

SAMPLING METHOD

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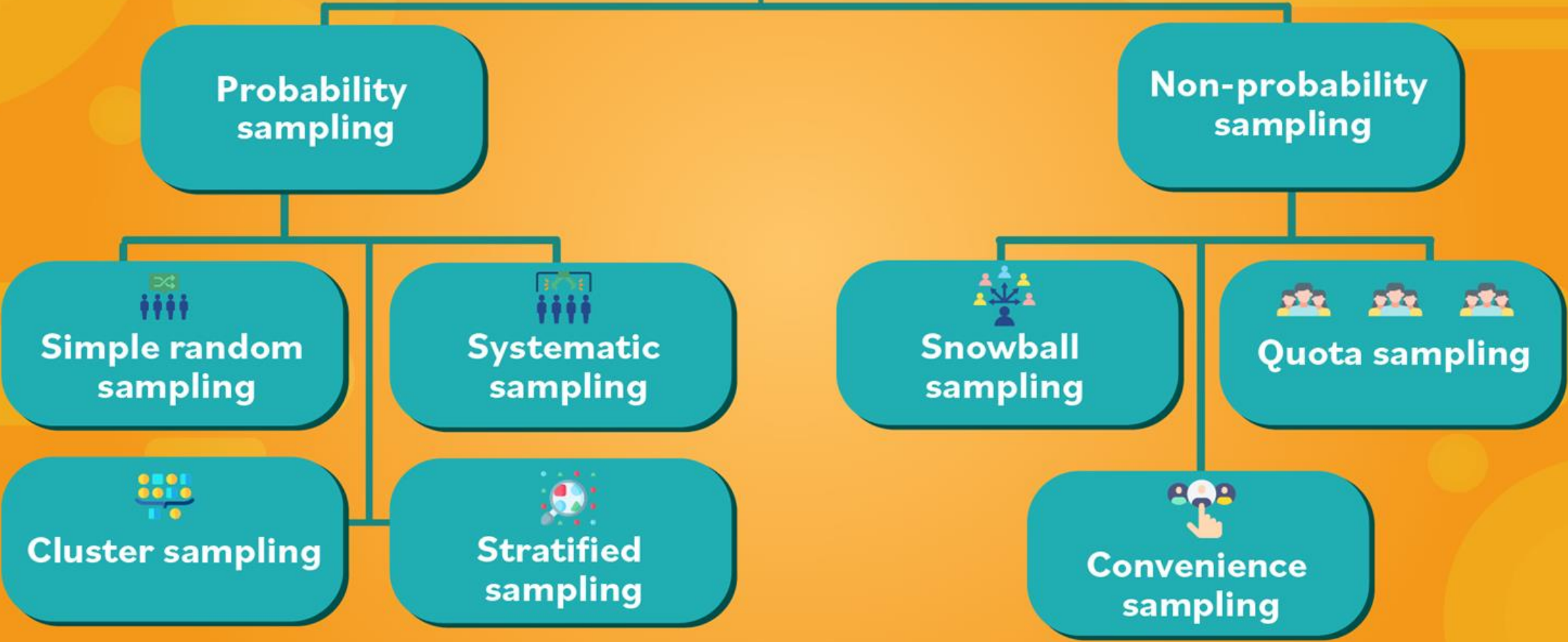
Sampling Method and it's types

To draw valid conclusions from your results, you have to carefully decide how you will select a sample that is representative of the group as a whole. This is called a **sampling method**.

There are **two** primary types of sampling methods that you can use in your research:

- **Probability sampling:** involves random selection, allowing you to make strong statistical inferences about the whole group.
- **Non-probability sampling** involves non-random selection based on convenience or other criteria, allowing you to easily collect data.

