

# Qualitative and Quantitative Data

**Qualitative data** are based on words and descriptions. A case study, for instance, might include descriptions of a person's behaviour and personality, using words.

**Quantitative data** are based on numbers. Any measurement is a piece of quantitative data.

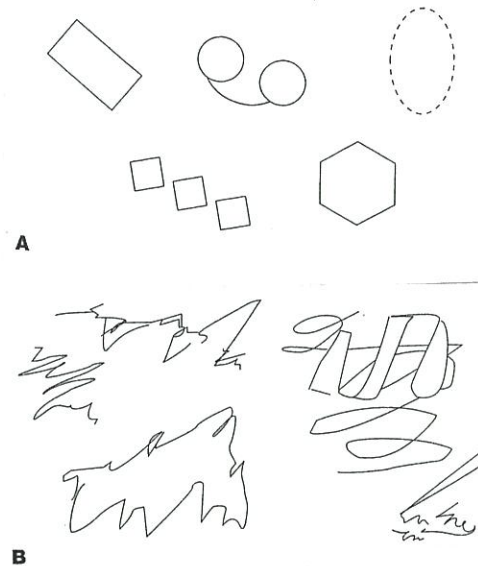
Psychological researchers like to work out ways to measure qualities. They make up tests that produce a score rather than a description. For instance, IQ is a score; but a person's ability to think, reason, solve problems and deal with the environment is more complex than a single number. In turning the quality into a quantity you tend to lose quite a lot of depth and individual information, but you can compare individuals with other individuals and groups of people with other groups of people. Psychologists use both qualitative and quantitative data, and each has its advantages and disadvantages.

The exercise below is a simple example of turning an aspect of a person's personality into a figure. Figures allow researchers to compare individuals and groups and do all kinds of statistical analysis. Do it for fun and see what quantity you come up with.

## Measuring sensation seeking

Answer "true" or "false" to each of the items listed below by circling "T" or "F." A "true" means that the item expresses your preference most of the time. A "false" means that you do not agree that the item is generally true for you. After completing the test, score your responses according to the instructions that follow the test items.

- T F 1. I would really enjoy skydiving.
- T F 2. I can imagine myself driving a sports car in a race and loving it.
- T F 3. My life is very secure and comfortable—the way I like it.
- T F 4. I usually like emotionally expressive or artistic people, even if they are sort of wild.
- T F 5. I like the idea of seeing many of the same warm, supportive faces in my everyday life.
- T F 6. I like doing adventurous things and would have enjoyed being a pioneer in the early days of this country.
- T F 7. A good photograph should express peacefulness creatively.
- T F 8. The most important thing in living is fully experiencing all emotions.
- T F 9. I like creature comforts when I go on a trip or vacation.
- T F 10. Doing the same things each day really gets to me.
- T F 11. I love snuggling in front of a fire on a wintry day.
- T F 12. I would like to try several types of drugs as long as they didn't harm me permanently.
- T F 13. Drinking and being rowdy really appeals to me on the weekend.
- T F 14. Rational people try to avoid dangerous situations.
- T F 15. I prefer Figure A to Figure B.



Give yourself 1 point for answering "true" to the following items: 1, 2, 4, 6, 8, 10, 12, and 13. Also give yourself 1 point for answering "false" to the following items: 3, 5, 7, 9, 11, 14, and 15. Add up your points, and compare your total to the following norms: 11–15, high sensation seeker; 6–10, moderate sensation seeker; 1–5, low sensation seeker. Bear in mind that this is a shortened version of the Sensation Seeking Scale and that it provides only a rough approximation of your status on this personality trait.

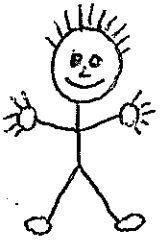
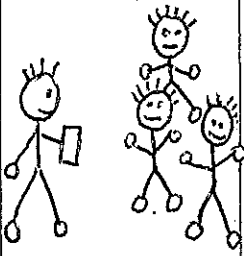


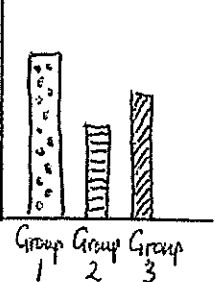
Now complete the exercises below in your **RESEARCH METHODS workbook**:

- Write what kind of data each dot point below is:
  - A description of the experiences of a person who has been in solitary confinement
  - The number of words used by a three-year-old child
  - The age when 100 babies in a study of gross motor development begin to walk
  - The grades you get in your first set of tests/outcomes in Year 11
  - Your teachers' comments on your first assignments in Year 11
  - The weights of Olympic gymnasts compared with the weights of weight lifters
  - Your ATAR score at the end of Year 12

2. What are the advantages and disadvantages of each kind of data? Draw up a simple table like the one below and refer to the information in the introduction above and in your text on pages 71–73.

Type of Data	Qualitative Data	Quantitative Data
Definition/Explanation		
Example of data about you		
Advantages		
Disadvantages		

# Five Methods of Research in Psychology

	Case study	Naturalistic observation	Survey	Correlation	Experiment
<b>Definition</b>	 Detailed description of a single individual	 Description of what people or animals do under natural conditions	 Description of selected aspects of a population	 Description of the relationship between two factors or variables	 Description of a controlled study showing the relationship between a cause and an effect
<b>Number of individuals studied</b>	Usually one	Usually many	Many	Many	Several in each group
<b>Advantages</b>	Suitable for studying rare conditions	Unintrusive, natural, source of new information	Determines characteristics of a population	Suitable for studying variables that are impossible, impractical or unethical to control	If well designed, determines cause-and-effect relationships
<b>Example</b>	Intensive report on the childhood of someone who became a murderer	Observing children's play behaviour	Survey to determine satisfaction of people with health care provided in a hospital	Seeing whether there is a relationship between hours of watching violent TV and number of violent actions	Testing a new technique for enhancing long-term memory of foreign language words

For each of the studies below, write down the method of research you would consider most useful. Give a reason for your choice.

- A study of multiple personality disorder
- The effect of sleep deprivation on performance of a simple task such as copying numbers
- A study of young men's and women's flirting behaviour
- Determining the relationship between year eleven students' heights and that of their same-sex parent
- Exploring the effect of sensory deprivation on motor coordination
- Finding out people's opinions on a proposed new law
- A study of a rare genetic disorder
- Finding out about students' attitudes to the resources of the school library
- Whether creative people have happier marriages
- Relationships between IQs in family groups, eg. between identical twins, fraternal twins, and ordinary siblings
- A study of whether people with anxiety disorders share similar early childhood experiences
- Finding out whether baboons are territorial – do they defend their own territory from other baboons
- Finding out the effects of watching a particular type of film on participants' willingness to give another person electric shocks (the films could be: neutral / non-violent and sexually explicit / violent and sexually explicit)