

UNIVERSITY OF KHEMIS MILIANA

Level : 3rd Year Counseling & Guidance

2nd Semester 2023

SUBJECT :ENGLISH

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Specific aims :

By the end of the lesson the student will be able to :

- Identify different types sampling procedures.
- Select appropriate sampling procedures for selection and allocation of participants including random sampling, stratified sampling, convenience sampling, and snowball samples.

LESSON SIX :Populations and samples

The choice of participants for any study is fundamental and is based on two questions:

- What group of people is being studied? (This is the **target population**.)
- How much effort is a researcher prepared to put in to make the sample representative of the target population?

The **sample** refers to the details of the participants themselves, including how many of them participate and features such as age, gender and any other feature relevant to the specific study.

The **sampling technique** is how the sample is selected from a target population. There are different sampling techniques and some are more effective in being representative of the target population than others.

The **population** refers to the large group of individuals that a particular researcher may be interested in studying, for example students attending colleges in the North West, children under six with autism, women in their thirties, etc. This is often called the **target population** because it is a subset of the general population.

For practical and economic reasons, it is usually not possible to include all members of a target population in an investigation so a researcher selects a smaller group, known as the **sample**.

Ideally, the sample that is drawn will be **representative** of the target population so that **generalisation** of findings becomes possible. In practice, however, it is

often very difficult to represent populations within a given sample due to their diverse nature.

Inevitably then, the vast majority of samples contain some degree of **bias**. Samples are selected using a **sampling technique** that aims to produce a representative sample. We will look at the main techniques used by psychologists.

Random sample

A **random sample** is a sophisticated form of sampling in which all members of the target population have an equal chance of being selected. To select a random sample; firstly, a complete list of all members of the target population is obtained. Secondly, all of the names on the list are assigned a number. Thirdly, the sample is generated through the use of some **lottery method** (a computer-based randomiser or picking numbers from a hat).

Systematic sample

A **systematic sample** is when every n th member of the target population is selected, for example every 3rd house on a street or every 5th pupil on a school register.

Stratified sample

A **stratified sample** is a sophisticated form of sampling in which the composition of the sample reflects the proportions of people in certain sub-groups (strata) within the target population or the wider population. To carry out a stratified sample the researcher first identifies the different *strata* that make up the population. Then, the proportions needed for the sample to be representative are worked out. Finally, the participants that make up each stratum are selected using random sampling.

Opportunity sample

Given that representative samples of the target population are so difficult to obtain, many researchers simply decide to select anyone who happens to be willing and available (an opportunity sample). The researcher simply takes the chance to ask whoever is around at the time of their study, for example in the street.

Volunteer sample (self-selected sampling)

A volunteer sample involves participants selecting themselves to be part of the sample; hence, it is also referred to as **self-selection**.

To select a volunteer sample a researcher may place an advert in a newspaper or on a common room notice board. Alternatively, willing participants may simply raise their hand when the researcher asks.

Snowball sample

How? Current participants recruit further participants from among people they know. Thus the sample group appears to grow like a snowball. This method enables a researcher to locate groups of people who are difficult to access, such as drug addicts. The sample is not, however, likely to be a good cross-section from the population because it is friends of friends.

• Don't confuse opportunity sampling and random sampling. If the word is used in its everyday sense, it could be argued that opportunity sampling involves selecting people 'at random'. In psychology, however, random sampling is a much more sophisticated and complex process.