

# Non-probability sampling



# What is non-probability sampling?

Non-probability sampling is also known as:

- Convenience sampling
- Opportunistic sampling
- Pragmatic sampling

It is commonly used in investigations that involve questionnaires, interviews or surveys of groups of people.

It is also sometimes used when sampling spatial data from across an urban area.



# Review

Identify how two or more of these factors might influence your decision to use non-probability sampling in a busy city centre.

accessibility

opportunity

convenience

availability

safety

Cardiff

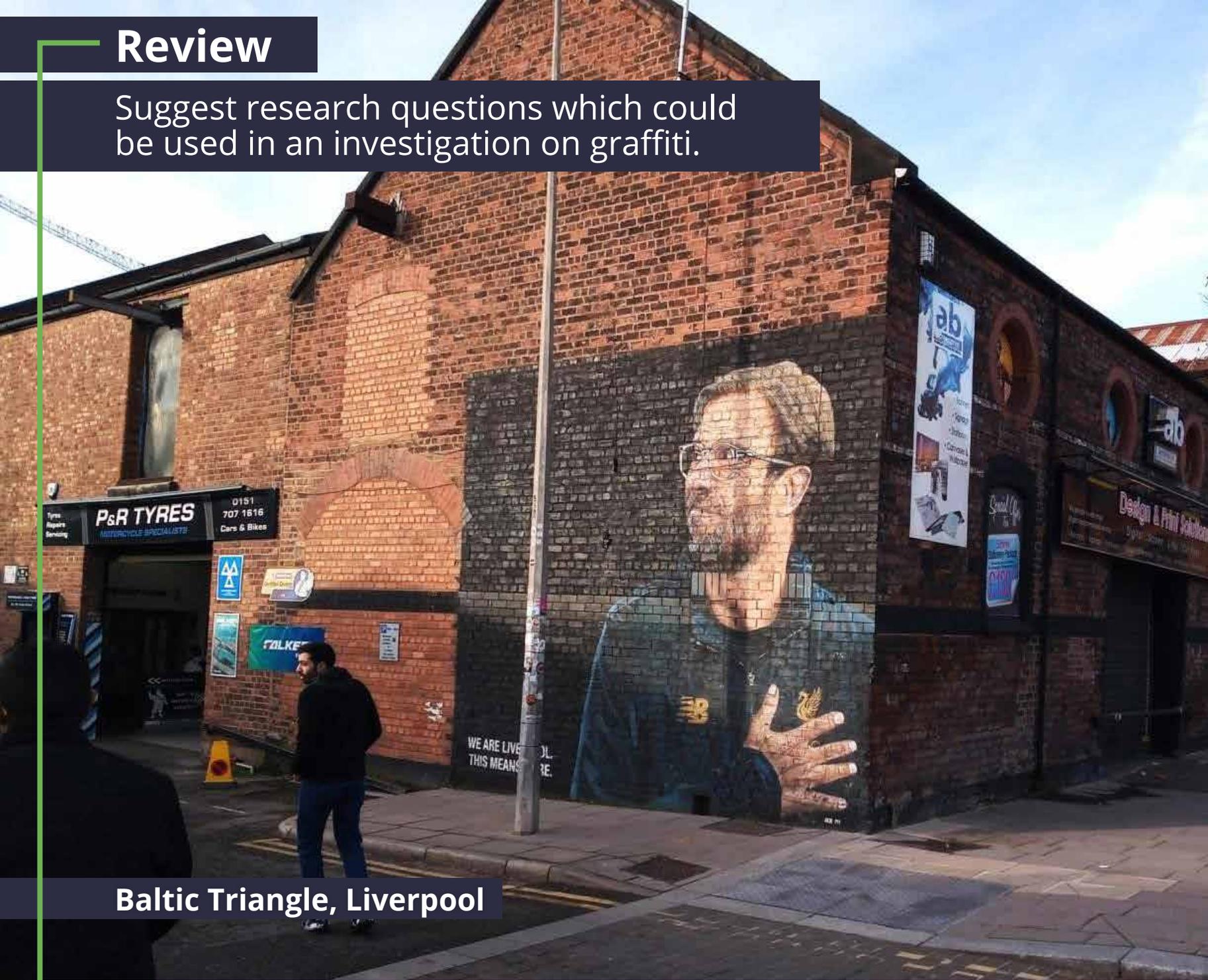


# Theoretical contexts



# Review

Suggest research questions which could be used in an investigation on graffiti.



