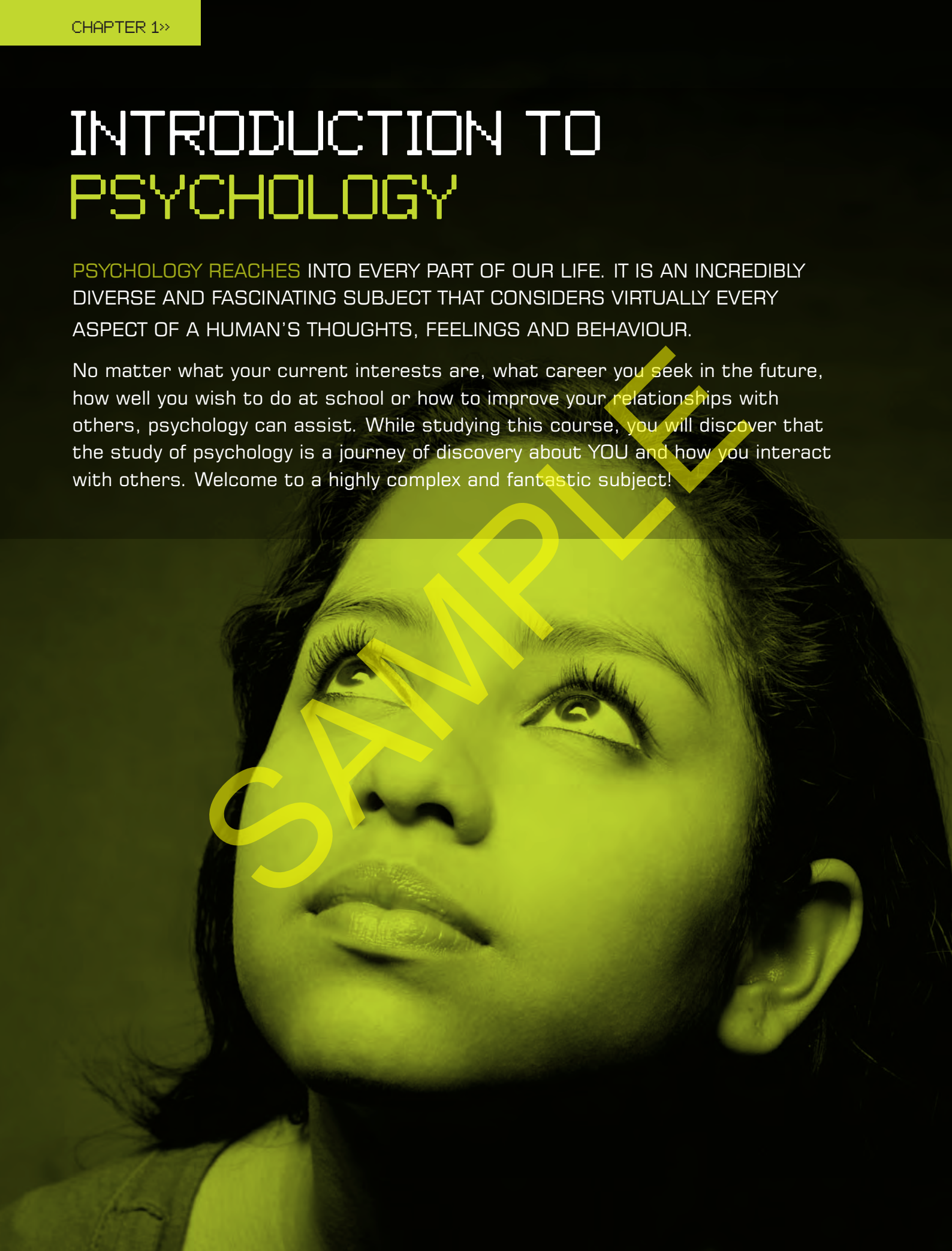


INTRODUCTION TO PSYCHOLOGY

PSYCHOLOGY REACHES INTO EVERY PART OF OUR LIFE. IT IS AN INCREDIBLY DIVERSE AND FASCINATING SUBJECT THAT CONSIDERS VIRTUALLY EVERY ASPECT OF A HUMAN'S THOUGHTS, FEELINGS AND BEHAVIOUR.

