Understanding sampling

Lecture handout | Synthetic content for PDF testing

1. A sample helps us study a larger population

A population is the complete group we want to understand. A sample is a smaller group selected from it. A good sampling method reduces avoidable bias.

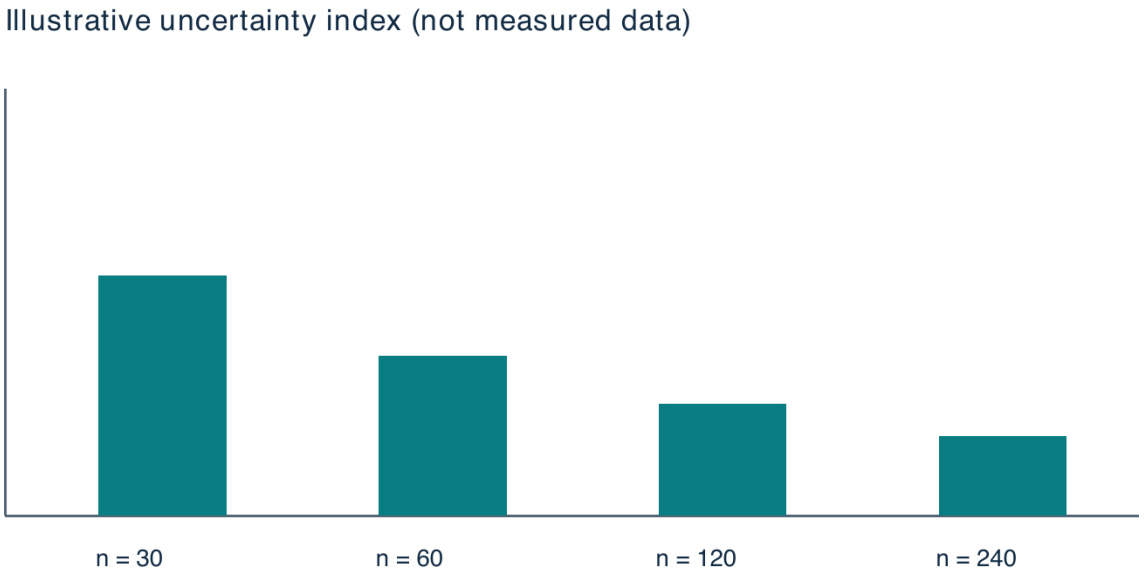
Example: a fictional campus has 2,400 students. We invite a random sample of 120 students to describe their preferred study spaces. These numbers are illustrative only. They are not results from a real survey.

2. Sampling uncertainty

Repeated samples can produce different estimates.

Larger samples often improve precision, if the selection method is sound.

A larger sample does not automatically remove systematic bias.



Check your understanding

Why can a biased sample remain misleading even when it is very large?

Detail check: 0 1 2 3 4 5 6 7 8 9 | Aa Bb Cc | 10.5% | 1,024 | 0.001