Sampling Methods

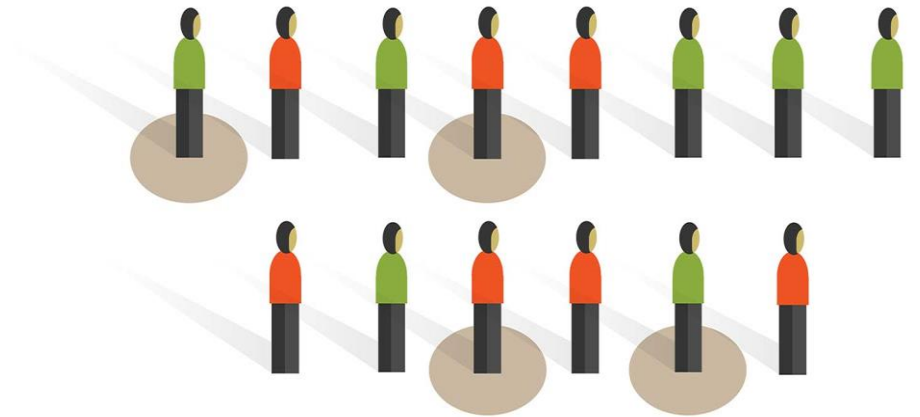


Probability sampling methods

1. Simple random sampling

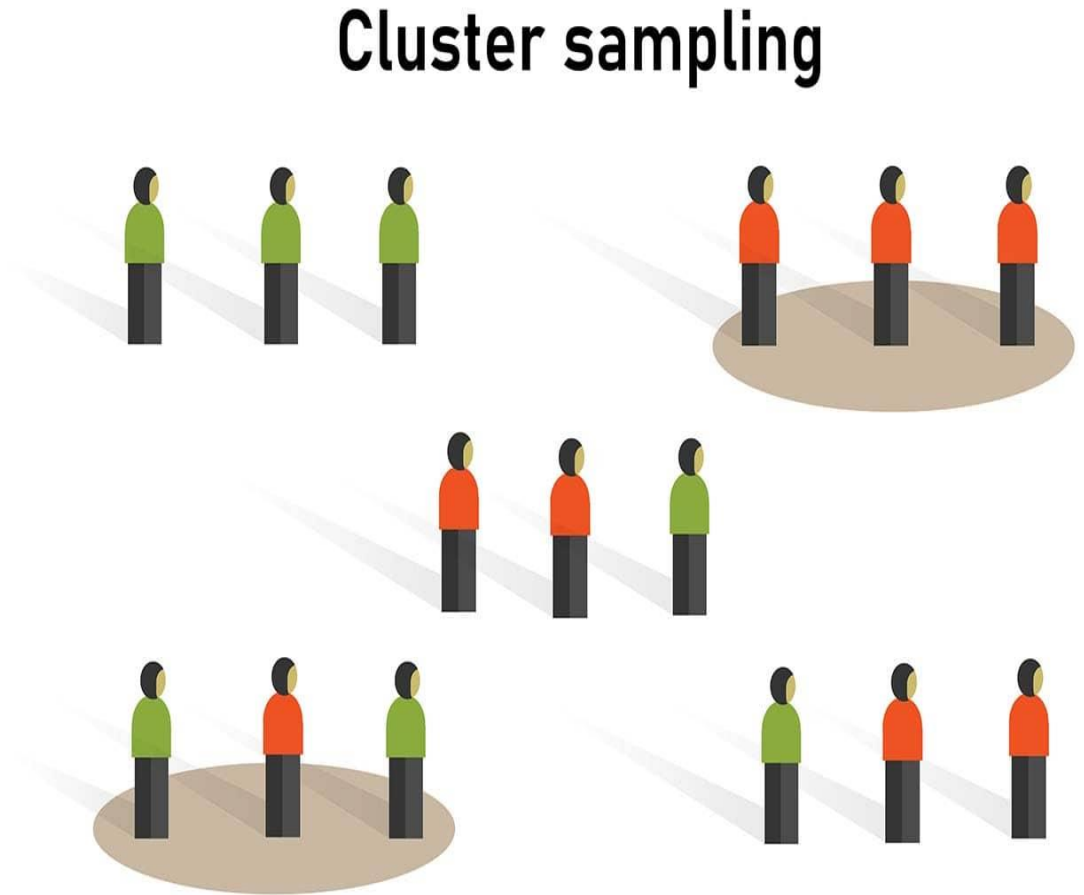
- Simple random sampling gathers a random selection from the entire population, where each unit has an equal chance of selection.
- This is the most common way to select a random sample.
- To compile a list of the units in your research population, consider using a random number generator.

Simple random sampling



2. Cluster sampling

Cluster sampling is the process of dividing the target population into groups, called clusters. A randomly selected subsection of these groups then forms your sample.



Cluster sampling is an efficient approach when you want to study large, geographically dispersed populations.

It usually involves existing groups that are similar to each other in some way (e.g., classes in a school).