Baltic Triangle, Liverpool

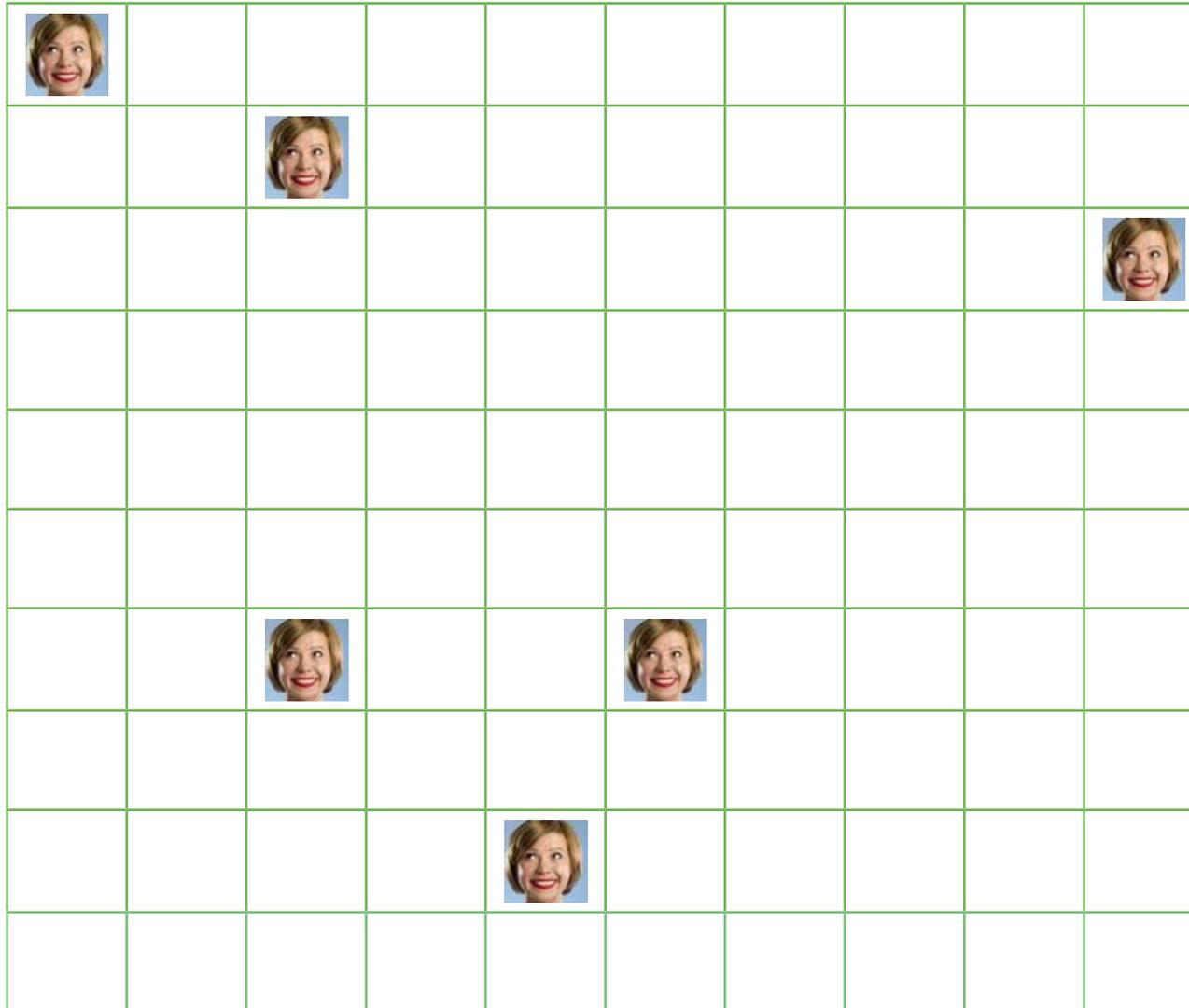
## Random sampling



In non-probability sampling of people in the street, participants are selected by subconscious bias.

