



GSOC.RM2 Sampling Methods in Sociological Research

AQA 8192 · Calculators not allowed · about 65 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Where a question refers to Item A, use both the Item and your own knowledge of research methods in your answer.

Item A: Studying first-generation university students

A hypothetical research scenario written for this exercise, for students to apply their knowledge of sampling to.

A sociologist wants to find out about the experiences of students who are the first in their family to go to university. She has been given permission to use the university's full list of registered first-generation students as a sampling frame. She is deciding between two possible approaches: (1) sending a short questionnaire to a large random sample drawn from this list, or (2) carrying out in-depth unstructured interviews with a small group of students who volunteer to take part after seeing a poster.

1 Which of these is the best example of a sampling frame?

- ☐ A) A newspaper article about student life
- ☐ B) The university's register of enrolled students
- ☐ C) A television documentary about universities
- ☐ D) A sociology textbook chapter on education

(Total for Question 1 is 1 mark)

2 Sociologists need a sampling frame before they can select a sample using most sampling methods.

- (a)** Define the term 'sampling frame'. (2)

- (b)** Identify two examples of a sampling frame a sociologist could use to study pupils at a secondary school. (2)

(Total for Question 2 is 4 marks)

3 Random sampling is one method of selecting a sample from a sampling frame.

(a) Explain what is meant by random sampling. (2)

(b) Give one strength of using random sampling. (1)

(c) Give one weakness of using random sampling. (1)

(Total for Question 3 is 4 marks)

4 Stratified sampling divides the sampling frame into groups before selecting a sample.

(a) Explain what is meant by stratified sampling, using an example. (2)

(b) Explain one reason a sociologist might choose stratified sampling rather than simple random sampling. (2)

(Total for Question 4 is 4 marks)

5 Quota sampling is a non-random method often used by market researchers.

(a) Explain what is meant by quota sampling. (2)

(b) Explain one reason quota sampling is often used even though it is not random. (2)

(Total for Question 5 is 4 marks)

6 Snowball sampling relies on existing contacts to find further participants.

(a) Explain what is meant by snowball sampling. (2)

(b) Explain why snowball sampling is often used to study hard-to-reach or hidden groups. Give an example of such a group. (2)

(Total for Question 6 is 4 marks)

7 Opportunity (convenience) sampling selects whoever is easiest to access.

(a) Explain what is meant by opportunity sampling. (2)

(b) Explain one weakness of opportunity sampling for producing representative findings. (2)

(Total for Question 7 is 4 marks)

8 Reliability and validity are two different ways of judging the quality of sociological data.

(Total for Question 8 is 4 marks)

9 Before carrying out a large-scale study, sociologists often run a pilot study.

(Total for Question 9 is 2 marks)

10 Look again at Item A. The sociologist is considering sending a short questionnaire to a large random sample drawn from the sampling frame.

(a) Using Item A and your own knowledge, explain one strength of this approach. **(3)**

(b) Using Item A and your own knowledge, explain one weakness of this approach. **(3)**

(Total for Question 10 is 6 marks)

11 Look again at Item A. The sociologist is also considering carrying out in-depth unstructured interviews with a small group of student volunteers.

(a) Using Item A and your own knowledge, explain one strength of this approach. **(3)**

(b) Using Item A and your own knowledge, explain one weakness of this approach. **(3)**

(Total for Question 11 is 6 marks)

- 12** Sociologists sometimes use official statistics, such as government records, as a secondary source of data.

Discuss the strengths and limitations of using official statistics in sociological research. In your answer you should refer to sociologists' views.

(Total for Question 12 is 9 marks)

- 13** Give one example of a sampling frame that would be likely to exclude people who are homeless.

(Total for Question 13 is 1 mark)

- 14** State one practical reason a sociologist might not be able to survey an entire research population.

(Total for Question 14 is 1 mark)

- 15** Explain how a well-chosen sample helps a sociologist make claims about a wider population.

(Total for Question 15 is 2 marks)

Mark scheme · GSOC.RM2 Sampling Methods in Sociological Research

Question 1

- **B1** B (the university's register of enrolled students)
- **Answer: B**

Question 2

- (a) **B1** a list of every member of the research population (oe)
- (a) **B1** from which a sample can then be selected (oe)
- **(a) Answer: A list of every member of the population being studied, from which a sample is drawn.**
- (b) **B1** one acceptable example, e.g. the school register/roll
- (b) **B1** a second acceptable example, e.g. a list of Year 11 form groups, the school's exam entry list, a class register
- **(b) Answer: Any two of: the school register; a form-group or class list; the exam entry list.**