There are two types of cluster sampling:

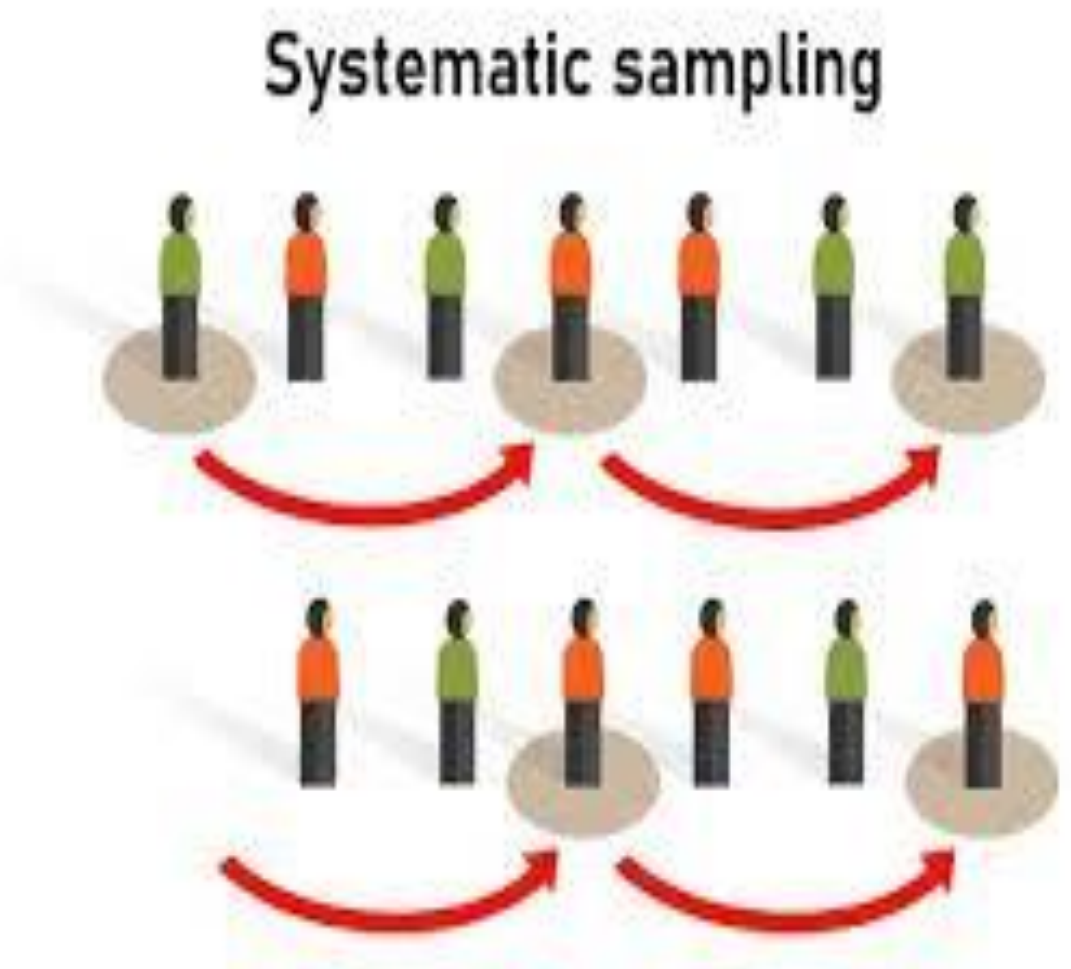
Single (or one-stage) cluster sampling, when you divide the entire population into clusters

Multistage cluster sampling, when you divide the cluster further into more clusters, in order to narrow down the sample size

3. Systematic sampling

Systematic sampling draws a random sample from the target population by selecting units at regular intervals starting from a random point.

This method is useful in situations where records of your target population already exist, such as records of an agency's clients, enrollment lists of university students, or a company's employment records. Any of these can be used as a sampling frame.

