

Sampling

Why sample and how to do it

A sample provides a manageable number of participants to represent your target population. Using a sample is especially helpful when time or resources are tight, or when your target population is large.

There are two methods for sampling: probability sampling and non-probability sampling. Each sampling method offers a few different ways of generating your sample.

Keep these guiding principles in mind when sampling:

- Make sure your sample consists of as many diverse profiles as possible.
- Do not leave out hard-to-reach populations.
- Ensure age, race, gender, ethnicity, and socio-economic status are representative and aligned with your research objectives.

Probability sampling methods

vs

Non-probability sampling methods



Probability sampling methods

Simple random sampling

The target population must...

Contain a finite number of members who all have similar characteristics.

For example, a company with 250 employees.

How to generate this sample:

Use a random lottery approach. Assign a number to each member of the population to protect their identity and eliminate bias. Then randomly select as many numbers as needed for your sample.

For example, choosing numbers out of a hat for 25 employees from a company of 250 employees. All employees have a chance to be chosen.

Systematic sampling

The target population must...

Contain a finite number of members who all have similar characteristics.

How to generate this sample:

Take a systematic approach. Assign a number to each member of the population to protect their identity and eliminate bias. Then select numbers on regular intervals (i.e., time, space, or order) as needed for your sample but ensure there are no patterns in the numbering list that might skew the sample.

For example, a local charity is seeking to form a systematic sample of 500 volunteers from a population of 5000. The charity can build their sample by selecting every 10th person on their volunteer list.

Stratified sampling

The target population must...

Be very diverse (also known as heterogeneous) to ensure every characteristic is proportionally represented.

For example, an organisation looking to improve their services for marginalised and/or underrepresented groups must ensure representation of various gender orientations, racial, and ethnic groups.

How to generate this sample:

Work with sub-groups (also known as strata). Start with the population and divide into sub-groups based on relevant criteria to your research objectives (i.e., gender, age, ethnicity, etc.). Then decide how many people should be sampled from each sub-group. Finally use simple random sampling or systematic sampling to select a sample from each sub-group. Allow the topic and nature of your consultation to guide what criteria to use when forming the sub-groups.

Multi-stage sampling

The target population must...

Be very large and typically without a finite or known number of members.

How to generate this sample:

Take a staged approach. Start with the population and cluster it into groups based on one categorisation relevant to your research objectives (i.e., region). Next select a sample of your groups using simple random sampling or systematic sampling. Then divide your sample's groups into sub-groups based on another relevant categorisation. Select a new sample of your sub-groups. Finally use your new sample of groups to

create a sample of research participants using simple random sampling or systematic sampling.

Non-probability sampling methods

Voluntary response sampling

The target population must:

Know about your consultation so they can volunteer themselves to be research participants.

How to generate this sample:

Build awareness of your consultation so people can learn about it and decide if it is of interest to them. Then provide opportunities for people to volunteer themselves. The research team may decide to publicise a call for participants in places where your target population is likely to see it.



Be mindful of risks like bias and lack of representation when building your sample this way.

Snowball sampling

The target population must:

Consist of current participants in your research who are willing to recruit other participants.

How to generate this sample:

Build relationships with your current research participants. Treat them well and help them feel confident in recommending this research opportunity to people they know (especially people who are difficult to access). You can make this an easy process by providing appropriate information for them to share.

