NEW ERA AGRICULTURE MAGAZINE

SAMPLING: A KEY TO SOCIAL SCIENCE RESEARCH

Karukumalli Sindhura

Introduction:

In utmost social exploration we're interested in further than just the people who directly share in our study. We'd like to be suitable to talk in general terms and not be confined only to the people who are in our study. There are times when we are not veritably concerned about generalizing, perhaps we ’re just assessing a program in an original agency and we don’t watch whether the program would work with other people in other places and at other times. When psychologists do exploration, they're frequently interested in developing propositions that would hold for all humans. But in utmost applied social exploration, we're interested in generalizing to specific groups. The group you wish to generalize to is frequently called the population in your study.

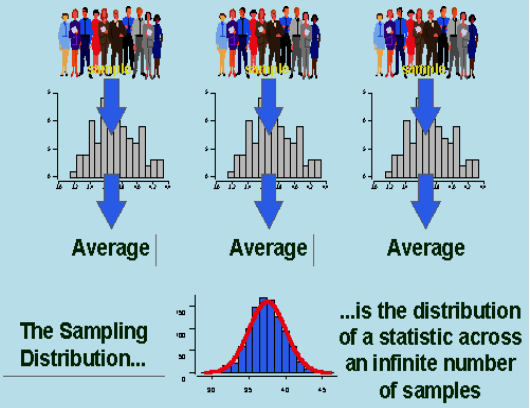
Statistical Terms in Sampling

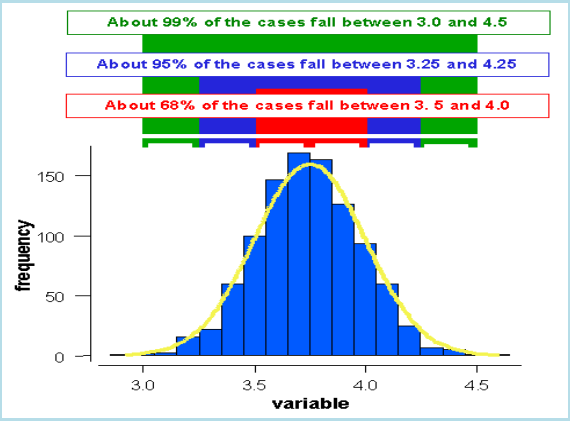
When we sample, the units that we test – generally farmers – force us with one or more responses. In this sense, a **response** is a specific dimension value that a sampling unit inventories. In the figure, the person is responding to a check instrument and gives a response of 4. When we look across the responses that we get for our entire sample, we use a **statistic**. There are a wide variety of statistics we can use – mean, median, mode, and so on. In this illustration, we see that the mean or average for the sample is 3.75 ha. But the reason we sample is so that we might get an estimate for the population we sampled from. If we could, we would much prefer to measure the entire population. If you measure the entire population and calculate a value like a mean or average, we don’t refer to this as a statistic, we call it a **parameter** of the population. The distribution of an infinite number of samples of the same size as the sample in your study is known as the **sampling distribution**.

If we take the average of the sampling distribution – the average of the averages of an infinite number of samples – we would be much closer to the true population average – the parameter of interest. So the average of the sampling distribution is essentially equivalent to the parameter. But what is the standard deviation of the sampling distribution.

Karukumalli Sindhura

**Ph.D Scholar, Division of Agricultural Extension Education, SKUAST-Jammu, Chatha, Jammu & Kashmir-180009*





The standard deviation of the sampling distribution tells us something about how different samples would be distributed. In statistics it is referred to as the **standard error** (so we can keep it separate in our minds from standard deviations. In sampling contexts, the standard error is called **sampling error**. Sampling error gives us some idea of the perfection of our statistical estimate.

Sampling

Sampling is the process of opting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen.