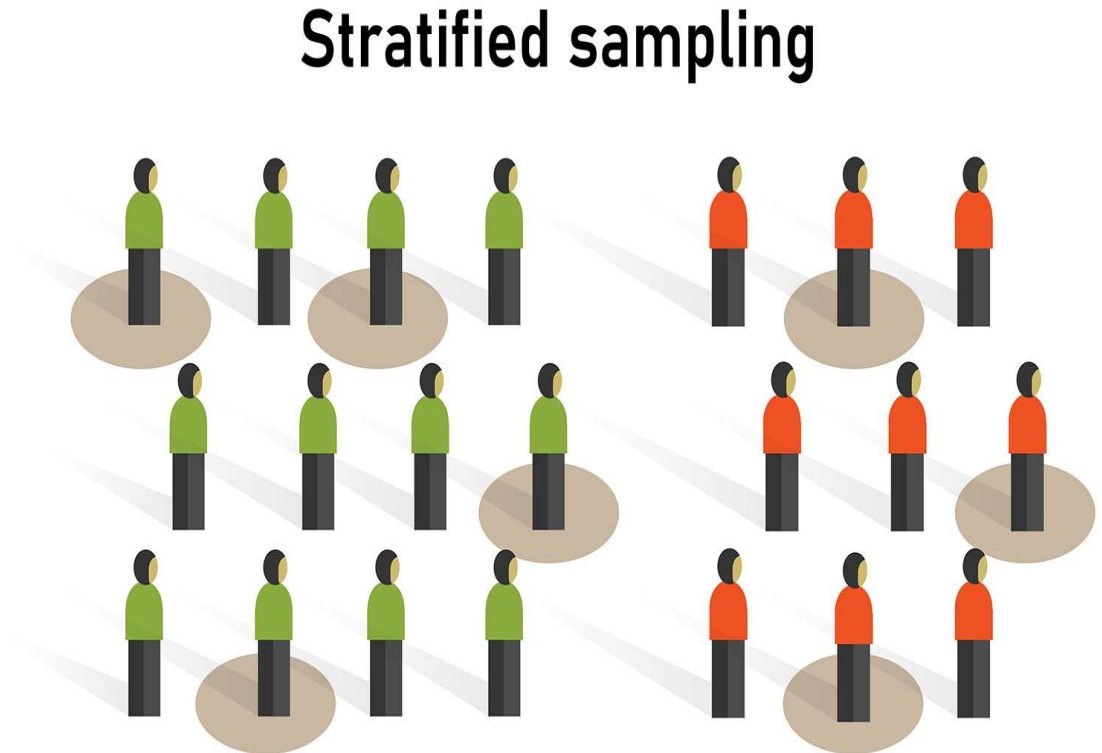


4. Stratified sampling

Stratified sampling collects a random selection of a sample from within certain strata, or subgroups within the population.

Each subgroup is separated from the others on the basis of a common characteristic, such as gender, race, or religion.

This way, you can ensure that all subgroups of a given population are adequately represented within your sample population.



- For example, if you are dividing a student population by college majors, Engineering, Linguistics, and Physical Education students are three different strata within that population.
- To split your population into different subgroups, first choose which characteristic you would like to divide them by. Then you can select your sample from each subgroup.
- You can do this in one of two ways:
 - ✓ By selecting an equal number of units from each subgroup
 - ✓ By selecting units from each subgroup equal to their proportion in the total population

Non-Probability sampling methods

1. Convenience sampling

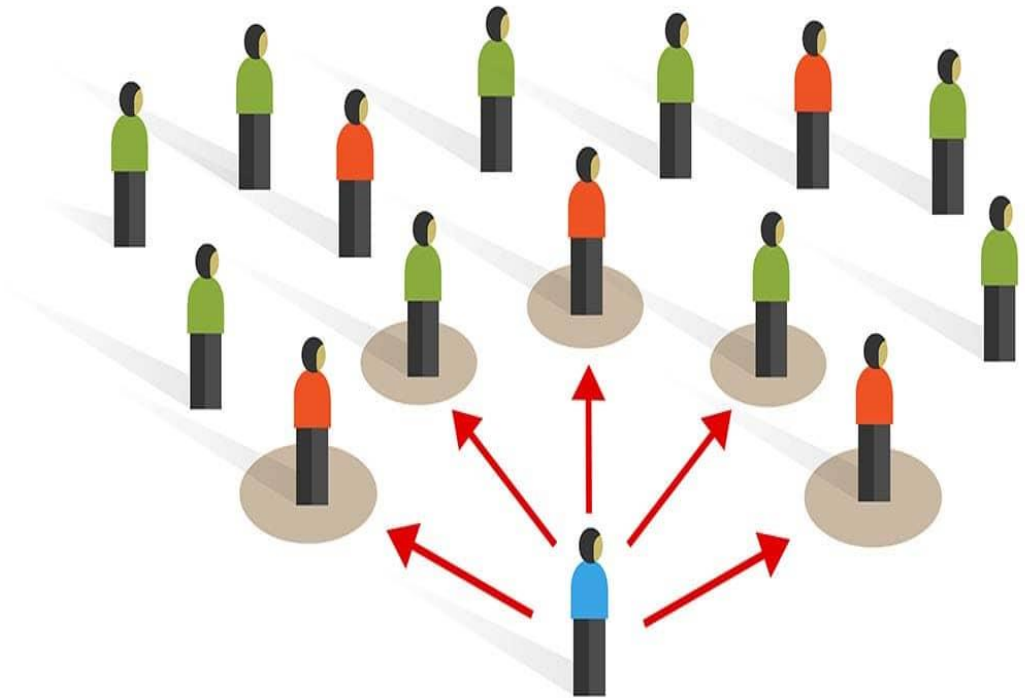
Convenience sampling is primarily determined by convenience to the researcher.