Probability sampling methods

Non-probability sampling methods

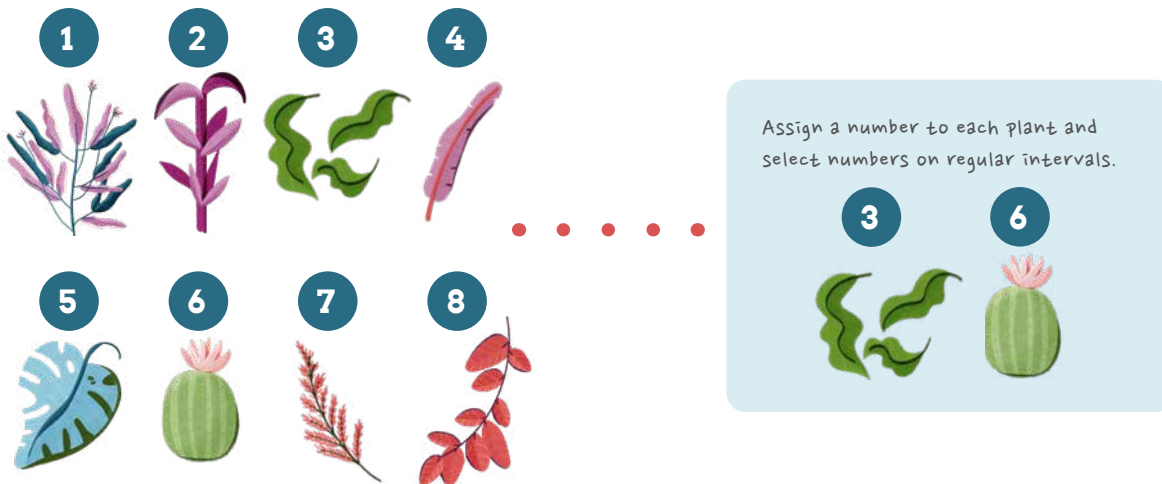
Notes

Probability sampling methods

Simple random sampling

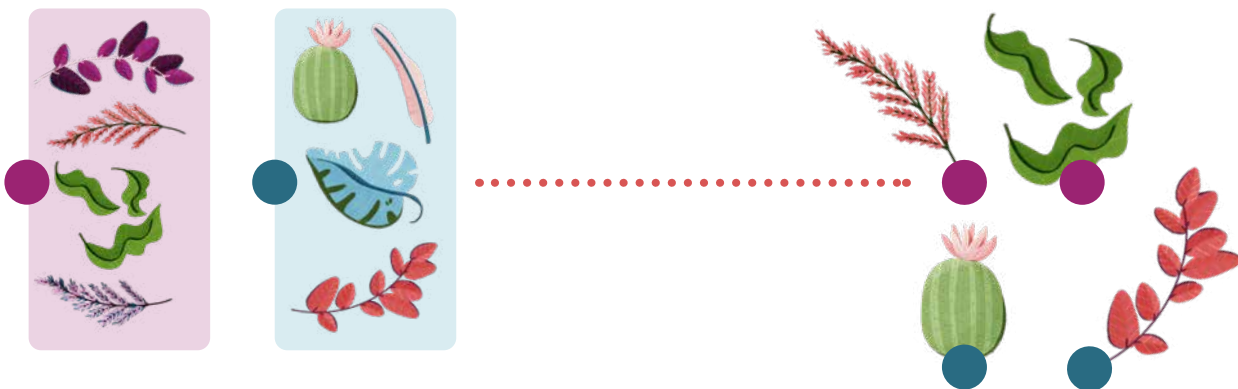


Systematic sampling



Stratified sampling

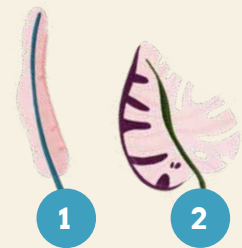
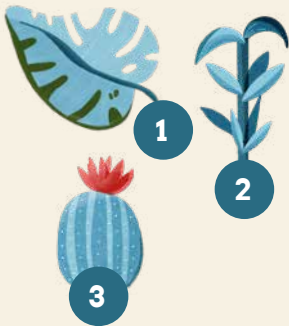
Work with sub-groups (strate) and divide into subgroups. Decide how many should be sampled from each sub-group and select using random or systematic sampling.



Multi-stage sampling

cluster into groups based on one categorisation relevant to your research.
Select a sample of your groups using simple random or systematic sampling.

In this example, we first divide our plants by color and select a sample using systematic sampling, choosing every first and third plant.

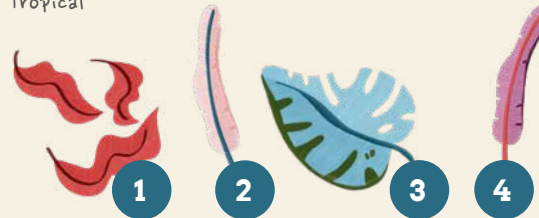


Next, we will divide our sample's groups into sub-groups based on another relevant categorisation and select a new sample from our sub-groups. For this round, we divide our plants by climate: dry or tropical.

Dry



Tropical



Finally, we select a new sample for our research by using simple random sampling.



Non-probability sampling methods

Voluntary response sampling



Tania Fernandes
@taniafernandez

Support a global movement and ignite change! Complete this survey bit.ly/EducationForAll on online safety and security for women. It is our collective responsibility to protect #YoungWomen.



1:14 PM - 26 Feb 2022

1 Retweet 11 Likes

1 1 11

Add another Tweet

Snowball sampling



Tania Fernandes
@taniafernandez

Join us on 3/1 at 1 PM and bring a friend. We will be hosting a workshop on Empowered Young Women and would love to include your voice. Sign up and RT: bit.ly/EducationForAll #ShareYourVoice



1:14 PM - 26 Feb 2022

1 Retweet 11 Likes

1 1 11

Add another Tweet

voluntary response
sampling

Snowball sampling