No matter what your current interests are, what career you seek in the future, how well you wish to do at school or how to improve your relationships with others, psychology can assist. While studying this course, you will discover that the study of psychology is a journey of discovery about YOU and how you interact with others. Welcome to a highly complex and fantastic subject!



WHAT DO YOU KNOW ABOUT PSYCHOLOGY?

Before you read on, decide whether the following statements are **true** or **false**. You will find the answers on page 10. Each statement, and much more, is investigated in this book.



1 YOU ARE LIKELY TO FEEL HAPPIER IF YOU FORCE YOURSELF TO SMILE FOR ABOUT TEN MINUTES.



2 WHEN YOU DON'T GET ENOUGH SLEEP FOR A COUPLE OF DAYS, YOU FIND IT HARDER TO COMPLETE SHORT, COMPLEX TASKS.



3 TEENAGERS ARE MORE LIKELY TO BE 'NIGHT OWLS' THAN ADULTS IN THEIR LATE TWENTIES.



4 YOU ARE NOT ABLE TO TRICK A LIE DETECTOR; IT WILL REVEAL A LIE.



5 THE MAIN USE OF HYPNOSIS IS TO ENTERTAIN PEOPLE WITH A STAGE SHOW.



6 YOU ARE EITHER A 'LEFT' OR 'RIGHT' BRAIN THINKER. YOU CAN ONLY LEARN WHEN USING THIS SIDE OF YOUR BRAIN.



7 YOU ARE MORE LIKELY TO BE ATTRACTED TO SOMEONE WITH SIMILAR INTERESTS AND BACKGROUND.



8 SOME PEOPLE NEVER DREAM.

WHAT IS PSYCHOLOGY?

1.1 INVESTIGATE

What exactly is psychology?

Think for a minute about these questions:

- What do you know about psychology?
- Can you define psychology?

Share your thoughts with someone else in your class. Attempt to answer the questions together. Share your answers with the rest of the class.

Many answers will highlight the value of psychology while others may reveal some of the misconceptions, such as learning to read other people's minds or reading horoscopes.

Try asking other people such as family and friends. You will probably get a whole range of answers, some correct and others wildly wrong. While you are at it, ask them to spell 'psychology'. Again, you will receive a range of responses.

Psychology is the scientific study of thoughts, feelings and behaviours, which are all heavily influenced by biology, past experience and cultural aspects.

You are unique. Your thoughts, feelings and behaviours are shaped by your biological make-up and functioning of your brain, past experiences and cultural background. The need to keep all these factors in perspective makes psychology a complex area of study.

While we are all different, many of our thoughts, feelings and behaviours are predictable. Psychology can help people change unwanted thoughts, feelings and behaviours. The goals of psychology are to use a scientific approach to *describe, explain, predict* and, at times, *influence* thoughts, feelings and behaviours in beneficial ways.



FIG 1.1» Psychologists help people deal with their thoughts, feelings and behaviours—often at very stressful times in their lives.

HOW DO I BECOME A PSYCHOLOGIST?

To become a qualified psychologist and a member of the **Australian Psychological Society (APS)** takes at least six years of study. You need to complete either an approved six-year full-time sequence of psychology at university or an approved four-year full-time sequence followed by a two-year 'apprenticeship' under the supervision of an experienced psychologist.

Many people study psychology without intending to become psychologists. Gaining an understanding into human thoughts, feelings and behaviours can assist greatly in other professions such as management, social work, education, human resources, selling, advertising and nursing. It can also assist in other aspects of everyday life.



FIG 1.2» An educational psychologist works with students in school to improve learning.

HOW DOES PSYCHOLOGY DIFFER FROM PSYCHIATRY?

People often confuse psychologists with psychiatrists. While it is true that both are concerned with mental health, there are important differences.