This can include factors like:

- Ease of access
- Geographical proximity
- Existing contact within the population of interest

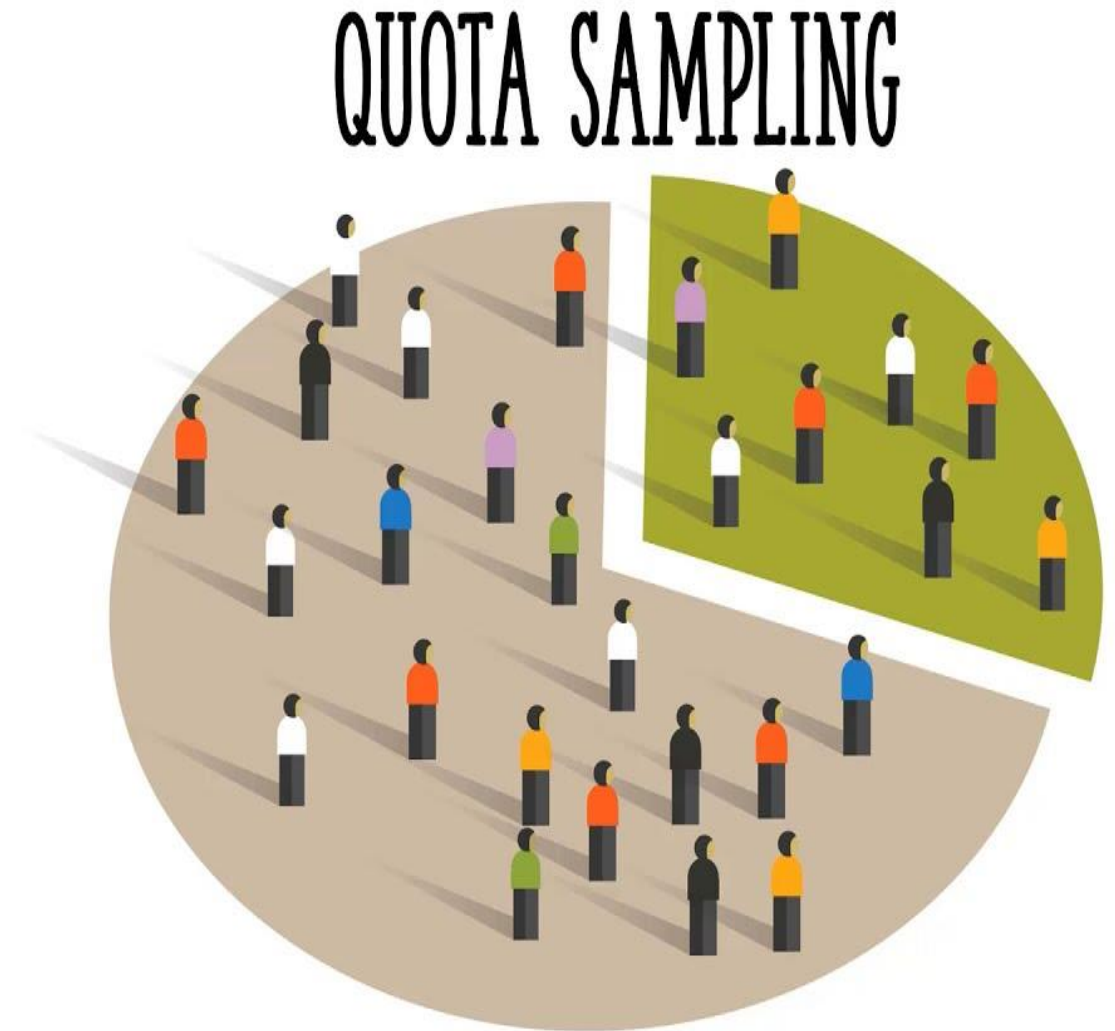
Convenience samples are sometimes called “**accidental samples**,” because participants can be selected for the sample simply because they happen to be nearby when the researcher is conducting the data collection.

