



SAMPLING

RESEARCH QUESTION:

DO UNIVERSITY STUDENTS PERCEIVE THEMSELVES AS BEING CLEVERER THAN THEIR PEERS?

The target population is the 10,000 undergraduate students at my university.

I recruit 200 participants.

They are studying in the Faculty of Science and Engineering.

Most of them are British, male, 18–20 years old and from a high socio-economic background.

I give them a maths test.

I then ask them to rate how well they think performed.

The finding show that the average participant believes that they are cleverer than 66% of the population.

Can I conclude that most people believe themselves to be cleverer than their peers?

WHAT IS A SAMPLE?
WHY USE A SAMPLE?

SHOULD THE SAMPLE **ALWAYS** BE
REPRESENTATIVE?





RANDOM AND NON-RANDOM SAMPLING TECHNIQUES

Flick (2014)

CONVENIENCE SAMPLE

Limitations:

Does not produce a representative sample of the population and this can distort the results.
Findings cannot be generalised to the wider population.

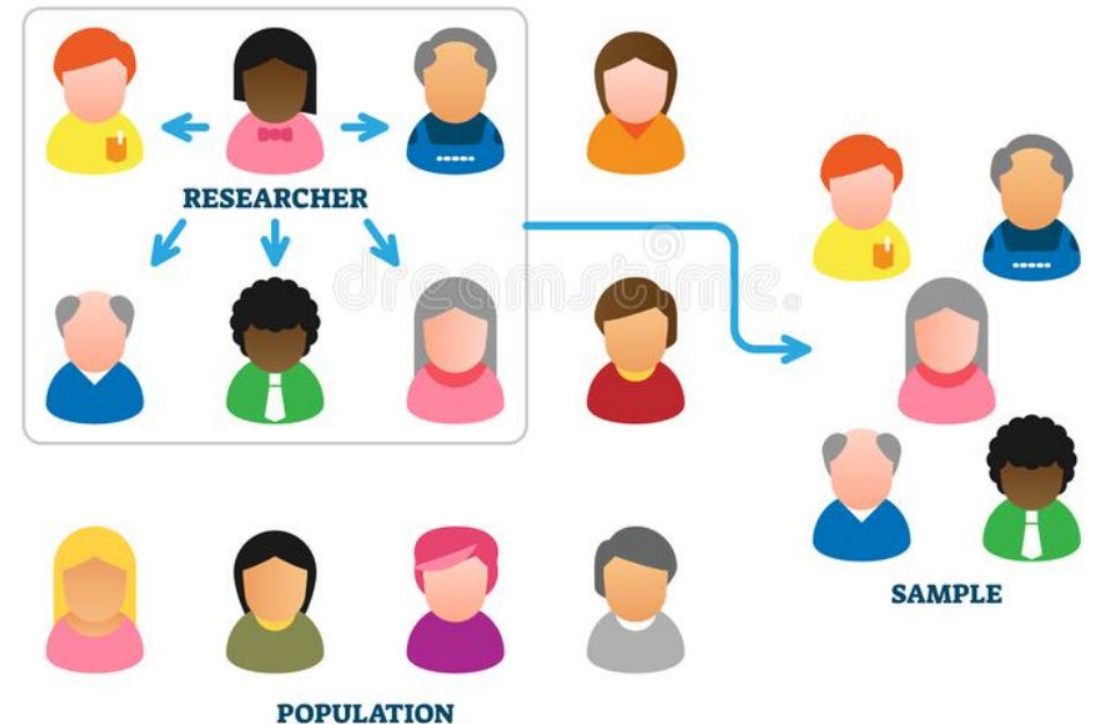
Example:

Deliberately choose a group of people who are most likely to provide information that will answer your research question (e.g. teachers from your placement school who you know use a specific strategy)

Benefit:

You have participants that are likely to give you the information you want to get

