



# What's what FSKM

EISSN: 2756-7729

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BEYOND THE CLAIM  
OF RANDOM  
SAMPLING

# BEYOND THE CLAIM OF RANDOM SAMPLING

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## SAMPLING TECHNIQUES

Sampling techniques refer to the methods used to select a subset of individuals/ items from a population for the purpose of data collection. Sampling techniques can generally be classified into two types, as illustrated in Figure 1.

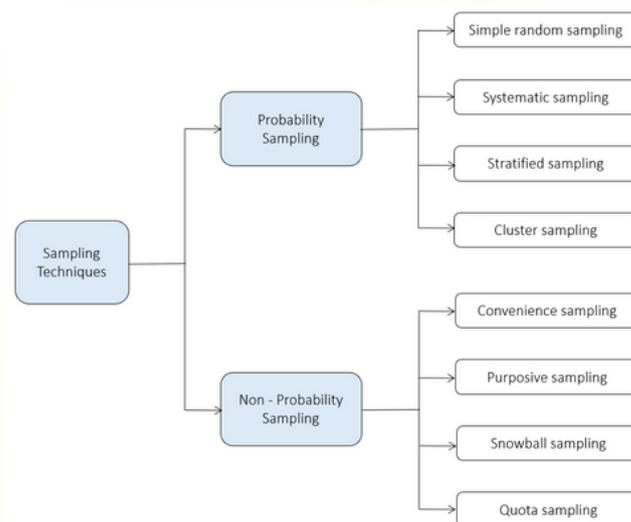


Figure 1: Types of Sampling Techniques

Probability sampling refers to methods where every individual in the population has a known and equal chance of being selected. This approach relies on randomization such as using random number tables or computer-generated sequences which helps ensure that the sample is representative of the larger population. The figure illustration can be seen in a previous article by Jamil (2025).

On the other hand, non-probability sampling involves selecting individuals in a way that not everyone in the population has an equal chance of being chosen. Instead, participants may be chosen based on convenience, judgment or specific criteria which makes the method more practical but less representative of the population.

It is important to note that in research, the term 'random' has a precise definition. Although researchers occasionally claim to have used 'random' sampling, in practice the procedure actually reflects on non-probability techniques as participant selection is frequently based on convenience rather than strict randomness. This article focuses on stratified sampling and quota sampling as both techniques aim to ensure representation across important subgroups within a population. Stratified sampling can be categorized into proportionate and disproportionate approaches. Moreover, quota sampling can be considered as a form of proportionate stratified sampling but on convenience basis (Sekaran, 2003).

Figures 2 and 3 respectively provide a visual comparison between stratified sampling and quota sampling. In both approaches, the population is initially divided into homogeneous strata (or group) such as faculties. The principal distinction lies in the selection procedure of stratified sampling which employs random selection within each stratum to ensure proportional representation, whereas quota sampling utilises non-random methods such as convenience sampling or purposive sampling to fulfil specified quotas.

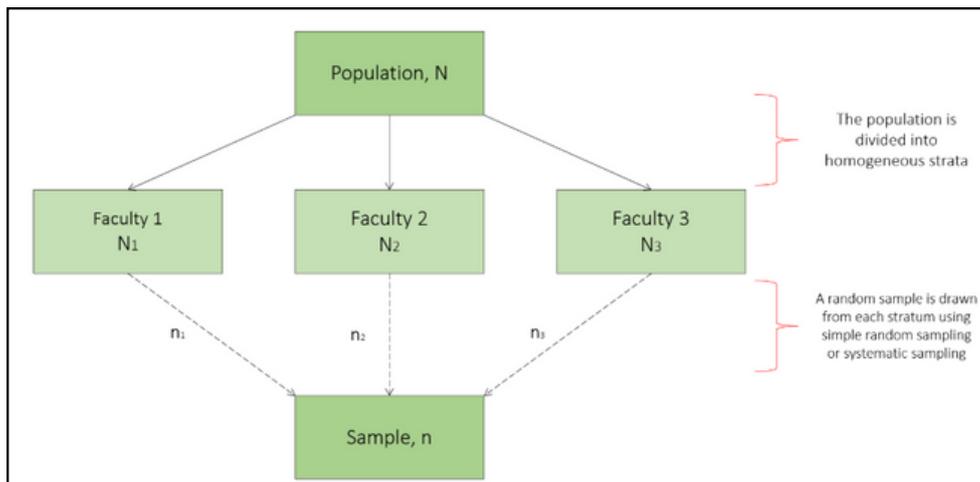


Figure 1: Stratified sampling

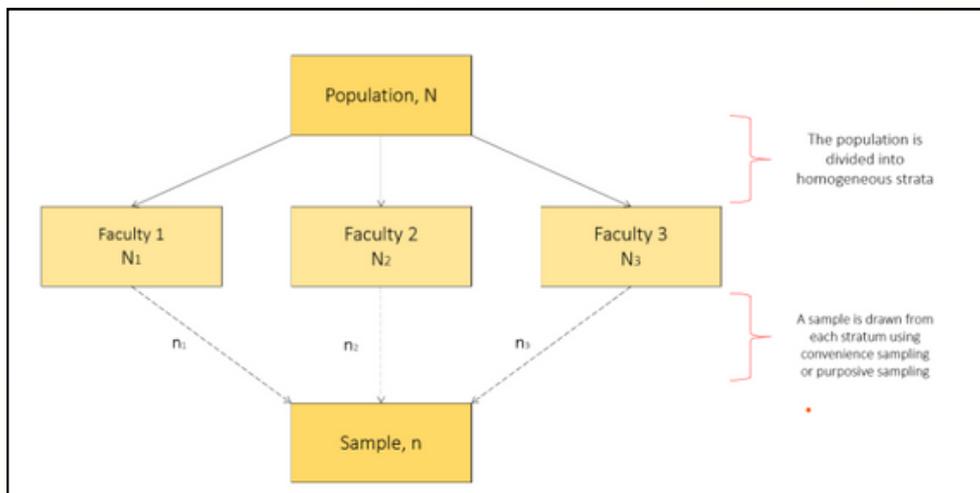


Figure 2: Quota sampling

In summary, both stratified and quota sampling ensure subgroup representation but differ in rigor and applicability. Stratified sampling enables greater accuracy and stronger statistical inference though it requires more planning and detailed population information. Quota sampling offers faster implementation but with higher risk of bias and limited generalizability (Groves et al., 2009). The choice between these methods should be guided by research objectives, resources and the required level of precision.

## REFERENCES

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