Convenience sampling



2. Quota sampling

- In **quota sampling**, you select a predetermined number or proportion of units, called a quota.
- Your quota should comprise subgroups with specific characteristics (e.g., individuals, cases, or organizations) and should be selected in a non-random manner.

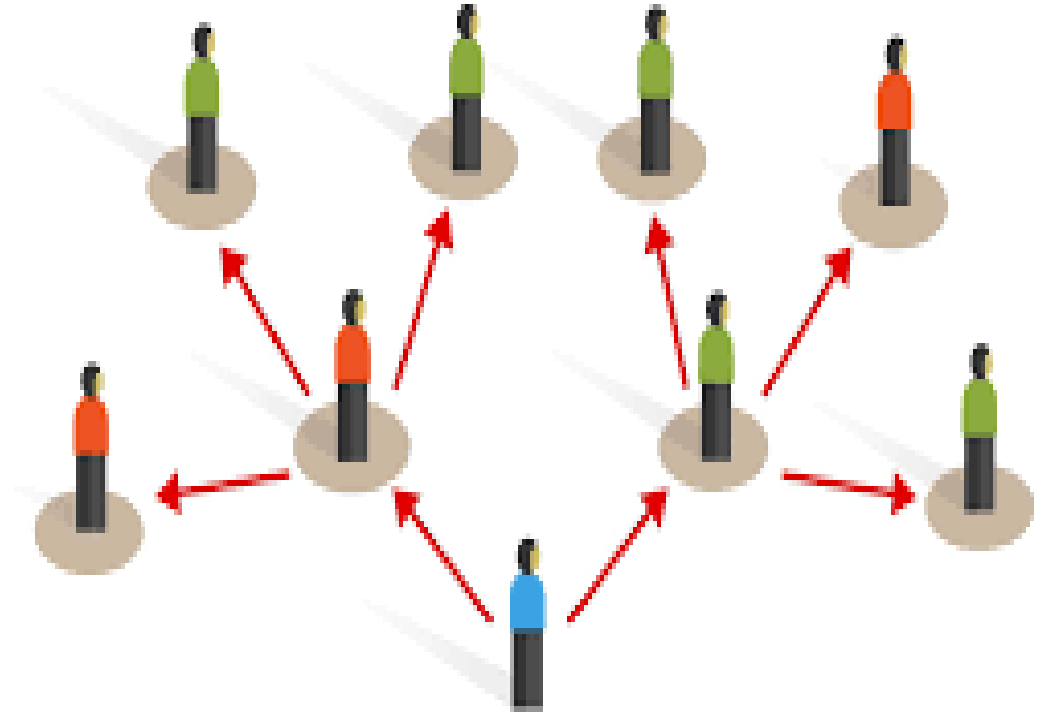


- Your subgroups, called **strata**, should be mutually exclusive.
- Your estimation can be based on previous studies or on other existing data, if there are any.
- This helps you determine how many units should be chosen from each subgroup.
- In the data collection phase, you continue to recruit units until you reach your quota.

3. Snowball sampling

Snowball sampling is used when the population you want to research is hard to reach, or there is no existing database or other sampling frame to help you find them.

Snowball sampling



- Research about socially marginalized groups such as drug addicts, homeless people, or sex workers often uses snowball sampling.
- To conduct a snowball sample, you start by finding one person who is willing to participate in your research. You then ask them to introduce you to others.
- Alternatively, your research may involve finding people who use a certain product or have experience in the area you are interested in. In these cases, you can also use networks of people to gain access to your population of interest

4. Purposive (judgmental) sampling

Purposive sampling is a blanket term for several sampling techniques that choose participants deliberately due to qualities they possess. It is also called judgmental sampling, because it relies on the judgment of the researcher to select the units (e.g., people, cases, or organizations studied).

Purposive sampling is common in qualitative and mixed methods research designs, especially when considering specific issues with unique cases.



Thank You

Any Questions?