CONVENIENCE SAMPLING



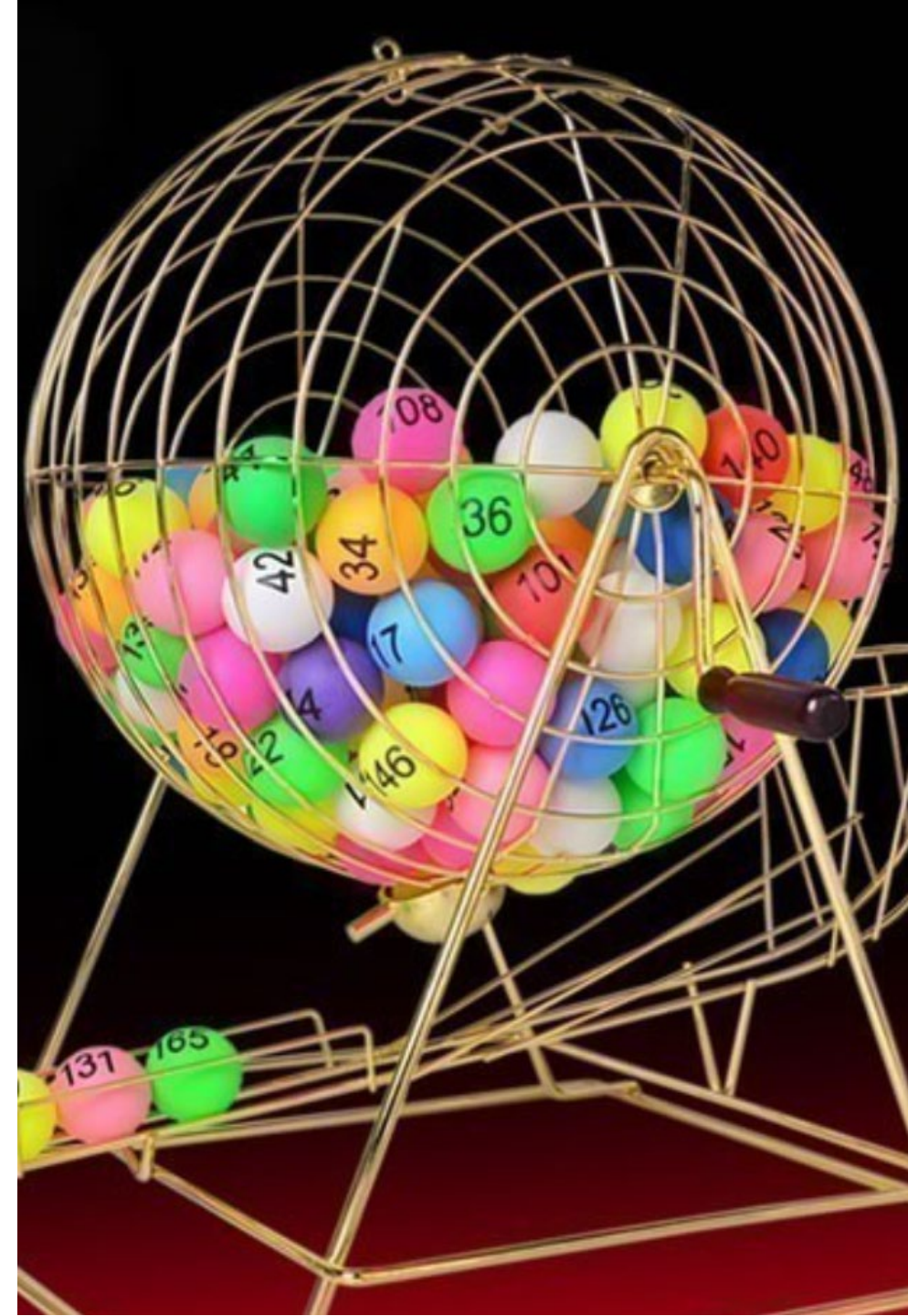
SIMPLE RANDOM SAMPLE

Example:

Assign a number to all 100 students. Then, use a random number generator to select 10 random numbers and use the corresponding students as members in the sample.

Benefit:

Simple random samples are usually representative of the population we are interested in since every member has an equal chance of being included in the sample.