- » The training and qualifications are different. A **psychiatrist** is a medical doctor who has first completed a medical degree (minimum five years) and then further study and supervision to specialise in psychiatry (minimum four years).
- » While psychiatrists and psychologists both work in the area of mental illness, **psychology** is not as narrow a field as psychiatry. Psychologists also work with people who do not suffer from mental illness, to assist with thoughts, feelings and behaviours.
- » Psychiatrists, as medical doctors, can prescribe medication. They consider medication plays a major role in the treatment of mental illness. Australian psychologists cannot prescribe medication; their work is more concerned with thought processes and behaviour.

It is not uncommon for a patient to receive assistance from both a psychiatrist and a psychologist. While their treatments differ, a combination of both can often be more beneficial than either treatment alone.

1.2 INVESTIGATE

Job prospects and remuneration

- 1 **WWW»** Visit the Australian Government's JobSearch website. Click on Career information. Go to Job Outlook and look up Psychologists. Answer the following questions:
 - a How many people in Australia are working as psychologists?
 - b What are the average weekly earnings for a psychologist?
 - c What are the career prospects?
 - d Name at least four different industries that employ psychologists.
 - e Find one other fact that interests you about this occupation.

Find a psychologist near you

- 2 **WWW»** Go to the Australian Psychological Society website. Click on Find a Psychologist.
 - a What are the main categories listed?
 - b Search for psychologists in your area. How many did you find? What types of psychologists are represented in your area?

TYPES OF PSYCHOLOGISTS

There is a huge increase in demand for psychologists in Australia. Psychologists work in diverse areas in almost every industry.

The table below lists some of the types of psychologists and the sorts of questions that they might investigate. All areas can involve teaching and research.



FIG 1.3» A sports psychologist talking to swimmer Libby Trickett about her performance

TABLE 1.1» Types of psychologists

Type of psychologist	Questions considered within this field
Clinical psychologist —focuses on people with mental illness or behavioural disorders	Does smoking marijuana lead to schizophrenia? What can be done to help a person overcome depression?
Cognitive psychologist —looks at thoughts, memories and perception	Why do different people have different approaches to thinking and learning? Why are people sometimes forgetful?
Counselling psychologist —deals with life issues such as family, marriage or school problems	How can stress experienced by a student be reduced? How can families reconnect after difficult situations?
Developmental psychologist —addresses aspects of psychological development from conception to death	Is daycare beneficial for young children? What are the major issues facing teenagers?
Educational psychologist —focuses on teaching and learning in educational settings	Why do some children have difficulties learning in class? What is an effective way to increase contributions to class discussions?
Forensic psychologist —deals with criminal behaviour in legal situations and prisons	Are criminals psychologically fit for trial? Are psychologically abused children more at risk of dangerous criminal behaviour when adults?
Health psychologist —deals with health issues and diseases	How can we get people to take notice of the dangers of binge drinking? Are some personalities more at risk of a certain disease?
Industrial and organisational psychologist —addresses psychological aspects of business and industry work settings	What form of leadership would be most effective for this work? How can motivation among workers be increased?
Sports psychologist —focuses on enhancing sporting performance	What can be done to calm nerves before an event? What short-term goals are best to reach the ultimate sporting performance?
Social psychologist —looks at social influences on individual behaviour and interactions between groups and individuals	Why does prejudice exist? What type of people are attracted to each other?
Environmental psychologist —considers how the physical world affects people's behaviour and vice versa	How can attitudes be changed to make people behave in a more environmentally friendly manner? What are the effects of office design on work output and satisfaction?

1.3 INVESTIGATE

Create a webpage

- 1 Design a webpage that promotes one area of psychology. Describe the goals within this area of psychology, the most likely workplace and the type of work that a psychologist in this field would carry out.

Interview a psychologist

- 2 Interview a psychologist of your choice. Ask a number of questions about their role as a psychologist including:
 - › What inspired you to choose psychology as a career?
 - › What studies did you undertake to become a psychologist?
 - › Did you study psychology at secondary school?
 - › What area of psychology do you specialise in?
 - › What are your main roles or jobs at work?