Types of Sampling

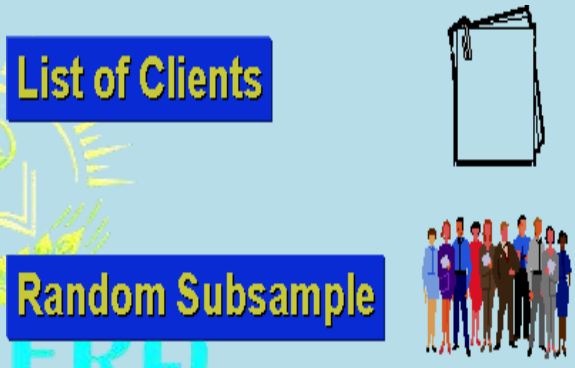
A. Probability Sampling

A probability sampling method is any method of sampling that utilizes some form of *random selection*.

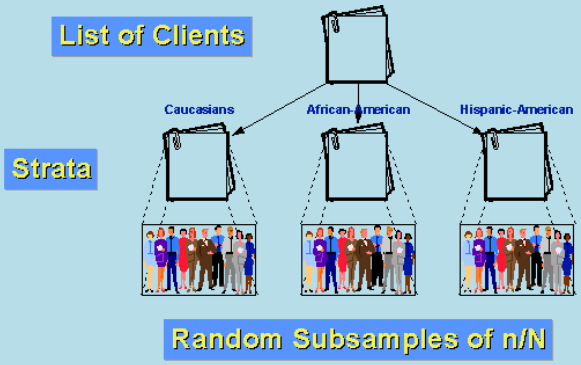
Systematic Random Sampling

Systematic sampling is often used in place of simple random sampling.

In this method of sampling every nth member of the population is systematically selected for the sample.



Simple Random Sampling



Stratified Random Sampling

Cluster (Area) Random Sampling

Cluster sampling is kindly analogous to stratified random sampling, in a way that the population is divided into mutually exclusive

clusters. The clusters are made in such a way that they are representative of population. Further, simple random sample is drawn from any aimlessly named cluster. This is one stage cluster sampling. We can also follow the same process of cluster conformation at colorful stages and draw simple random sample. This would be called as multi-stage cluster sampling.

B. Non-probability: The difference between non-probability and probability sampling is that nonprobability sampling does not involve arbitary selection and probability sampling does.

Purposive Sampling: In purposive sampling, we test with a *purpose* in mind. We generally would have one or more specific predefined groups we are seeking.

Types of Purposive Sampling

- Modal Instance Sampling
- Expert Sampling
- Heterogeneity Sampling

Modal Instance Sampling:

In statistics, the mode is the most constantly being value in a distribution. In samling, when we do a modal case sample, we're testing the most frequent case, or the "typical " case. In a lot of informal public opinion pates, for case, they solicit a "typical" namer. There are a number of problems with this sample approach. First, how do we know what the "typical" or "moda " case is?

Expert Sampling:

Expert sampling involves the assembling of a sample of persons with known or provable experience and moxie in some area. frequently, we convene such a sample under the aegis of a "panel of experts."

Heterogeneity Sampling:

We sample for diversity when we want to include all opinions or views, and we aren't concerned about representing these views proportionately. Another term for this is testing for diversity. In numerous brainstorming or nominal group processes(including conception mapping), we'd use some form of diversity slice because our primary interest is in getting broad diapason of ideas, not relating the " average " or " modal case " bones. In effect, what we'd like to be sample isn't people, but ideas.

Summary& Conclusion

The purpose of sampling is to make conceptions about population parameters from sample statistics. Astronomically, there are two styles of sampling –non-probability sampling and probability sampling. Non-probability sampling includes convenience sampling, share sampling and intentional sampling. While, probability sampling includes simple arbitrary sampling, stratified sampling, cluster sampling and methodical sampling. Testing error is the difference in the value of sample statistics and population

parameters. Testing error can be kept low by taking larger samples.

References

1. Kerlinger, F.N.2017. Foundations of Behavioral Research. Surjeet Publications, India.
2. Random Number Generator - https://stattrek.com › statistics › random-number-genera.
3. Ray, G.L. and Sagar Mondal.2014. Research Methods in Social Sciences and Extension Education. Kalyani Publications, New Delhi. India.