A sample might appear to have been selected at random, but the selection is, in fact, influenced by an unconscious bias.

We tend to select people who look friendly, who are in a similar age group, or people who look like they have some time to spare.



# Strengths and limitations

## Strengths

- In a questionnaire, you are likely to get a lower rejection rate compared to designing and conducting a systematic or stratified survey.
- Sample sites may be safer, more convenient or more accessible.

## Limitations

- It is likely to be less representative of the whole population.
- It only provides more representative results if you select a more homogeneous population.



## Key considerations

1. Can the investigation focus on a population that is more **homogeneous** than the whole UK population? If so, the sample could be reasonably representative as the range of views should be slightly less varied than it would be if the whole population was taken into account.

How can you do this? Think about age, gender, ethnicity or socio-economic background of your potential sample.



## Plan using secondary data

Sources of secondary data can be used to identify patterns and trends within the whole population before a sample is chosen.



# Ethnicity in Tower Hamlets

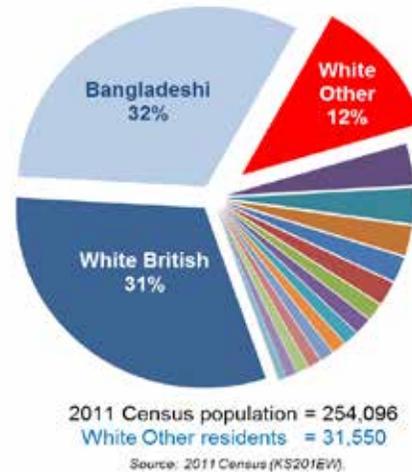
## Analysis of 2011 Census data

### Summary of findings

This briefing presents key statistics from the 2011 Census about the ethnic composition of the Tower Hamlets population. The new Census figures provide valuable intelligence about the nature of diversity in the borough and how it is changing. Key findings include:

- **More than two thirds (69 per cent) of the borough's population belong to minority ethnic groups** (i.e. not White British): 55 per cent belong to BME (Black and Minority Ethnic) groups, and a further 12 per cent are from White minority groups.

Figure 2. Population by ethnicity, Tower Hamlets, 2011



Broad ethnic group (¾ population)	
White ethnic groups	45
All BME Groups	55
- Mixed ethnic groups	4
- Asian/Asian British	41
- Black/Black British groups	7
- Any other ethnic group	2

Small ethnic group	% population
[<5 per cent)	
Black African	3.7
Chinese	3.2
Indian	2.7
Other Asian	2.3
Black Caribbean	2.1
White Irish	1.5
Other Black group	1.5
Any other ethnic group	1.3
Mixed groups: Other	1.2
Mixed groups: White and Asian	1.2
Mixed: White and Black Caribbean	1.1
Arab	1.0
Pakistani	1.0
Mixed: White and Black African	0.6
Gypsy or Irish Travellers	0.1