PSYCHOLOGY—A SCIENCE

Over the years many people who do not understand the scientific nature of psychology have considered psychology as a pseudoscience, or a fake science. **Pseudosciences**, such as astrology, alchemy and phrenology, are generally well-established beliefs that have not changed over the centuries. They are based on tradition and are difficult to measure and test. They do not use a scientific approach.

Psychology is a science—it follows a set of procedures for collecting and interpreting data known as the **scientific method**. Psychological theories are continually tested and developing. Psychologists are critical thinkers. They take an objective stance and scrutinise research findings. Being critical thinkers does not just mean psychologists make criticisms. They analyse all aspects of the research and often present alternative explanations and constructive ideas.

Psychologists:

- › study theories using a scientific approach (i.e theories must be testable)
- › avoid jumping to conclusions
- › generate new ideas
- › evaluate the evidence
- › report findings.

1.4 INVESTIGATE

Psychology is more than just common sense

- 1 Look at the following saying and discuss the questions below.

Absence makes the heart grow fonder.

 - a What does this saying mean?
 - b Do you agree or disagree with this saying?
 - c How does this saying compare with *Out of sight, out of mind*? Can both be true?
 - d Design a study to test whether these sayings are true.
 - e Research the following common sayings and answer questions 1a and 1b for each.
 - › *Birds of a feather flock together.*
 - › *The early bird gets the worm.*
 - › *People who live in glass houses shouldn't throw stones.*
 - › *As you make your bed, so you must lie in it.*
 - › *Too many cooks spoil the broth.*
 - › *A rolling stone can gather no moss.*

RESEARCH TECHNIQUES

As part of the scientific method, psychologists employ a number of research techniques to collect and interpret data. These include making observations, self-reports, surveys and questionnaires, and experiments. Brain scanning and measuring physiological responses, including brainwave patterns, heart rate, blood pressure and galvanic skin response (electrical conductivity on the skin, linked to sweating), are often used and provide important psychological insights.

One of the easiest ways to understand the scientific method is to perform an experiment. For example, the activity in Investigate 1.5 relates to psychological research findings on the use of mnemonic techniques that can help you improve your memory.

Mnemonic techniques

There are many different ways to remember chunks of information that our brains would otherwise be unable to cope with. Most people can easily recall five to nine bits of information, but a mnemonic technique can increase this to many bits. A **mnemonic technique** is a memory trick or aid. You probably already **know** some memory tricks. The aim is to make associations, add meaning or create humour to assist us in making the information memorable. A few techniques are:

- *Method of loci*—Visualise your bedroom. Draw a map of your room and 15 objects in it and where they are located. For example, bed, wardrobe, chair, dirty clothes basket, hook on back of door, desk ... Rehearse a logical order for these 15 items until you can readily visualise the order. When you are ready, associate each item with a word from a list to be remembered. As you make the association, take the time to visualise the items together. For example, 'a kite on the bed, a daisy painted on the wardrobe, a hippo squeezed onto the chair ...' until the list is complete. The more bizarre and humorous the associations, the more likely you will remember the list.
- *Narrative chaining*—This involves linking each word to be recalled into a meaningful sequence or story. For example, 'a bird dressed in a costume jumped into a boat that was heading up a tree. A doctor placed him into a letterbox ...'
- *Acrostics*—These are word associations that create rhymes or stories using the first letter of the words to



FIG 1.4» Psychologists rely on scientific evidence such as brain scans to provide important insights.



FIG 1.5» Psychologists rely on observation to provide psychological data.

be remembered. For example, the order of the planets from the Sun (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune) can be remembered with the acrostic 'My Very Excited Mother Jumped Suddenly Under Nana'. An acrostic for remembering the order of 'north, east, south, west' is 'Never Eat Soggy Weetbix'. Try an acrostic for the following list of words: fire, plane, sofa, mug, soap, comic.

1.5 INVESTIGATE

Can mnemonic techniques improve memory?

