

# Sociology Factsheet



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## The use of Quantitative and Qualitative Data Collection Methods in Sociology

**What is quantitative data?**

**What is qualitative data?**

This Factsheet outlines issues relating to the use of quantitative and qualitative data in Sociology specifically:

- The different types of qualitative and quantitative research methods
- The advantages and disadvantages of the different methods
- The differences between quantitative and qualitative data collection methods

Sociologists complete research to explore and gather evidence. There are two main reasons why sociologists conduct research:

1. To build theories. Sociologists may have an idea about a topic/issue and will seek data to provide an explanation for why things are as they are.
2. To test theories. Sociologists seek data in order to see if an idea/theory is true.

In order to build or test theories sociologists need to collect data. They can do this in two ways – collecting **quantitative data** or **qualitative data**.

### Definitions

#### Quantitative methods

- Favoured by sociologists who wish to take a scientific approach - positivists
- Involves the systematic collection of data
- Presented in numerical form
- Example: Official statistics of crime rates

#### Qualitative data

- Favoured by sociologists who wish to collect opinions and views on topics - phenomenologists
- Can collect both objective and subjective data which is descriptive rather than numerical
- Focuses on interpreting meaning and feeling
- Presented in words
- Example : Media reports, letters and diaries

Quantitative and qualitative data can be **secondary** or **primary** data. Primary data is collected first hand by the sociologist e.g. conducting an interview

Secondary data is second hand – it is material which already exists e.g. official statistics, mass media, life documents

		Example
Quantitative	Secondary	Government surveys
	Primary	Questionnaire Structured interview
Qualitative	Primary	Unstructured interview Participant observation
	Secondary	Personal and non-personal documents

**What are the advantages and disadvantages of Quantitative data?**

### Advantages

- **Test hypotheses.** Numerical data allows hypotheses to be tested
- **Study trends.** Numerical data allows for trends to be identified
- **Reliable.** Quantitative methods can be repeated by other researchers with consistent results
- **Make comparisons.** Numerical data is easy to compare
- **Establish causality.** Numerical data allows causality to be shown
- **Easy to analyse.** Numerical data is easy to analyse
- **Representative.** Large scale social survey methods aim to generalise to the larger group to which the sample belongs
- **Objective.** The scientific methods of quantitative research means that the investigation should be free from personal and political opinion and prejudice



### Disadvantages

- **Lack of depth.** Quantitative methods sometime do not give people opportunity to say what they really mean
- **No meaning.** Any meanings and feelings are hidden behind the numerical data
- **No focus on the individual.** Data is summarised collectively and does not look at individual responses
- **Distorts reality.** As data is summarised collectively and statistically, the true picture can be distorted

### Theoretical perspective Positivists favour quantitative data

These sociologists believe that sociology is a science. They produce quantitative data and seek generalisation from the data. Positivist sociologists believe that quantitative research methods are essential.


Unless human behaviour can be translated into numerical terms, it cannot be measured and compared. Without quantitative data, conclusions are little better than impressions and opinions. Evidence must be collected in an organised, structured fashion by applying the principles of scientific enquiry to the study of social behaviour.

This usually involves carrying out social surveys using questionnaires (a set of written questions where people are asked to write down their answers) or structured interviews (a set of written questions read out by an interviewer who write down the answers people give). An example of a social survey is the General Household Survey produced annually by the Office of Population Censuses and Surveys. The survey covers such areas as family life, housing, employment and health. Every person is asked exactly the same questions and the results were presented in a numerical form.



**Activity**

Think of some examples of sociological studies that have used quantitative research methods. e.g. Quantitative family studies often look at size or structure, and they often try to measure how family and marriage might change over time. Devise a table as suggested below and complete it using studies you have researched in your different topic areas.

Area of specification	Study	Method used
e.g. Family 	e.g. Willmott and Young	Surveys

Think about the advantages and disadvantages of using this method. How reliable and valid do you think this data is?

**Exam Hint:** You may be asked in the exam to examine the reasons why some sociologists prefer to collect and use quantitative data in their research. It is important in this answer to show a good understanding of quantitative data. Chief examiners look for appropriate and accurate use of important concepts such as reliability and representativeness and would also expect to see some developed explanation of the theoretical dimensions of quantitative data (positivists). Use of studies where quantitative methods have been used are also effective. Make sure the answer is clearly focused on quantitative data. Answers that concentrate on outlining issues relating to specific methods without a focus on the quantitative dimension of the question would gain limited marks. A similar question could focus on the reasons why some sociologists would prefer to use qualitative data in their research

**Theoretical perspective****Phenomenologists favour qualitative data**

They argue that quantitative approaches are unsuitable for the study of human behaviour. Questionnaires and structured interviews are based on questions which are relevant and important to sociologists but they may be irrelevant and unimportant to those who answer them. Sometimes the questions give people little opportunity to say what they really mean. In many cases the required response is simply a tick in one of several boxes. The data may look neat, tidy and scientific when quantified but lacks quality and validity. Qualitative data gives more information and provides data on views and opinions which is much more informative when trying to understand society.

**What are the advantages & disadvantages of Qualitative data?****Advantages**

- **Close to reality.** Individual responses give a good reflection of how people feel about issues, often reflecting reality
- **More personal.** Qualitative data focuses on individual responses
- **In depth feelings and meanings** Qualitative research tries to achieve what is called 'verstehen' - they try and see the world through the eyes of those involved.
- **Sociologists not imposing their view of the world.** Individual responses are reflected in the data, rather than a collective summary.
- **Rich description.** Detailed responses can be obtained from individuals


**Disadvantages**

- **Subjective.** Outcome of research can be affected by personal opinions, experiences and biases of the sociologist
- **Unreliable.** Qualitative research methods e.g. observations often depend on personal relationships being established between the respondent and the researcher and are difficult to be repeated by other researchers with similar results
- **Not measurable.** Qualitative data includes feelings and opinions which are not measurable statistically
- **Not scientific.** Qualitative research methods do not follow scientific methodology
- **Cannot generalise.** Samples studied by qualitative methods tend to be small because the methods are more time consuming and therefore the sample is less likely to generalise to the larger group to which the sample belongs.
- **Mis-interpretation.** Sociologists involved in qualitative research methods e.g. observation may mis-interpret what they see and hear

**Activity**

Think of some examples of sociological studies that have used qualitative methods. e.g. Qualitative family studies often look at the feelings and emotion of those in family relationships. What does it mean to have the role of mother?

Devise a table as suggested below and complete it using studies you have researched in your different topic areas.

Area of specification	Study	Method used
e.g. Religion 	e.g. Barker Cult watching	Participant observation

Think about the advantages and disadvantages of using this method. How reliable and valid do you think this data is?

**Exam Hint:** An understanding of these research methods is important when preparing for the A level examinations. It is also important when preparing for the A2 synoptic paper where you are required to make links between the different topic areas. Learning about methods is an ideal way to do this as all sociologists, whether studying education, family, crime for example, face the same challenges and need to find out about society in a convincing way. This means that the act of research raises common issues that can be used as a way to think about studies and will allow you to evaluate them.

**Test Yourself**

1. What is quantitative data?
2. Name one quantitative research method
3. Identify one sociological study that has used a quantitative research method
4. Give 2 advantages and 2 disadvantages of quantitative data
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7. Identify one sociological study that has used a qualitative research method
8. Give 2 advantages and 2 disadvantages of qualitative data