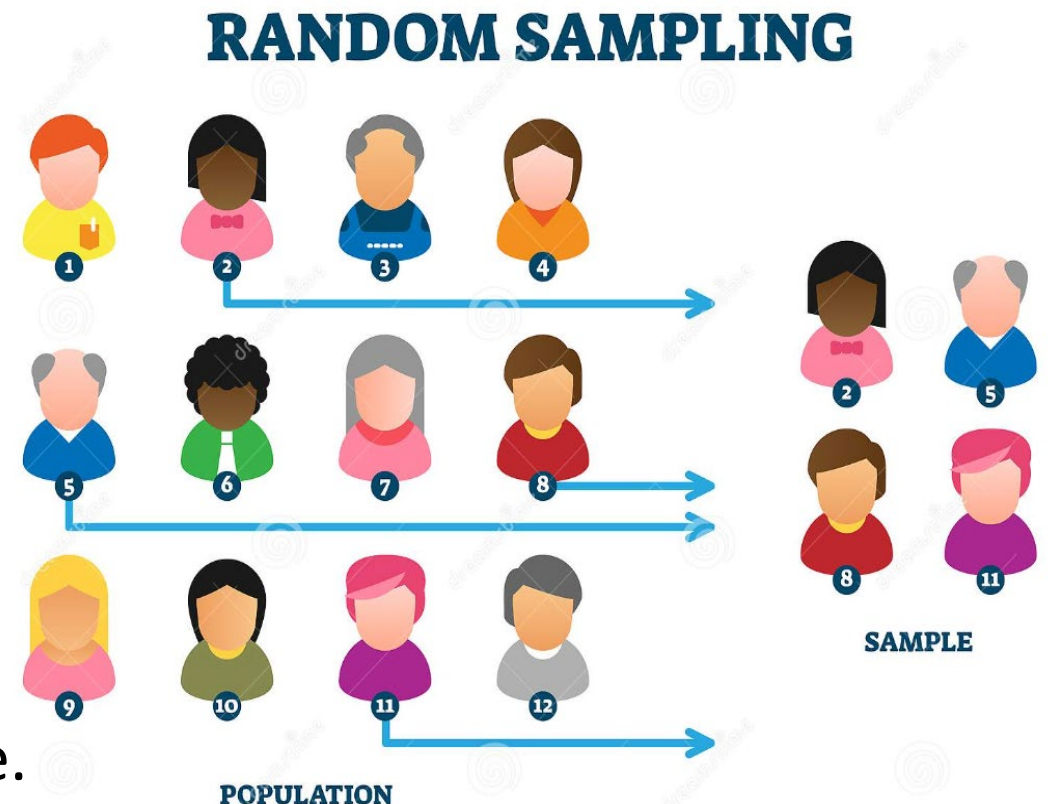
SYSTEMATIC RANDOM SAMPLE

Example:

Create a list in alphabetical order based on the surname of all your students, randomly choose a starting point, and pick every 3rd student to be in the sample.

Benefit:

Systematic random samples are usually representative of the population we are interested in since every member has an equal chance of being included in the sample.



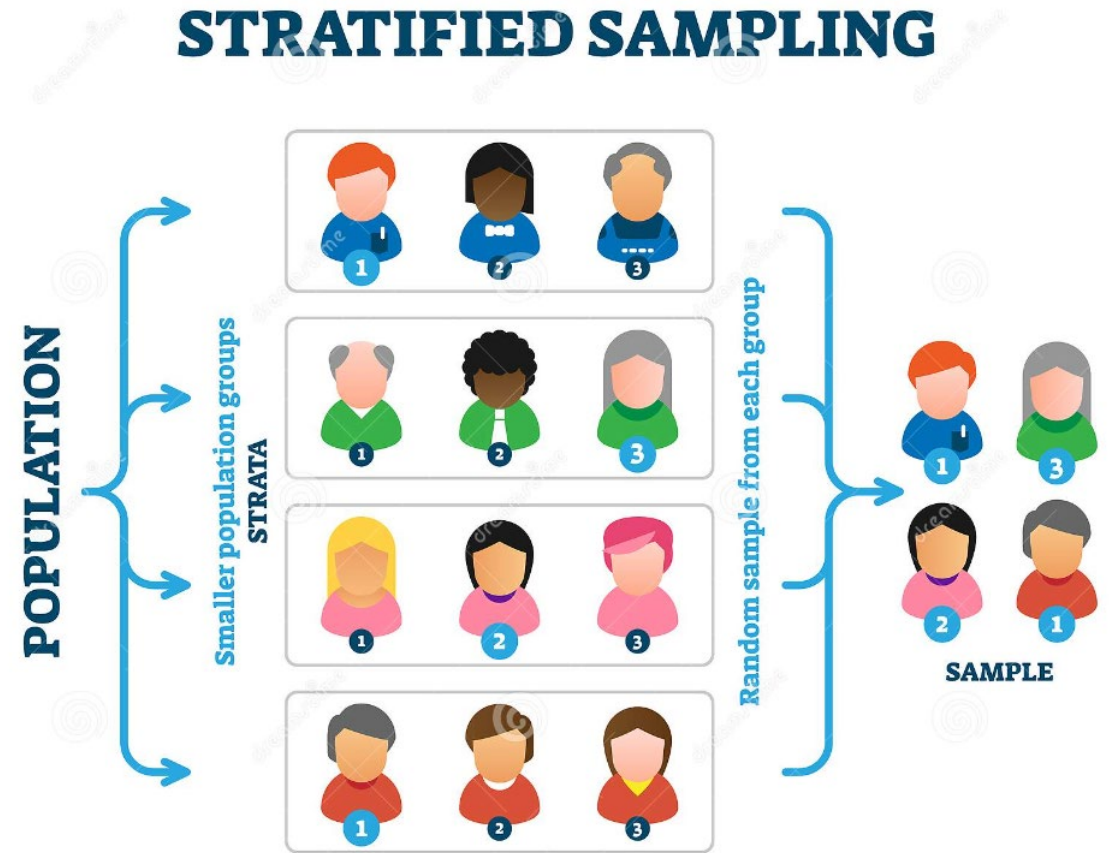
STRATIFIED RANDOM SAMPLE

Example:

Split up all students according to their year group – Year 5, Year 7, Year 9 and Year 11. Randomly select 25 students from each grade to be in the sample.

Benefit:

Stratified random samples ensure that an equal number of students from each year group are included in the sample.



REFERENCES

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