This activity is a memory recall task. Two participants will learn a mnemonic technique prior to completing the task. Two others will complete the task without learning a specific strategy. Results will be compared to determine the effectiveness of using mnemonic techniques for enhancing recall.

Aim: To compare the results of participants who used a specific mnemonic technique to assist them in recalling a list of 15 words with those of participants who used no technique.

Materials: Two word lists, paper and pens

Method:

- As a class, create one list of 15 words (List A). Ensure the words in your list are unrelated to each other and there are no themes.
- Create a list of instructions to be given to participants prior to completion of the task. It is important that participants agree to take part of their own free will, and that they understand the general nature of the task (without giving away its purpose). It is also important for all experimenters (you) to be as consistent as possible in the way you carry out this task with your own participants.
- Create a prediction of what you think the outcome of the task will be. This is known as your *hypothesis*.
- Allocate two participants to the *control group*. This group will carry out the recall test without learning a mnemonic technique. Follow these steps:
 - 1 Ensure participants have paper and pen to record words once lists have been read out.
 - 2 Slowly read out List A. Leave two seconds between words to assist participants in learning each word. Upon completion of the list, instruct your participants to write down as many words as they can. They may be written in any order.
 - 3 Collect each list. Thank your participants.
 - 4 Correct each participant's list and record a score out of 15 for the number of words recalled.
 - 5 Calculate an average score out of 15 for each participant. Bring the average scores to your next class.
- Allocate the other two participants to the *experimental group*. This group will learn a

mnemonic technique before the reading of their lists of words for recall. Follow these steps:

- 1 Ensure participants have paper and pen to record words once lists have been read out.
- 2 Explain to your participants that you will first teach them a mnemonic technique to help them remember words in the task you are going to give them. In class, choose one of the three techniques described earlier. All experimenters must teach the same technique. Ask your participants to use this technique to learn the following list of words as practice: kite, daisy, hippo, spoon, glass, moon, egg, pencil, bike, bottle, grass, diamond, key, brain, candle. Give your participants three minutes to practise this technique; then ask them to recall the lists of words for your task.
- 3 Repeat steps 2 to 5 as used with the control group.

Results: Collate class results for the *control group* and the *experimental group*. Calculate the mean (average) score for each group.

Discussion:

- 1 What did your results show when comparing the average score for both control and experimental groups?
- 2 Was your hypothesis supported? Refer to your results to support your answer.
- 3 What was the difference in the way the experiment was performed for the experimental and control groups? This factor is called the *independent variable*: the variable that was deliberately altered by the experimenter in the experiment.
- 4 What did you measure in this experiment? This is known as the *dependent variable*: the aspect of behaviour that is measured in an experiment to look for effects of the independent variable.
- 5 A number of other variables could have influenced the data (dependent variable). Explain two such variables and describe how each could have influenced the results. Consider variables such as the consistency of experimenters, how the method was designed and carried out, choice of participants, and method for collating results.

Conclusion: Summarise what you have found out as a result of conducting this experiment.

1.6 INVESTIGATE

Please help Bree

Bree is a Year 10 student. She enjoys school, including most of her subjects, and wishes to improve her learning and memory. Her marks are reasonable but she believes she is capable of better. Bree would like to know more about study techniques, especially since she has examinations this year. Bree needs your help.

- 1 What is psychology and why are study techniques part of this subject area?
- 2 Which type(s) of psychologist could investigate different study techniques designed to help learning and memory?
- 3 Most people who study psychology do not become psychologists. What other professions would be interested in studying learning and memory including study techniques?
- 4 Where could Bree find more information about study techniques? Include specific types of people and resources.
- 5 Use library and Internet sources to investigate study techniques further. Create a PowerPoint slide or handout with five valuable points.



ETHICAL CONSIDERATIONS

Ethical considerations are an extremely important part of psychological research. Ethical considerations are precautions taken to protect the physical and psychological well-being of the participant. To do this, ethical guidelines must be followed when carrying out research. All research must first be approved by an ethics committee.