Question 3

- (a) **B1** every member of the sampling frame has an equal chance of being selected (oe)
- (a) **B1** development, e.g. selection is made using a method such as a random number generator or names drawn 'out of a hat', not by the researcher's judgement
- **(a) Answer: A method where every person on the sampling frame has an equal chance of being chosen, usually using a random number generator.**
- (b) **B1** any one of: avoids researcher bias in selection; more likely to be representative of the sampling frame; results can more confidently be generalised
- **(b) Answer: It avoids researcher bias in who is chosen, so the sample is more likely to be representative.**
- (c) **B1** any one of: by chance the sample could still be unrepresentative (e.g. all one gender); requires a complete, up-to-date sampling frame, which may not exist; selected individuals may refuse to take part
- **(c) Answer: By chance, a random sample can still turn out unrepresentative, e.g. mostly one gender or age group.**

Question 4

- (a) **B1** the sampling frame is divided into relevant strata/groups (e.g. by gender, age or year group) before a sample is randomly selected from each group
- (a) **B1** a correct, clear example applying this to a research context (e.g. dividing a school register by year group, then randomly selecting pupils from each year in proportion to its size)
- **(a) Answer: The population is split into relevant groups (e.g. by year group), then a random sample is drawn from each group in proportion to its size.**
- (b) **B1** it ensures that important subgroups (e.g. each year group, or each gender) are represented in the sample (oe)
- (b) **B1** development: this makes the sample more representative of the whole population than a purely random sample, which could under-represent a smaller subgroup by chance
- **(b) Answer: It guarantees every relevant subgroup is represented in proportion, reducing the risk that chance produces an unrepresentative sample.**

Question 5

- (a) **B1** the researcher sets a target number (a quota) of people with particular characteristics (e.g. 20 women aged 16-19) to find and question
- (a) **B1** development: the researcher then selects whoever is available to fill each quota, so selection is not random
- **(a) Answer: The researcher decides in advance how many people of each type to interview, then fills these quotas with whoever is available.**
- (b) **B1** it can be used when there is no sampling frame available (oe)
- (b) **B1** development: it is quick, cheap and practical, for example for a researcher stopping people in a shopping centre, so it suits research with a tight budget or deadline
- **(b) Answer: It does not need a sampling frame and is quick and cheap to carry out, so it suits research with limited time or money.**

Question 6

- (a) **B1** the researcher starts with one or a few participants
- (a) **B1** these participants introduce the researcher to further participants they know, and the sample grows this way (oe: 'snowballs')
- (a) **Answer: The researcher recruits a first few participants, who then introduce them to others they know, and the sample grows from these contacts.**
- (b) **B1** there is usually no sampling frame for the group, and/or members may be reluctant to be identified, so trusted personal contacts are needed to gain access (oe)
- (b) **B1** a correct named example of a hard-to-reach or hidden group, e.g. people who use illegal drugs, members of a secretive religious sect, undocumented migrants
- (b) **Answer: There is no public list of members and they may not want to be identified, so a trusted introduction from an existing contact is often the only way in, e.g. researching illegal drug users.**

Question 7

- (a) **B1** the researcher selects whoever is conveniently available and willing to take part (oe)
- (a) **B1** development: for example, questioning people who happen to pass a particular location, or asking colleagues/friends
- (a) **Answer: The researcher simply selects people who happen to be conveniently available, e.g. asking passers-by in one street.**
- (b) **B1** the sample is drawn only from people available in one place/time, so it is unlikely to reflect the wider population (oe)
- (b) **B1** development with a concrete consequence, e.g. questioning shoppers on a weekday morning would miss people who are at work or school, biasing the sample
- (b) **Answer: It only reaches people available at that place and time, so findings cannot safely be generalised to the wider population.**

Question 8

- **B1** reliability means that if the same research were repeated using the same method, it would produce the same, or very similar, results (oe: consistency)
- **B1** reliability is associated with standardised, structured methods such as questionnaires or structured interviews, which can be repeated in exactly the same way
- **B1** validity means that the data gives a true and authentic picture of what is actually being studied (oe: accuracy/genuineness)
- **B1** validity is associated with methods that let people explain things in their own words and in depth, such as unstructured interviews or participant observation
- **Answer: Reliability = consistency (the study would get the same results if repeated); validity = accuracy (the data genuinely reflects what is being studied). Structured methods tend to be more reliable; in-depth qualitative methods tend to be more valid.**

Question 9

- **B1** a pilot study is a small-scale trial run of the research carried out before the main study
- **B1** its purpose is to identify and fix problems, e.g. confusing questions, unclear instructions or timing issues, before the real (larger, more costly) study goes ahead
- **Answer: A small trial run of the research done before the main study, to iron out problems (e.g. confusing questions) before the full study is carried out.**

