Non-Probability Sampling Methods

Non-probability sampling is a branch of sample selection that uses non-random ways to select a group of people to participate in research.

Non-probability sampling doesn't focus on accurately representing all members of a large population within a smaller sample group of participants. As a result, not all members of the population have an equal chance of participating in the study.

In fact, some research would deliver better results if non-probability sampling was used. For example, if you're trying to access hard-to-reach social groups that aren't usually visible, then a representative sample wouldn't yield suitable candidates.

Instead, you may opt to select a sample based on your own reasons, including subjective judgment, sheer convenience, or volunteers.

When do you use non-probability sampling?

Non-probability sampling is typically used when access to a full population is limited or not needed, as well as in the following instances:

- You may want to gain the views of only a niche or targeted set of people, based on their location or characteristics. To ensure that there is plenty of data about the views of these specific people, it would make sense to have a sample full of people meeting the criteria.
- If there is a target market that you want to enter, it may be worthwhile doing a small pilot or exploratory research to see if new products and services are feasible to launch.
- If money and time are limited, non-probability sampling allows you to find sample candidates without investing a lot of resources.
- Where members are not represented traditionally in large populations or fly under the radar, like far-left and right-wing groups, it's necessary to approach these subjects differently.

Here are some commonly used non-probability sampling methods:

➢ Convenience sampling (also called haphazard, grab, opportunity, or accidental sampling)

Convenience sampling is a common type of non-probability sampling where you choose participants for a sample, based on their convenience and availability.

You can see this type being used in public places, like malls or school campuses, where it's easy to meet and select people as they 'go by' based on the characteristics and criteria that you think are important.

It is a cheap and quick way to collect people into a sample and run a survey to gather data. Because of this, it is usually used for quick user opinion polls or pilot testing.

Convenience sampling also has two subtypes:

Consecutive sampling (also known as total enumerative sampling)

Consecutive sampling is the process of doing research with the sample members that meet the inclusion criteria and are conveniently available. You conduct research one after the other until you reach a conclusive result. Samples are chosen based on availability and each result is analyzed before you move onto the next sample or subject.

Self-selection (also known as volunteer sampling)

The self-selection sampling technique uses volunteers to fill in the sample size until it reaches a specified amount.

This requires less work contacting people, as volunteers sign up and opt-in to be part of the research if they meet your desired criteria. The insights gained will likely be based on strongly held opinions that these volunteers want to share. An example is medical research candidates that opt into medical studies because they fit the criteria of the research study and want to be involved for health reasons.

➢ Quota sampling (also known as dimension sampling)

Quota sampling is a non-probability sampling technique similar to stratified sampling. In this method, the population is split into segments (strata) and you have to fill a quota based on people who match the characteristics of each stratum.

However, quota sampling techniques differ from probability-based sampling as there is no commitment from you to give an equal chance of participants being selected for the sample. Instead, you keep reaching out until the number in the stratum has been reached.

In general, quota sampling is conscious of the divisions in a population but still gives deep insights into each stratum.

➢ Snowball sampling (also known as referral, respondent-driven, or chain referral sampling)

Snowball sampling is a non-probability sampling type that mimics a pyramid system in its selection pattern. You choose early sample participants, who then go on to recruit further sample participants until the sample size has been reached. This ongoing pattern can be perfectly described by a snowball rolling downhill: increasing in size as it collects more snow (in this case, participants).

This type of sampling is useful for getting in touch with hard-to-access communities of people, like sex workers, homeless people, or teenagers. An example of snowball sampling is recruiting sample members through social media channels who then promote your work to those in their network.

➢ Purposive sampling (also known as judgmental, selective, or subjective sampling)

Purposive sampling is a type of non-probability sampling where you make a conscious decision on what the sample needs to include and choose participants accordingly. In this way, you use your understanding of the research's purpose and your knowledge of the population to judge what the sample needs to include to satisfy the research aims.

You must validate whether a prospective sample member fits the criteria you're after, though if this is confirmed, the participant can be added to the sample. There are obvious bias issues with this type of sample selection method, though you have all the freedom to create the sample to fit the needs of your research.

That said, your credibility is at stake; even the smallest of mistakes can lead to incorrect data. However, because this is a fast and easy way to source a sample, you can redo the sample quite easily if there is a mistake.