Ethical guidelines include:

- **No lasting harm to participants**—This is the overall goal and must be considered at all times.
- **Confidentiality**—Participants have a right to privacy and must not be identified or named in the research.
- **Voluntary participation**—People must be willing to take part in the study. They cannot be coerced with bribes or pressure.
- **Informed consent**—The researcher must give details of the study including the ethical considerations (informed) in order for volunteers to agree to participate in the study (consent).
- **Right to withdraw**—Participants have the right to remove themselves or their data from the study at any time, including after the event. They are free to go at any time.
- **Minimal deception, only used when absolutely necessary**—Sometimes it is necessary to conduct research without participants knowing the true purpose of the study. Deception can only be used if it is minimal, will not cause lasting harm and is absolutely necessary.
- **Debriefing**—Participants have a right to know the results of the study and where they can seek psychological assistance if needed after the study. They are also reminded that they can withdraw their results after the study.

Psychology is a broad and diverse subject. It draws in aspects of biology and other sciences, and connects with philosophy, sociology and almost all other subject areas. There are many types of psychologists, ranging from those who treat mental illness to those who detect lies or sell commercial products. It is not surprising that psychology is appealing—almost all professions can benefit from its applications.

Answers to page 3 questions: true, false, true, false, false, false, true, false.

CHAPTER SUMMARY

- Psychology is the scientific study of thoughts, feelings and behaviours. Thoughts, feelings and behaviours are heavily influenced by biology, past experience and cultural aspects.
- The goals of psychology are to use a scientific approach to *describe, explain, predict* and, at times, *influence* thoughts, feelings and behaviours in beneficial ways.
- To become a registered psychologist, you need to complete an approved six-year sequence of psychology at university. Many people study psychology without intending to become psychologists as it is helpful in other areas of everyday life.
- A psychiatrist is a medical doctor who treats people with mental illnesses and is able to prescribe medication. Psychologists also work in this area but use other therapies and cannot prescribe medication; *they* work in scientific ways to improve people's thoughts, feelings and behaviours. Psychiatrists and psychologists often work together to the benefit of the *patient*.
- There is a huge increase in demand for psychologists in Australia. Psychologists work in diverse areas in almost every industry.
- Pseudosciences, such as astrology, are generally well-established beliefs that have not changed over the centuries. They are based on tradition and are difficult to measure and test. *They* do not use a scientific approach.
- Psychology uses the scientific method to test theories. Psychologists *generate* and *welcome* new ideas. Critical thinking is *crucial* and all *aspects* of the research are *analysed* and, typically, *alternative* explanations and *constructive* ideas are generated.
- *Ethical considerations* are an extremely important part of *psychological research*. Many precautions are taken to *protect* the physical and psychological well-being of the participant. Ethical guidelines must be followed *when* carrying out research. All research must first be *approved* by an ethics committee.