Question 10

- (a) **B1** identifies a genuine strength, e.g. a large random sample is likely to be representative of first-generation students at the university
- (a) **B1** links the strength to Item A specifically, e.g. because she has the full sampling frame (the university's register), she can draw a properly random sample rather than relying on volunteers
- (a) **B1** further development, e.g. a questionnaire is quick to send to large numbers and produces standardised, easily comparable (reliable) data
- **(a) Answer: Because she has a full sampling frame, a large random questionnaire sample is likely to be representative and produces reliable, comparable data quickly.**
- (b) **B1** identifies a genuine weakness, e.g. a short questionnaire cannot capture the depth of first-generation students' personal experiences
- (b) **B1** links the weakness to Item A specifically, e.g. the topic (personal experience of being first in the family at university) may need detailed, open answers a short questionnaire cannot get
- (b) **B1** further development, e.g. low validity results because respondents are limited to fixed questions/answers, and some may not respond at all (non-response), harming representativeness in practice
- **(b) Answer: A short questionnaire cannot capture the depth of personal experience the topic needs, giving lower validity; non-response can also undermine the representativeness the random sample was meant to secure.**

Question 11

- (a) **B1** identifies a genuine strength, e.g. unstructured interviews let students explain their experiences in their own words and in depth
- (a) **B1** links the strength to Item A specifically, e.g. this suits a sensitive, personal topic like being the first in your family at university better than a fixed questionnaire
- (a) **B1** further development, e.g. this produces high validity data and lets the researcher probe/follow up on unexpected answers
- **(a) Answer: Unstructured interviews let students describe their experiences in their own words, suiting this sensitive personal topic and producing high-validity, in-depth data.**
- (b) **B1** identifies a genuine weakness, e.g. volunteers are a self-selected group, not a random sample
- (b) **B1** links the weakness to Item A specifically, e.g. students who respond to a poster and volunteer may differ systematically from first-generation students who do not (e.g. more confident, more willing to discuss the topic)
- (b) **B1** further development, e.g. this makes the findings hard to generalise to all first-generation students, and a small sample is also time-consuming to interview and analyse
- **(b) Answer: Volunteers are self-selected, so may differ from first-generation students who did not come forward, harming representativeness; the small sample is also time-consuming to collect and analyse.**

Question 12

- **Level 3** (7-9): A detailed, balanced discussion that develops strengths AND limitations, supported by accurate reference to sociologists' views, and reaches a supported conclusion. Sociological terminology is used accurately throughout.
- **Level 2** (4-6): A clear discussion of strengths and/or limitations with some development, showing some accurate awareness of sociologists' views. Limited attempt at a balanced conclusion.
- **Level 1** (1-3): One or more isolated, undeveloped points about official statistics, with little or no reference to sociologists' views.
- **Level 0** (0): No relevant content.
- **Indicative content:**
 - Strength: official statistics are usually free, quick to access and cover very large numbers of people, e.g. the whole population in a census.
 - Strength: because they are collected in a standardised way, they are reliable and allow comparisons over time and between groups.
 - Positivist view: Emile Durkheim's study 'Suicide' (1897) used official suicide statistics from several countries and religious groups to argue that differences in suicide rates reflect differences in social integration and regulation, treating the statistics as reliable social facts.
 - Interactionist/interpretivist critique: J. Maxwell Atkinson's 'Discovering Suicide' (1978) argued that official suicide statistics are not objective facts but social constructions, produced by coroners' interpretive judgements about ambiguous deaths, so they may say more about how coroners classify deaths than about the 'real' rate of suicide.
 - Limitation: official statistics are collected for administrative or political purposes, not for sociological research, so they may not measure exactly what a sociologist wants to study (low validity).
 - Limitation: definitions used by the government can change over time (e.g. how crime or unemployment is defined), making comparisons over time misleading.
 - Limitation: some behaviour is not recorded at all, for example the 'dark figure' of unreported and unrecorded crime, so official statistics can understate the true scale of a problem.
 - A balanced conclusion should weigh the practical strengths (scale, cost, reliability, comparability) against the validity concerns raised by interactionist critiques such as Atkinson's, rather than dismissing official statistics outright.

Question 13

- **B1** any one of: the electoral register; a council tax register; a GP patient list registered to a fixed address (any correct example that depends on a fixed home address)
- **Answer: The electoral register (registration usually requires a fixed home address, which many homeless people do not have).**

Question 14

- **B1** any one of: it would be too costly; it would take too much time; the population may be too large to reach everyone
- **Answer: Surveying the whole population would usually take too much time and money.**

Question 15

- **B1** if the sample is representative (reflects the characteristics of the wider population, e.g. its mix of ages or genders)
- **B1** then findings from the sample can be generalised to the wider population with more confidence (oe)
- **Answer: If the sample represents the wider population's key characteristics, findings from it can be generalised to that population with confidence.**