



Evaluate sampling methods for bias

1

Sample: 2,000 patients randomly selected from hospitals across Canada

A

Emergency care patients

B

All hospital patients in Canada

2

Population: All flights departing from a major airport
Sample: 500 international flights

A

Yes, it is representative of the population

B

No, it is not representative of the population

3

Goal: Percentage of people who exercise weekly
Sampling approach: Survey people leaving a gym

A

Gym visitors may exercise more frequently than the general population.

B

Gym visitors may estimate their exercise time more accurately than other people.

4

Goal: Satisfaction with a mobile app
Sampling approach: Survey only users who opened the app at least 20 times this month

A

Undercoverage bias

B

Voluntary response bias

C

Measurement bias

D

Response bias

5

Population: All restaurants in a city

A

250 restaurants randomly selected from the city's business registry

B

250 restaurants that offer food delivery

6

Goal: Public opinion on a new city bike lane
Sampling approach: Post an online poll on a cycling advocacy website

A

People with strong opinions about cycling are more likely to respond.

B

Readers of the website may answer surveys more quickly because they are familiar with online polls.

7

Goal: Average household electricity use
Sampling approach: Survey households that recently installed solar panels

A

Voluntary response bias

B

Response bias

C

Measurement bias

D

Selection bias

8

Population: All lakes in a province

A

150 lakes with public boat launches

B

150 lakes randomly selected from across the province



Evaluate sampling methods for bias

9

Goal: Student satisfaction with cafeteria food
Sampling approach: Ask students, "How bad is the cafeteria food this year?"

A

The wording of the question may encourage students to report lower satisfaction.

B

Students may remember cafeteria meals from earlier in the year more clearly than recent meals.

10

Goal: Support for a political candidate
Sampling approach: Survey people attending that candidate's campaign rally

A

Selection bias

B

Measurement bias

C

Voluntary response bias

D

Response bias

11

Population: All subscribers to a streaming service

A

5,000 subscribers randomly selected from the subscriber database

B

5,000 subscribers who watched at least 20 hours last month

12

Goal: Support for a political candidate
Sampling approach: Survey people attending that candidate's campaign rally

A

Campaign attendees may be more willing to complete surveys than other voters.

B

Campaign attendees may support the candidate more strongly than the average voter.