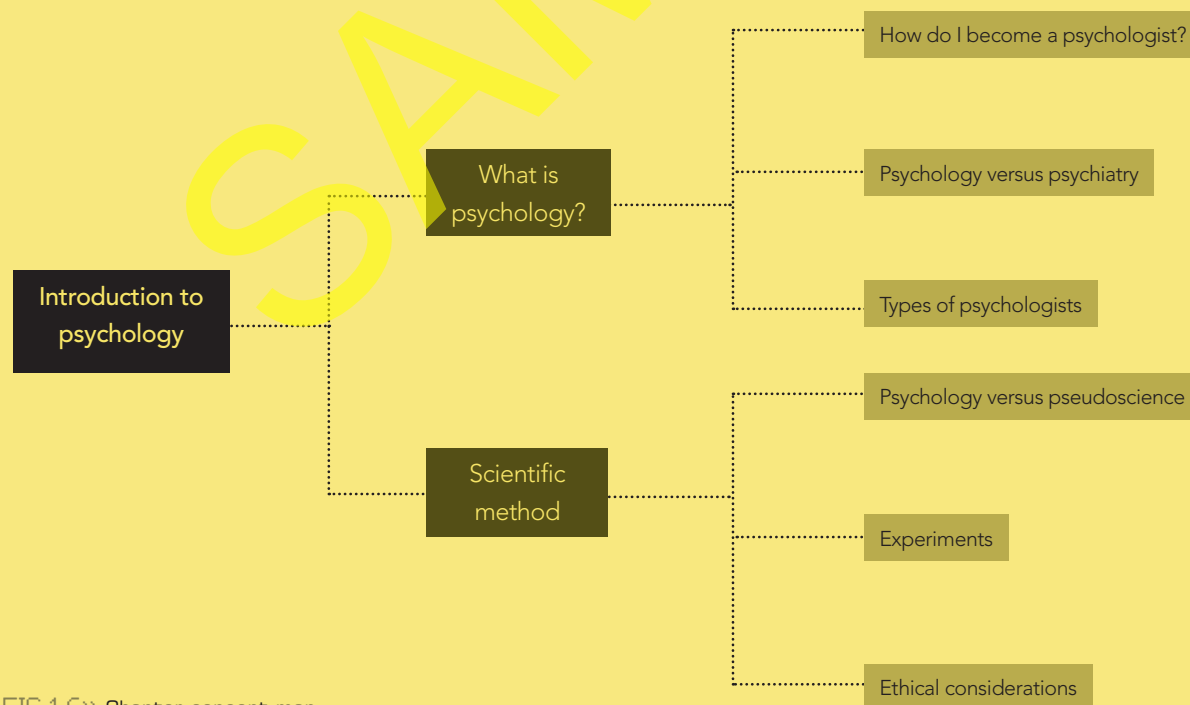


FIG 1.6>> Chapter concept map

TEST YOUR UNDERSTANDING

Questions

- 1 Which of the following is true of the scientific method?
 - a It believes that the theory is correct even when research findings suggest otherwise.
 - b It is not open to criticism.
 - c It has well-established beliefs that have not changed over the centuries.
 - d It follows a set of procedures for collecting and interpreting data.
- 2 The term *pseudoscience* means:
 - a any fake science
 - b a real science that investigates fake areas of science
 - c early (pre-1900s) research in science
 - d a real science that encourages critical thinking.
- 3 To become a qualified psychologist, you must have completed at least ____ years of full-time study of psychology at university or a combination of university and supervised practice.
 - a two
 - b four
 - c six
 - d eight
- 4 People must not be pressured or forced to participate in a research study. This follows the ethical consideration of:
 - a informed consent
 - b voluntary participation
 - c confidentiality
 - d debriefing rights.
- 5 A psychologist who investigates how to make people more aware of the dangers of using a solarium and sunbathing is likely to be:
 - a a clinical psychologist
 - b an industrial psychologist
 - c a health psychologist
 - d a counselling psychologist.
- 6 What are the main goals of psychology?
- 7 How does the training to become a psychologist differ from the training to become a psychiatrist?
- 8 Match the following fields of psychology with their descriptions.

<ol style="list-style-type: none"> a clinical psychology b social psychology c industrial and organisational psychology d counselling psychology e educational psychology 	<ol style="list-style-type: none"> i focuses on social aspects including how we think and interact with others ii focuses on all aspects of schooling including learning strategies iii focuses on all aspects of behaviour in work settings iv focuses on the diagnosis, causes and treatment of people with mental illness v focuses on assisting people with many personal life issues that do not involve mental illness
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- 9 Name two areas of psychology that you find interesting. What types of issues and research do psychologists working in these areas deal with?
- 10 Psychologists are critical thinkers. What does this mean?
- 11 Why do psychologists take ethical guidelines so seriously?

Extend yourself

- 12 Is psychology part of the Science Learning Area at your school? Find reasons for your answer.
- 13 Why has psychology struggled in the past to be recognised as a science?
- 14 What is *elaborative rehearsal* and how can it assist your studies?
- 15 What is the Barnum Effect and how does it relate to pseudoscience?
- 16 Visit the Young Australian Skeptics website and find out more about pseudoscience. www.yaskeptic.com