersed populations
- Potential for within-cluster homogeneity

Considerations for Choosing a Sampling Method

- Population size and characteristics
- Time, budget, and resources available
- Research objectives and questions
- Data analysis techniques
- Feasibility and practicality

Conclusion

1 Key Takeaways

- Understand the purpose and importance of sampling
- Differentiate between sampling methods
- Evaluate advantages and disadvantages
- Consider factors when choosing a sampling method