Figure 2 Population by ethnic group, Tower Hamlets, 2011 Census

## Review

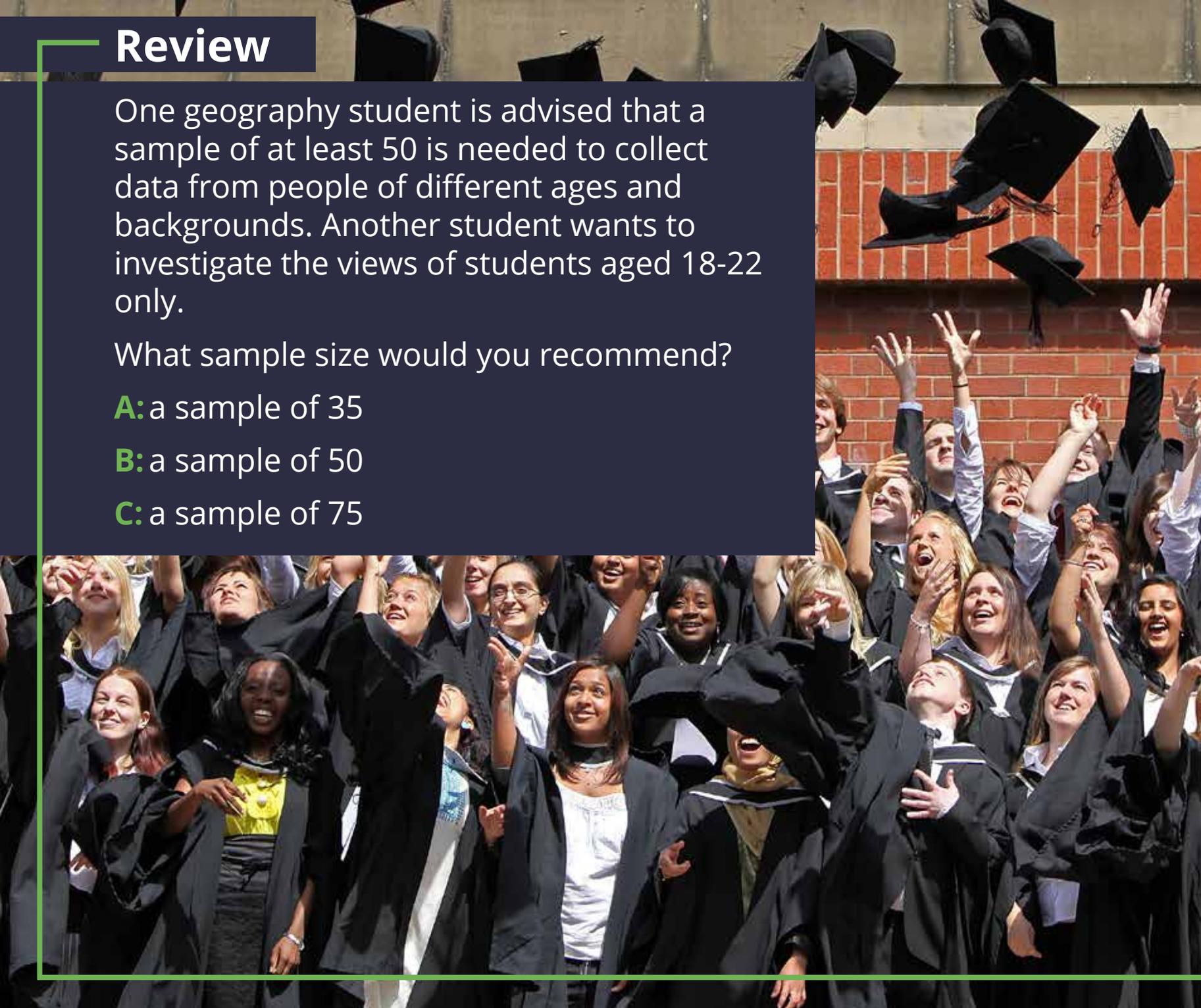
One geography student is advised that a sample of at least 50 is needed to collect data from people of different ages and backgrounds. Another student wants to investigate the views of students aged 18-22 only.

What sample size would you recommend?

**A:** a sample of 35

**B:** a sample of 50

**C:** a sample of 75



## Key considerations

2. Can the investigation focus on key stakeholders or **players**? If so, it may be possible to conduct a longer survey with fewer participants and get a representative view.

How can you do this? If the investigation is about change, think about who the key decision makers are. Alternatively, think about which key groups in the community are affected by change.



## Review

Identify **players** who could be surveyed in an investigation of the impacts of gentrification of a small urban neighbourhood.



Jewellery Quarter, Birmingham

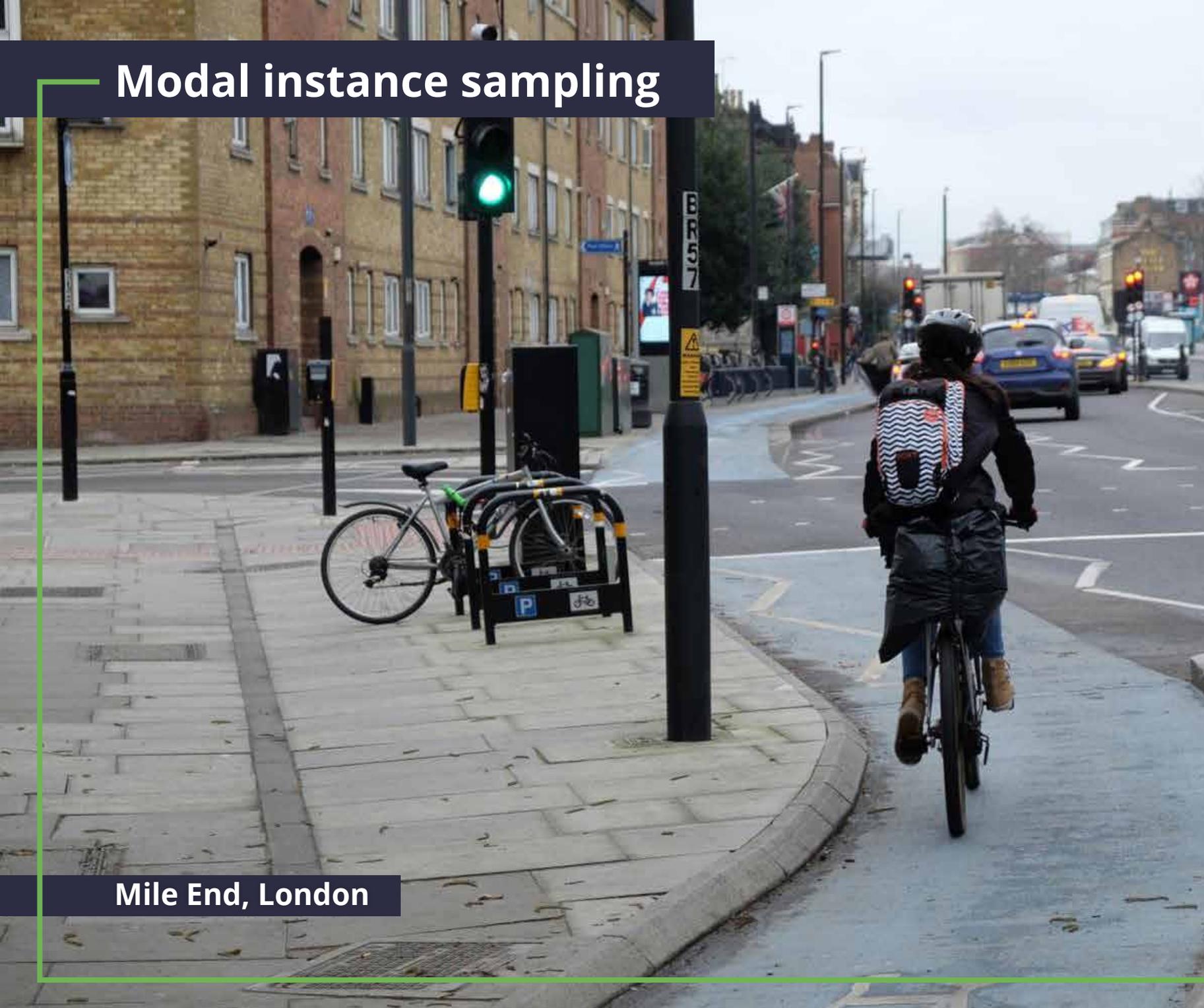
## Expert sampling



## Snowball sampling



# Modal instance sampling



Mile End, London

## Review

Identify how you might investigate attitudes to graffiti in an urban environment using non-probability sampling.



Baltic Triangle, Liverpool